

Library Section

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE July 12, 1923.

LIEUT. CROCKER'S BORDER TO BORDER NON-STOP FLIGHT

The official report on the non-stop flight from the Gulf of Mexico to the Canadian Border, made by Lieut. H.G. Crocker, Army Air Service, on May 26th, discloses several interesting facts. Lieut. Crocker took off from Ellington Field, Houston, Texas, at 5:20 a.m. Central Time, flew to the Gulf, and then turned northward. He states that while passing Middlefork, La., the clouds became so low that the plane just cleared the tree tops. At this time also the engine began to miss and splutter for about five minutes, due in all probability to some foreign substance momentarily clogging the gas line. This was soon cleared, however, and the engine never again faltered during the remainder of the flight to Selfridge Field.

Lieut. Crocker's report is as follows:

"Having been selected to make the Gulf to Border flight, different routes were studied and test flights were made in the DH-4B-1-S plane A.S. No. 22-353 which was to be used. Weather maps were consulted daily.

The course decided on was from Ellington Field to the waters of the Gulf, thence to the Border just below Detroit, Michigan, landing at Selfridge Field. This distance was greater than from other cities on the Gulf, but owing to the fact that a large, smooth field was necessary for the take off, Ellington Field was selected as the starting point.

In preparing the map used, the course was marked on each State traversed, and the desired sections were mounted on a linen strip one foot by twelve feet, the ends of which were attached to two small rollers eight inches apart in an aluminum frame. This map, showing from fifty to one hundred miles on each side of the course, was found quite necessary, especially when varying from the original course in storm areas. The total distance to be flown was divided into fifty mile sections and the total mileage was distinctly marked on each division. This map could be placed in the lap, on the side of the seat or hung on the side of the fuselage.

The plane was equipped with a long coil spring attached to the left rudder, the tension of which could be adjusted to eliminate the constant, slight pressure usually necessary on the right rudder. A small folding desk for a pad was placed on the right side on which to make notes. Two thermos bottles, one for water the other for coffee, were carried. With a main tank capacity of 240 gallons and a reserve of 28 gallons of gasoline, with 24 gallons of oil, the plane was ready for the flight.

There being no supplies at Ellington Field, a flight was made to that station Wednesday, May 23, to arrange for the servicing of the plane, receiving the latest weather forecasts and securing accommodations for the proposed flight. Because the gasoline capacity was only sufficient for thirteen hours and the minimum distance to be travelled was approximately 1200 miles, the winds and their velocity were the most important items to be considered in determining the favorableness of the weather predictions.

The weather map for Friday, May 25, showed fair conditions over the country to be covered and the predictions for Saturday were more favorable. The plane was serviced and flown to Ellington Field Friday and reserviced there with 70 gallons of commercial gasoline and 4 gallons of oil. Col. John H. Howard, Commanding Officer of Kelly Field, Capt. Chas. B. B. Bubb, Lieuts. George Roberson, Leland S. Andrews and R.D. Biggs, arrived to witness and assist in the take off.

The following weather forecast was received from Washington, D.C. at 9:30 p.m. Friday, and it was definitely decided to take off the following morning:

Jms

'Observer, Houston, Texas.

'Partly cloudy sky with possibility of widely scattered thundershowers Saturday in Louisiana and eastern Texas. North of Louisiana to Detroit there will be cloudy sky with local rains and scattered thundershowers. The winds will be gentle to moderate variable over south portion and gentle to moderate east to southeast farther north up to two thousand feet.

Signed- Mitchell,
Forecaster, Weather Bureau'

The take off was made at 5:20 a.m., central time, shortly after dawn. After touching the waters of the Gulf, the course then taken was 20° with a west wind and visibility only fair. R.P.M. 1500; temp. 85° ; oil pressure, 48 lbs; altitude, 1800 ft.; speed 97 M.P.H.

The R.P.M. for the entire flight was kept at 1500, while the oil pressure varied from 48 lbs. at the start to 25 lbs. for the last 500 miles. As the gasoline supply diminished the air speed increased from 97 M.P.H. at the start to 103 M.P.H. at the end.

In order that a check could be made on the plane's flying, the performance of the engine and all instruments, and a double check on the course as taken, Lieut. Andrews, who had assisted in the plans and preparations for the flight, escorted the plane for about 150 miles.

At 5:30 a.m. the sun rose and seemed to bring with it a haze that covered the earth. Near the Sabine river at 7:05 a.m. clouds began to gather. The logging railroads of this territory were quite confusing.

While passing Middlefork, La., the clouds became so low that the plane was just clearing the tree tops. Also at this time the engine missed and sputtered for about 5 minutes due, it was thought, to some foreign substance in the gasoline line. This soon was cleared and the engine never again faltered.

A climb of 2000 ft. thru the clouds was made and a compass course followed for one hour, the height of the clouds gradually increasing to 3000 ft. Gliding thru the clouds a ceiling of 500 ft. was found. A deviation of five miles to the west had been made during this compass course. The wind had swung to the south and the course was changed to 30° .

From then on for about 800 miles between 20 and 30 rain storms were encountered on the course, taking from 3 to 20 minutes to fly thru them, but those more severe were flown around. This made it more difficult to check the course, especially with a low ceiling, poor visibility and flying at 150 to 500 ft. altitude. Due to storms there was at one time a deviation of 30 miles from the course.

Starr City, Ark., was passed at 9:15 a.m.; Forrest City, Ark., at 10:15 a.m.; Mississippi River was crossed five times, the first at Caeruthersville, Mo., and the last at Belmont, Mo., between 11:30 a.m. and 11:50 a.m.; the Ohio River was crossed at Metropolis, Ill. at 12:05 p.m.; the Wabash River five miles near its mouth at 12:50 p.m.; Washington, Ind., passed at 1:25 p.m.; Spencer, Ind., at 1:50 p.m.; Indianapolis, Ind. at 2:20 p.m.; Muncie, Ind. at 2:55 p.m.; Delphos, Ohio at 3:20 p.m.; Toledo, Ohio at 4:25 p.m. The Canadian Border was touched about one mile from Gordon, Ontario, across from Trenton, Mich. at 4:49 p.m. central time, taking 11 hours and 29 minutes from Gulf to Border. The main tank supply gave out at 4:55 central time and the reserve was used for 20 minutes. Both mentally and physically fatigued, a landing at Selfridge Field was made at 5:15 p.m., making 11 hours and 55 minutes in the air.

The wind on this flight varied greatly, with a west wind at the start thru Texas and Louisiana; a south wind in Arkansas; a southeast wind in southern Indiana, and an east wind in the eastern part of this State. While approaching Toledo, Ohio, and on to Selfridge Field, head winds from the northeast were encountered.

It was found upon draining all tanks that there were 19 gallons of gasoline and 7 gallons of oil remaining, making an average hourly gasoline consumption of $20\text{-}3/4$ gallons, while the oil showed 1.42 gallons per hour. A sample of the oil was taken to McCook Field for test.

On the return trip, stops were made at McCook Field, Ohio; Scott Field, Ill.; Muskogee, Okla.; the flight finished at Kelly Field, Texas, at 5:15 p.m., Saturday, June 2, 1923."

ARMY'S LARGEST AIRSHIP DESTROYED

Ill luck still continues to pursue the Lighter-than-Air Branch of the Army's Air Service. The TC-1, the newest and largest airship in commission, shortly upon the conclusion of a cross country training flight from Scott Field, Ill., to Dayton, Ohio, was completely burned while attached to the mooring mast at Fairfield. The cause of the ship's destruction has been attributed to either the presence of static electricity or lightning, as a severe electrical storm was raging at the time of its destruction.

Fortunately, no loss of life accompanied the disaster, although Sergeant Harry Barnes, engineer, sustained a fracture of both legs, and Mr. C.R. Maranville, of the Goodrich Tire and Rubber Company, was also painfully injured.

The TC-1 left Scott Field at 10:20 A.M., and after circling the field headed for Dayton, arriving there shortly before six o'clock. The crew of the ship were Lieuts. Clyde A. Kuntz and Ira Koenig, pilots; Sergeants Harry Barnes, F. Adams and Pvt. Gerald Adams, engineers. The passengers were Captain W.B. Mayer, Lieuts. C.M. Brown, J.B. Jordan and W.J. Flood, students; and Mr. C.R. Maranville.

The loss of the TC-1 is a severe blow to the lighter-than-air activities at Scott Field.

THE NATIONAL BALLOON RACE

The United States Army Air Service will be well represented at the National Balloon Race to be held at Indianapolis, Ind., July 4th. There will be three teams from the Air Service, each consisting of one pilot and one aide. The races are to be held under the auspices of the Indianapolis Chamber of Commerce, under the jurisdiction of the Contest Committee of the National Aeronautic Association, and will be governed by the rules and regulations of the Federation Aeronautique Internationale.

The three winning teams will be sent to the International Balloon race to be held in Brussels, Belgium, on September 23rd next. The three army teams to be entered in the National Balloon race are: (1) Capt. Lester T. Miller, pilot, and 1st Lieut. Courtland M. Brown, aide; (2) 1st Lt. Robert S. Olmstead, pilot, and 1st Lt. John W. Shoptaw, aide; (3) 1st Lt. James B. Jordan, pilot, and 1st Lt. Max F. Moyer, aide.

Lieut. Joseph P. Bailey will accompany the Army contestants as the official operations officer and alternate. All the instruments to be used by the Army pilots in this classic have been carefully checked and calibrated under the supervision of the Instrument Section at Scott Field. These instruments will be one of the primary determining factors in the race, and neither time nor effort has been spared to make the calibration as accurate as possible with the latest and best testing equipment. Each pilot will be furnished with complete data concerning the correction and care of these instruments, so that there may be no possibility of error in their use. In addition, he will be furnished with one statescope, one altimeter, one recording barograph and also some form of vertical speed indicators. Three special instruments will also be carried by members of the army teams, one special barometer and two special vertical speed indicators.

Every facility for the insurance of success for the Army teams has been consulted and put to work. Meteorological data is being furnished, and every person in the service who can in any way assist has put forth every effort to make possible another victory for the Army. It was this spirit of cooperation which won the prize last year, when Major Oscar Westover bested a large number of selected opponents.

CHIEF OF AIR SERVICE RECEIVES HIS WINGS

General Mason M. Patrick, Chief of Air Service, who on June 26th qualified at Bolling Field as an airplane pilot, was the honor guest at a luncheon at the Army and Navy Club the following day, which was attended by all Air Service officers stationed in Washington. To commemorate the event, the officers presented their chief with a set of silver wings. Lieut.-Obl. James E. Fechet, who made the presentation, congratulated the General on being the first Major-General in the Army who had ever qualified as an airplane pilot, and the only officer of the Army at the age of sixty to receive this rating.

In his response, General Patrick thanked the officers for their good will and loyalty, and stated that when he took up the practice of flying he had no idea in mind of seeking any personal glory, his sole reason for attempting to learn to fly being to gain better conception of the skill required in actual flying and in order that he might have a greater appreciation of the dangers incident thereto.

Major Herbert A. Dargue, Air Service, who was General Patrick's instructor, and who had heretofore accompanied him on many inspection trips via air, told the officers assembled that General Patrick had been an apt pupil, and expressed his confidence in the General's ability to pilot an airplane.

ARMY DIRIGIBLE HAS A ROUGH VOYAGE

The Dirigible AC-1, which left Scott Field on the morning of June 7th to get the crew of the ill-fated TC-1, which was destroyed by lightning at Wilbur Wright Field, Dayton, Ohio, the previous evening, succeeded in returning safely to its home station after battling her way all night through a fierce storm in Indiana and Ohio. The pilots of the ship were Lieuts. W.C. Farnum and Geo. W. McEntire, with Sgt. Joseph Bishop as rigger and Sgt. Greenfield as engineer. They arrived at Wilbur Wright Field at 1:30 p.m., but could not secure their ship to the mooring mast. A high wind and a severe electrical storm made the pilots apprehensive that their ship might suffer the same fate as the TC-1. The crew had the choice of one of three courses - flying to Akron, Ohio, to the Goodyear Tire and Rubber Co. hangar, to Langley Field, Va., to avoid storm, or to fight their way back to Scott Field through the storm. They finally decided on the latter course, and started at 3:11 o'clock, with only two of the crew of the TC-1 on board, as it was not possible to carry any more through the storm.

According to the story related by members of the crew, the storm struck the AC-1 nine miles out of Wilbur Wright Field and lasted two hours. The storm was followed by a 30-mile wind, which lasted through the entire night until six o'clock in the morning. Three times during the night the rudder control of the ship broke, leaving the ship at the mercy of the storm which blew them sixty miles off their course. The pilots were unable to check their course on account of the inky blackness of the night, but got their bearings at the first sight of daylight, when they found themselves over Bloomfield, Ind., just ten miles south of their course. From 4:15 to 6:00 o'clock, the ship flew at an average air speed of 55 miles per hour, but on account of the high wind they were unable to cover more than 14 miles per hour, ground speed.

At 6:00 o'clock the wind shifted around to the north, giving the ship easier flying, and from that time on they covered 40 miles per hour until they landed at Scott Field.

The members of the crew stated that although they had to fight a bad storm all night, their trip had been one of extreme comfort on account of the closed car with which the AC-1 is equipped. The car has sleeping compartments and a complete kitchenette, providing every luxury that can be had in a Pullman car.

Lieuts. W.J. Flood and C.M. Brown, student officers, were the passengers on board, the rest of the crew of the TC-1, consisting of Captain W.B. Mayer, Lieuts. J.B. Jordan, Clyde A. Kuntz and Ira Koenig remained at Wilbur Wright Field to await the decision of the board of officers selected to determine and report on all the facts concerning the destruction of the TC-1.

Mr. C.R. Maranville, an employee of the Goodrich Tire and Rubber Co. of Akron, Ohio, who was a passenger on the TC-1 at the time it was struck, suffered the amputation of his foot at the hospital in Dayton. He and Sergeant Harry Barnes leaped to the ground, a distance of 40 feet, and received injuries, Maranville a crushed ankle and Barnes a sprained knee.

SPEEDING UP MAIL SERVICE

For nine consecutive days, the pilots of the 88th Observation Squadron, stationed at the Fairfield Air Intermediate Depot, Fairfield, Ohio, delivered mail to the 11th Infantry and the 3rd Field Artillery while they were "on the hike" from Ft. Benjamin Harrison, Ind. to Camp Knox, Ky., where they will be stationed for the summer training of the R.O.T.C. and the C.M.T.C. units. Through the efforts of the Air Service it is now possible for the line outfits marching cross-country to enjoy a convenience that they have never before experienced.

RESERVE OFFICERS IN CALIFORNIA DO CONSIDERABLE FLYING

Saturdays and Sundays have been busy days lately for the members of the Officers' Reserve Corps who reside in San Diego, Calif., and vicinity, as the weather man has been very liberal with fine weather for week ends. Reserve Officers have taken advantage of the excellent flying conditions offered, with the result that approximately thirty officers, under the direction of Major T. C. Macaulay, A.S., O.R.C., have participated in aerial flights during the past fifteen days.

MOTION PICTURES OF NIGHT FLYING

The Anti-Aircraft Regiment from Fort Totten, N. Y., and the Air Service at Mitchel Field recently cooperated in making a series of motion pictures of night flying. The plane was illuminated by four large searchlights and photographed from the ground. Advice was received from Fort Totten to the effect that satisfactory photographic results were obtained.

About a week later the Anti-Aircraft searchlight batteries returned to Mitchel Field and conducted a series of searchlight problems from 9:30 to 10:30 p.m., when the rising of the moon made it necessary to discontinue the problem. During the first section of the problem the airplane was flown at an altitude of 3000 feet. One of the four searchlights was set at each corner of the field and each secured practice in tracking. The airplane left its navigation lights on until the battery picked up the plane, when the lights on the plane were turned out and the searchlights secured actual practice in following. The results were fairly satisfactory within two or three miles of the searchlights' positions at an altitude of 3,000 feet, and the plane was often illuminated sufficiently to have permitted anti-aircraft firing, but at the altitudes of 5,000 feet and over, or at distances of greater than two or three miles from the airdrome, the searchlights were absolutely unable to illuminate the airplane.

ENGLISH AS SHE IS "WRIT"

The following contribution received from our Clark Field Correspondent speaks for itself:

"We frequently read and enjoy the article published in the 'Weekly News Letter', by the one who dubbed himself 'ED'. While we are not for a moment contemplating an opposition, we feel sure that some of the letters received at these headquarters from aspirants to aeronautical fame are worthy of passing notice. Now, the present generation of Filipinos is hot on the trail of twentieth century progress. All aeronautical developments are studied and discussed, to determine their adaptability and appliance to present equipment on hand - which is none. Nevertheless, interest is keen and they all picture themselves as future heroes of the air. Here goes a sample:

'A. Augstin, Pangansian, P.I.
11 days.

Mr. Commanding Officer,
Army In Air,
Camp Stotsenburg.
Gentlemen:

I am now about to enquire employment by the aeroplane. My experience causes me to be excellent for a position by the aeroplane. A clerk I was jobed with a good salary to sum in forty pesos three month in Manila. This man is name was Manila Bulletin as Editor of as much paper. The aeroplane will be new my home but I am to cause a cochero. The aeroplane went above the town of at present with my mother at home I am staying by the day recently. If this permission is allowed my present salary will be good. Do not afraid now that I will come as the answer will soon. I am no cause to be afraid by you. The aeroplane is high and low all the same the big birds. I will see that no many people go by the aeroplane first permission to me on the request. I now am you cochero to receive care in the oil on the aeroplane. I will see the aeroplane make fast speed above the house to my companion for seven years now when I have new job in some soon day now.

Very sincerely,
Conception Bautinguno.'

Such a letter expresses the ambition of the young blood. These additions to our mail box are amusing, to say the least, and frequently received."

THE ARMY RELIEF SOCIETY

A report covering the activity of the Air Service Branch of the Army Relief Society for the past year shows that a total sum of \$2,117.18 was contributed to the Society by various Air Service fields. Langley Field, Va., heads the list with a contribution of \$959.00. Kelly Field comes next with \$349.50, followed by Mitchel Field with \$246.68.

As its name implies, the primary function of the Army Relief Society is to extend aid to those in the Army who are distressed and who need help. The Air Service branch is particularly deserving of whole-hearted and liberal support, since the number of fatalities and accidents in the Air Service in time of peace is greater than in any other branch of the service.

Mrs. Bert M. Atkinson, who has always labored incessantly to further the interests of the Society, in a recent letter to General Patrick, Chief of Air Service, expresses the hope that the wives of Air Service officers will take the Society very seriously, as it is they who must carry on this work. She states that "they surely must feel the great comfort of our having the Society to turn to in time of need and to know that the Army Relief Society is not a charity but a mutual benefit association for the wives and children of deceased officers and enlisted men of the Regular Army."

Mrs. Atkinson states that one of the great handicaps confronting the Relief Society is the difficulty experienced of keeping in touch with the families of deceased Air Service enlisted men, as in many instances where enlisted men are killed in airplane accidents it is necessary that their families be taken care of as promptly as possible. No report of casualties amongst them comes to the Relief Committee from the War Department, as do casualties amongst officers, and this tends to delay relief work not a little. Commanding officers can greatly assist by furnishing such information.

One of the reasons advanced by Mrs. Atkinson to account for the fact that the Air Service branch of the Army Relief Society does not hold up its end with other branches of the Army is that many in the Air Service are not aware of the needs of this Society nor of the good it really does. To demonstrate how easily money can be raised, she cites one instance during the first year of the existence of the Army Branch when at Mather Field, Mills, Calif., a sum of \$5,000 was raised as the result of an aerial circus staged at that field. No gate admission was allowed, so tags were used, and all of the enlisted men took charge of the tagging and the wives managed the advertising and the concessions.

If the facts are known and understood, it is thought that all Air Service Stations could and would give greater support to the Society. It is believed that the Chief of the Air Service will gladly sanction any proposed proper measures for raising money to contribute to the Society and thus at the same time to help ourselves.

The report in detail is as follows:

Contributing Fields and Comdg. Officers	Amounts contributed.	Officers of Sections	Number of Section	Number of Members
Brooks Field, Texas Major R. Royce	\$129.00	Pres. Mrs. R. Royce	6	45
Chanute Field, Ill. Major F.L. Martin	75.00	Pres. Mrs. F.L. Martin Sec. Mrs. F. Bradbury Treas. "	13	62
Crissy Field, Cal. Maj. George Brett	115.00	Pres. Mrs. W.E. Gillmore	2	15
Fairfield Int. Depot Maj. A.W. Robbins	50.00	Sec. & Treas. Mrs. H.H. Mills	12	Not reptd
Kelly Field, Texas Lt.-Col. J.H. Howard	349.50	Pres. Mrs. S.B. Cook V.Pres. Mrs. D. Lackland Sec. Mrs. F.K. Cannon Treas. Mrs. Chas. Bubb	14	110

Contributing Fields and Comdg. Officers	Amounts contributed,	Officers of Sections	Number of Section	Number of Members
Langley Field, Va. Lt.-Col. C.H. Danforth	\$959.00	Pres. Mrs. C.H. Danforth Sec. Mrs. A. Easterbrook Treas. Mrs. L. Jacobs	7	Not reptd
Mitchel Field, N.Y. Maj. Walter Weaver	346.68	Pres. Mrs. W.R. Weaver Sec. & Treas. Lt. S.M. Connell	11	Not reptd
Rockwell Field, Cal. Maj. H.H. Arnold	9.00	Pres. Mrs. H.H. Arnold	8	9
Ross Field, Calif. Lt. Col. T.A. Baldwin	70.00	Pres. Mrs. J.A. Baldwin	-	-
Scott Field, Ill	47.00	Pres. Mrs. J. Paegelow V. Pres. Mrs. R.K. Simpson Sec. Mrs. R.E. Robillard Treas. Mrs. M.M. Greeley	16	26
McCook Field, O. Maj. T.W. McIntosh	64.00	Officers not reported	15	64
Scattered memberships	3.00			
Total	\$2117.18			
Expenditures:				
Postage \$3.00		(Signed) Mary E. Bayley, Sec. & Treas. A.S. Branch, Army Relief Society		
Telegrams 2.60	5.60			
Net receipts	\$2111.58	Mather Field, Mills, Calif.		

THE NIGHT FLIGHT OF THE ARMY AIRSHIP TC-2

The recent night flight of the Army Airship TC-2 from Akron, Ohio, to the Aberdeen Proving Grounds, Md., its permanent station, marked another step in the progress of lighter-than-air aviation. The flight began at 11:30 p.m., Thursday, May 31st, and lasted for seven hours, the landing at Aberdeen being made at six o'clock the following morning.

The performance of the ship from start to finish was excellent, and the mission of the flight was carried out without any serious delay or hindrances. The TC-2, a sister ship to the ill-fated TC-1, lately destroyed at Wilbur Wright Field, Dayton, Ohio, represents the largest type of ship constructed in this country. It was manufactured by the Goodyear Tire and Rubber Company of Akron, and is one of four similar ships being constructed by that company.

Although the altitude of the flight was 4500 feet, there was no inconvenience experienced by any members of the crew in the open car. The shifts in piloting were limited to two hours each, so as to give all of the crew an opportunity to handle the new ship.

For those who have never flown at night, without definite points on which to establish their course, it may be of interest to explain how a ship can start out seemingly blindly and arrive at its destination. Reliance must be placed in the compass and other instruments with which the ship is equipped, and due allowance is made for wind direction and the speed of the craft, both of which will cause the ship to drift from its course. A few minutes prior to taking off, the last word in direction and velocity of the wind were given to the officer commanding the ship. Computations were rapidly made to determine the drift and actual speed over the ground the ship would make, and the reading of the compass to be followed during the night was then determined.

Inasmuch as cities, rivers and mountains were on or near the path of the flight, the computed location of the ship and the height of the ground, above sea level, at the end of each hour were carefully noted. For example, it was determined that at the end of the first hour the ship was to be flying over ground 1200 ft. above sea level; at the end of the second hour, 1400 feet above sea level;

third hour, over three mountain tops 3500 feet above sea level. The pilots were then instructed that the altitude of the ship would be so regulated that the ship would fly at not less than 1,000 feet altitude all during the night.

The ship was taken off 300 pounds "heavy", which means that the handling crew shoved the car upward as far as possible and the ship was given the maximum headway before being able to settle to the ground. It circled upward in the darkness, with all of its lights showing, and from the ground the ship looked very much like an ocean steamer as it appears in the night.

From the viewpoint of those on board the ship as it plunged upward into absolute blackness, the only visible points were the lights in the hangar below, which showed up in the night. The ship made a wide circle around the hangar, as the orders directed that the ship was not to proceed on its course until everything had been tested and found to be in good order, and the ground crew remained in position until the ship headed away. Everything was found to be working satisfactorily and the ship pointed her nose in such a direction that the compass showed 120 degrees, when the flight to Langley Field, Va., began.

As soon as the ship was under way everything on board was made as dark as possible, with the exception of the necessary navigation instruments. Here and there scattered groups of lights were picked up on one side or the other, and a good check of the flight was being constantly made. The pilots held steadily on the course determined upon, and one by one the cities and towns that were to come in the path appeared, and the big ship was gradually nosed up to the predetermined altitude. Presently a big moon, which had been obscured by the mist, rose high enough to throw a faint light on the ground below, and by its glint a river was observed a number of miles ahead. A prompt examination of the charts was made and the river was identified. Other rivers, cities and visible marks, such as groups of coke ovens, were constantly noted and being used to check the course of the dirigible.

The view over Pittsburgh, Pa., at two o'clock in the morning, with its countless rows of lights and the glare from the steel foundries, was a sight not easily forgotten, nor will the crew quickly forget the view of the broad Ohio River showing in the moonlight like a silver ribbon with a black background.

The shifts of piloting were so arranged that a crew of two pilots and one engineer were on duty two hours before the relief crew took their place, but the keen pleasure of the trip and the desire to miss no view of what they were passing over kept all from sleeping. It was well worth while, for the moon began shortly to shine on rolling mountains whose tops looked right under the ship, while in reality they were 100 feet below. A heavy mist began to settle in the valleys, and it was not long before the mountain tops stood out as black wooded islands, in a sea of white clouds.

After a short while, clouds began to form around the airship itself, cutting off all view below and the moon from above, and for a period the navigation of the ship depended entirely upon the instruments set before the pilots. Dawn came while the ship was still flying in the clouds, and gradually as the world below the ship began to light up it became possible to check the course on the terrestrial objects below.

About this time one of the engineers reported a slight leak in one of the oil tanks. The ship was promptly turned off its path to the nearest town in the Cumberland Valley, in order to enable an accurate check to be made on location. The railroad station was situated in a place very difficult to approach, and two circles were made over the quaint little town before it was identified as West Minster, Md. Because of the trouble which developed in the oil line and the unfavorable winds, the course was immediately changed so that the ship would make Aberdeen Proving Grounds instead of Langley Field.

After two more hours of flying over the billowy clouds, during which time an occasional view was had of the fertile country in Northern Maryland, the broad Chesapeake Bay finally came into view. A fortunate shift of the wind cleared the air of clouds a few miles to the south, and the airship hangar at Aberdeen could be seen.

From that time on until the sound of the motors woke up the post, the crew gave directions for landing to a few men on the ground, and the ship was greeted with cheers at its new home as it made its first stop after leaving the Great Lakes. After a perfect landing, the ship was promptly put away in the hangar.

It is well worth mentioning that the flight eastward was made under excellent conditions, it being pleasantly cool and enjoyable from start to finish. Unfortunately, however, the crew had to return by rail to Scott Field, and that trip was exceedingly hot and dusty; the berths in the Pullman were close and stuffy and sleep was impossible. The average speed by rail was about 35 miles per hour, and the crew "landed" in St. Louis feeling and looking very dirty and tired. The comfort and speed of the trip by air, as well as the beauty of the scenery viewed from the ship, was in striking contrast to the trip by rail.

The TC-2 was flown under the command of Lieut. Philip Schneeberger, Lieuts. Arthur Thomas and Bruce Martin as pilots; Sergeant Neff and A. Oneil, the latter of the Goodyear Tire and Rubber Co. as mechanics, and Sergeant Fitch as rigger.

AERIAL CIRCUS AT SCOTT FIELD

At least 6,000 persons witnessed the aerial circus which was given at Scott Field on Wednesday afternoon, June 20th, for the Rotarians who came to the field from the International Convention in session at St. Louis for an outing upon the invitation of the Commanding Officer.

The features of greatest interest to the visitors were the parachute jumps, the burning of a captive balloon and the race by two pony blimps.

NEW SAFETY VALVE FOR AIRSHIPS ✓

Mr. A.G. Maranville, a representative of the Aeronautical Department of the B.F. Goodrich Tire and Rubber Co., of Akron, Ohio, recently visited Scott Field, Ill., for the purpose of demonstrating the new Goodrich safety valve for airships. This device is 28 inches in diameter and has a gas exhausting capacity of 11,000 cubic feet per minute. It uses the same gaskets and other fixings as the ordinary valve, but it has twice as large an opening and weighs 28 pounds. The new valve is for larger ships than there are at present at Scott Field, but the Goodrich firm are constructing one of 18-inch diameter for use in non-rigid ships.

SIDELIGHTS ON THE PHILIPPINES ✓

In the land of mid-day dreams,
Happy, happy Philippines;
Etc., etc.

Service in the Philippines must be very interesting and instructive, judging from reports received from time to time in the Office of the Chief of Air Service, describing the experiences of Air Service personnel stationed in the Islands. Imagine serving in a country, part of which is perfectly modern and up-to-date, and other parts, only as far distant as a few hours' ride in an airplane, the abode of a tribe of natives who in this enlightened day and age still live in a primitive state, wear no clothes to speak of, have no idea of the value of money, and where men, women and children all smoke.

In a report recently received covering a photographic flight from Camp Nichols, Rizal, P.I., to the Island of Mindoro, 1st Lieut. Willis R. Taylor, Air Service, relates some very interesting facts concerning a tribe known as the "Mangyans", who keep entirely to themselves and are only found in Mindoro.

The report reads as follows:

"On Thursday, April 26th, 1923, three airplanes, numbers 22-503, Lieut. R.A. Hicks, Pilot, Private O.O. Hansen, mechanic; 22-504, Lieut. W.R. Taylor, Pilot, Lieut. J.I. Moore, Observer; and a "Freighter", Lieut. E.R. McReynolds, Pilot; took off from the base at Calapan, Mindoro, for an aerial circumnavigation of Mindoro for the purpose of taking airscapes of various points. Permission had previously been obtained to land in South Mindoro, near the Barrio of Cayguray. Previous information had also been received from a Dr. Daywelt, a resident and a landholder of Cayguray, that a landing could be effected on his land and that he would mark a landing field with the conventional T.

The three planes took off from Calapan, the 26th, at 10:40. On the way down the coast photographs were taken of towns that had to be retaken, due to bad results on the previous circumnavigation.

A landing was effected on Dr. Daywelt's "Rancho" at 11:55. The field is

situated about one mile north of the Barrio of Cayguray and is on the west side of the Cayguray River. It can be easily located, as it is situated within a sharp 180° positive curve of the River, taking north as zero. The field is exceptionally level and is about a mile square. The grass is burnt off during the dry season and is about 18 in. high at other times. The field, with regard to accessibility for supplies, is very poor. Supplies would have to be shipped by water to "Camanorvi", erroneously called "San Jose" on the U.S.C. and G.S. Navigation Map. From there supplies would come to Cayguray either by "Banco", "Casco", or raft. This trip requires from two to four hours, according to the boat, the wind, and the tide. From there supplies would be hauled to the field by carabao cart one mile, about forty minutes.

Upon landing we were met by Dr. Daywalt and some native boys, who carried our baggage up to his house, some 200 yards distant. The doctor lives in a very palatial 2-story house, has a plentiful supply of artesian water, and makes an excellent cocktail concocted with a native berry, called the "Duhot". It is decidedly a warm concoction.

The doctor had arranged for a carabao and a deer hunt for us, so at about 2:30 we started for the foot hills. We had as transportation two small native ponies, with native saddles, two carabaoas, which the native guides rode, and one Indian bull to carry the baggage. We went up the Cayguray River about seven miles and pitched camp. We carried as hunting equipment three service Springfields with dum dum bullets, one Winchester 405, two shot-guns with buckshot, and buckshot loads, and our service automatics. We crossed the River here on a native carabao, this being an exceptional feat as this is the first time any of us had ever seen a white man ride a carabao as it seems that they have a great aversion to the white Race. As it was, the carabao didn't care very much for the idea. Lieutenants McReynolds and Moore went up the River and Lieutenants Hicks and Taylor went down. The guides located some fresh carabao tracks, which we started following. About that time it started to rain and the hunt was off as the guides stated that the game would go back in the "Bosque" (undergrowth). It rained all night and everybody and everything got very wet, so the hunt was rather a "Fizzle". We returned to the ranch house early the next morning (the 27th) and got some breakfast and dry clothes. The doctor claimed that the country was full of deer, wild carabao, and wild ducks, but that we had been very unfortunate in encountering bad weather. This is undoubtedly true, as we saw any number of carabao and deer trails. There are also a few "Tamarou" farther up in the mountains.

The natives of this section are mixed, some "Visayans" and some "Tagalogs". There are also a people known as the "Mangyans", who keep entirely to themselves and are only found in Mindoro, in the Philippine Islands, and it is believed only in that part of the world. They are very similar in looks to the American Indian, being much taller than the "Filipinos", and having high cheek bones. The color of their skin is almost a baked clay red. They have straight black hair and blue eyes, and are very well proportioned. Like all savage races they seem to have flat feet. The men wear nothing but a loin cloth and a few hair decorations, and sometimes a woven palm hat. Up to fifteen or sixteen the boys wear nothing. The girls wear nothing up to fifteen or sixteen. After they are married they wear a short skirt and sometimes a breast band or a waist. The men and the women both decorate their limbs with windings of brass and copper wire and wear beads and heavy metal ear-rings. A sub-chief wears a wild cock's feather in his hair. The head chief wears eagle's feathers.

Habitation - Their houses usually consist of only one room with no furniture, except a few woven mats of the native "Busi" palm, which they sleep on, and under. The houses are built about 8 feet from the ground on bamboo, and the house itself is constructed of bamboo with the roof and sides covered with woven or thatched "Busi" palm leaves. The small children sleep in "Busi" palm hammocks. This "Busi" palm is also used to make baskets and bags, and the sap is used to make a very powerful drink which they call "Tuba". About four gallons of this liquid can be obtained daily from a "Busi" Tree and is fermented and ready to drink is about 18 hours. The tree yield tapers off to a yield of about 2 gallons in a year and then dies.

Marriage Customs - Withdrawn by the censor.

Burial Customs - The dead are buried in trees, wrapped in "Busi" leaves.

Religion - The chief is the Medicine Man or Priest and they worship the "Great Spirit". They believe they were led hundreds of years ago by the "Great Spirit" from the Straits Settlement to Mindoro.

Laws - The head chief is the law maker and the Chief Tribunal. The capital punishments are for adultery, polygamy, and thievery. The race has the reputation of being very honest, and when they give their word they can be relied upon to keep it.

Food - Their food is rice, corn, pumpkins, chickens, wild fowl and game, and wild roots and fruit. They store their food by building a platform in a cut-off tree and a small house on that. They get to it by means of a ladder.

Weapons - They use bows and arrows, spears with flint and metal heads, and also make bolos from iron, which they trade, for after they have made a kill with their weapons they are highly prized.

Music and Dances - They have a number of chants in a minor similar to American Indian chants, and use a small instrument similar to a small guitar, using strings of human hair. They have a number of dances, but we were unable to get information about them or see them.

Mangyan Names of Section: Iling Island - Rising Sun - Eulalacao - Falling Star - Cayguray River - Crocodile - River infected in rainy season with crocodiles. Most of the information about the Mangyans was obtained from Dr. Daywelt.

Cooking Utensils - The cooking utensils are made of clay. They eat with their fingers, sometimes using wooden spoons. Their dishes are also made of clay and thickly woven "Busi" Palm Leaf.

The main Mangyan Village is about 25 kilometers in the mountains on a plateau, near Table Mountain. The chief of this particular tribe has never allowed anyone to enter this plateau. The plateau has only two entrances, which are guarded night and day. There is a smaller village some 15 kilometers from Dr. Daywelt's place which can be visited, but due to the limited time we were unable to do so, although a number of the people from the village were seen around the trails.

There is a still smaller village of about 40 Mangyans, about 3 kilometers across the Cayguray River from Dr. Daywelt's, on a small mountain. This village was visited and a number of photographs taken. The people had no idea of the value of money except copper centavos, which they make ornaments from. They will trade food or clothing for centavos, copper, or brass wire, red cloth, beads, etc. Also cigarettes or cigars and chewing tobacco, which they are fond of. They all smoke, men, women and children.

We took a number of pictures of the women wearing skirts only and then tried to get a photograph "Au Natural" for three cigarettes, two centavos, and a piece of copper wire, when one lady's husband showed up with a spear, thereby "Tying up" the negotiations. We saw the huts, modes of living, and made photographs of them.

In the afternoon a flight of 25 minutes was made to San Jose, some 12 kilometers across the bay, where a town and a large sugar mill is located, with the idea of locating a landing field, as this town is connected by railroad to Camanorvi. The cleared land seems to be all planted in cane, which was half grown, so a landing was not attempted. This would be the logical place for a base in that section, and it is believed that the manager of the sugar mill, a Mr. Wilson, would provide a landing field.

We put up our folding cots and stayed at Dr. Daywelt's the night of the 27th. He killed a young sheep and roasted half of it for us. The next morning we took off at 8:50 and arrived at Calapan at 10:35 via the west coast, in order to retake some photographs".

WEST POINT CADETS RECEIVE INSTRUCTION AT MITCHEL FIELD

Mitchel Field had the honor of welcoming 200 Cadets of the United States Military Academy on June 13th, when the first half of the class of 1924 arrived for a week's instruction in aviation. It is intended giving this group, and the second group which was due to arrive on June 21st, as much general information about the Air Service and aviation as their short stay would permit.

On June 14th all the cadets were given a flight, in the majority of cases it being their first hop. All were very enthusiastic and, as weather permits, they

will be given additional flights. On the evening of June 15th a dance was given in their honor at the Officers' Club. Instruction ceased at 11:00 a.m. on Saturday, in order that they might spend the week end with friends and relatives in the vicinity.

On Monday it was arranged to have them pay a visit to the Sperry factory at Farmingdale, L.I., in order that they may see airplanes in actual course of construction.

The schedule of instruction covered aerial photography, engineering, operations, supply, armament, communications and passenger flights, and concluded on the afternoon of June 19th with a lecture on the tactical application of the Air Service.

Mitchel Field spared no effort to make the stay of the cadets pleasant as well as instructive, and hopes that they enjoyed their visit as much as did the personnel of the field.

AIR SERVICE TO COOPERATE IN SUMMER TRAINING CAMPS

A detachment of enlisted men and five airplanes have been ordered from the 88th Observation Squadron, Fairfield Air Intermediate Depot, Fairfield, Ohio, to proceed to Camp Knox, Ky., to participate in the summer training of the R.O.T.C. and the C.M.T.C. Units. The 7th Photo Section will work in cooperation with the Field Artillery, and all photographs taken at Camp Knox will be sent to Fairfield for developing and printing.

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, June 2, 1923.

Lieut. Crocker, having spent considerable time in preparation for his flight from Gulf to Lakes, found it was well spent, since his flight was successfully accomplished. The plane used on this flight was the one used by Lieut. Doolittle on his transcontinental flight last fall. Lieut. Crocker will no doubt have an interesting story to tell when he arrives here.

The 13th Squadron returned from its march, which was undertaken for the purpose of testing equipment assigned to a squadron by table of allowances, including airplanes. It had been planned to make this march to Laredo, but on account of shortage of funds it was necessary to return from Pearsall, Texas. The landing field at Pearsall was rather poor, and as a result three planes were damaged in landing. A board of officers is preparing a report as to the result of test.

The Photographic Section completed and forwarded to Washington, copies of mosaics of Fort and Ports Project including Houston, Galveston, Beaumont and Texas City. Obliques are now being taken in connection with the same projects, remodeled K-1 and K-5 cameras having been received for this work.

A letter was recently received by the Commanding Officer of Kelly Field from a representative of the people of the country bordering on the lower Colorado River in Texas, in appreciation of the project recently completed by the 22nd Photographic Section. A photographic mosaic was made showing the lower stretches of the river and portions of the surrounding country which was flooded or threatened by floods caused by log jams in the river.

"Office of
Ben M. Griffith,
Magnet, Texas.

May 15, 1923.

"Col. John H. Howard,
Commanding Kelly Field,
San Antonio, Texas.

"Dear Sir:

The air photographs of the Colorado River were received by Major Stiles, State Reclamation Engineer, and in behalf of the Colorado River Flood Control Association, I wish to thank you for so promptly complying with our request for same, and your Department has placed every citizen adjacent to the lower reaches of the River, under lasting obligations to it, for the photographs taken by Capt. Giffin, enabled us to place our condition so forcibly before the Legislature last week, that they passed a bill that enables us to finance the opening up of the lower river, by cutting a new channel past the Great Raft, and there is no question but that our success was in a great measure due to these photographs.

Yours Very Truly,
(Signed) Ben M. Griffith".

Captain Lynd and Master Sergeant English returned from their extended cross-country, having flown from San Antonio to Portland, Oregon to San Diego, Calif., and return to San Antonio, Texas. This trip carried them through Texas, Oklahoma, Kansas, Colorado, Wyoming, Idaho, Utah, Oregon, Washington, California, Arizona, New Mexico and back through Texas. Captain Lynd reports that he experienced no serious difficulty enroute.

The School Group now has five Martin Bombers. The last one recently arrived here from Mitchel Field, being flown by Lieuts. L. A. Smith and G. H. Beverley. Another Martin Bomber, which was ferried from Mitchel Field at the same time by Lieuts. Peck and Rice, crashed on take off at Muskegee, Oklahoma, and was damaged beyond repair.

Five officers from Brooks Field and twelve officers from the Attack Group, at this station, are receiving Martin Bomber instructions preparatory to ferrying more Martin Bombers here, from New York, and for the Fall bombing maneuvers at Langley Field.

Lieut. Biggs of the 41st Squadron had a rather extended trip from here to Fort Sill, Oklahoma, thence to Scott Field, Illinois, and return to Kelly Field,

for the purpose of ferrying Captain Thenault, French Air Attache at Washington, D.C., to this station. Captain Thenault met with unexpected delay and discontinued his trip at Scott Field, Illinois, starting back from there to Washington, D.C.

Lieut. Biggs reports that he enjoyed his stay at Scott Field, as it gave him an opportunity to take in the Kentucky Derby.

Sergeant McDaniel on a cross-country to Mount Calm, had a forced landing at Kosse, Texas, due to a broken con-rod. A new motor was taken up to him, installed where the plane had landed and the plane flown back here.

The Advanced Flying School started its course on Monday, June 4, the Primary Course at Brooks Field having been completed and the students having reported here for further instruction.

The new field lighting set has had a number of tests with good results, and for the benefit of any pilot that may arrive here after dark, it is announced that this new lighting set can be put in operation on just a few minutes' notice.

At the request of the Commanding General of the 2nd Artillery Brigade, the School Group will bomb, with live bombs, a dummy battery emplaced near Camp Stanley. A number of preliminary missions have already been carried out, in the way of photographic and reconnaissance missions. Following the bomb attack, the Attack Group will attack with machine guns. Considerable interest as to the results of the attack is being shown.

This field, although already short of officers, is being drawn upon very heavily for officer personnel, not only for the coming maneuvers at Langley Field, but also for a demonstration to be given at Fort Leavenworth, for the benefit of the School of the Line, and for the purpose of ferrying bombers from New York to Kelly Field.

Brooks Field, San Antonio, Texas, June 11, 1923.

During the past week Brooks Field seemed almost like a deserted field due to the great change in its activities. All of the student officers have left this station and are now being initiated into the mysteries of the dashing DH-4-B at the Advanced School at Kelly Field. A great many officers have gone on leave and a great many have gone on cross-country trips. While there are still 15 or 20 officers here, yet it is a great change from the 90 or 100 who were here a few weeks ago.

The Field has just been inspected by the Inspector General, 8th Corps Area, and everyone is now breathing a sigh of relief, as the skin list was not very large.

There are indications of the Post taking on increased activities, as Major C.W. Russell arrived from Texas A. & M. to take up the duties of Camp Commander, Air Service, R.O.T.C. Camp. Arrangements are under way to quarter his men in the Cadet barracks and to feed them with the officers at the Officers' Mess.

Four officers from this station left to assist in flying back Martins for Kelly Field. Lieuts. Williams, McClellan and Patrick went to Mitchel Field and Lieut. Corkille to Langley Field. Lieut. Corkille will join the other flight at Bolling Field and the four ships will return together.

Orders have been received for Major Bock to go to Washington for temporary duty in the School Section, Office, Chief of Air Service. Captain Sturcken and Captain Rust returned after a very successful flight to New York and Washington and gave vivid descriptions of the fine reception they were given at Gallipolis, the fair Ohio city that Captain Rust has made famous. Lieuts. McCormick and Wimsatt left a few days ago, by air, for Washington and New York. They hope to make the trip in time to attend the graduation exercises at West Point. Officers ordered on Foreign Service are now rapidly departing. Lieuts. Salsbury and Thornton have left for Hawaii via Crissy Field. Lieut. Welsh left for Panama and Captain Rust will leave for that station this week.

Ever since the Primary Flying School arrived at this station the work of getting the station in shape has taken up a great deal of the labors of the enlisted men. That work has now reached a point where other activities can be undertaken, and June 11th saw the opening of the Aero Repair Building. All overhauls for training planes will be done at this station and in the future the Depot will be relied on for only new planes.

Kindley Field, Fort Mills, P.I., April 30, 1923.

The Artillery "Shoot" is over and Kindley Field has settled back into the jog-trot of ordinary routine. The men of the Flight are sniffing the wind that blows from Manila and waiting impatiently for the scream of the Eagle. In the stress of additional activities, the Squadron has been working with its nose to the grind stone, but now the dog-days are "History" and the day of reckoning -- and rewards-- is at hand.

Also, our visitors from the mainland for the "shoot" have departed. They descended upon us as the locust (The Second Squadron Mess is Island - famous), but we withstood their attack, fattened them on the prodigal's fatted calf, and sent them on their way rejoicing. Please quote: ". . . Some (Squadrons) achieve fame . . ." We would be swamped with new-comers if the Powers-That-Be approved the numerous requests for transfer that are pouring in on us.

The siren-call of Mountain Province -- The Adirondacks of the Philippines -- has sounded in the ears of Lt. McGraw, Mrs. McGraw, and Lieut. McKinnon, and they have gone hence. Kindley Field knows them no more -- for the time being. At Baguio, on the top of the world, they disport themselves, and chase the elusive golf ball over 18 holes of pine-fringed links.

Lt. Creighton is again with us after a short visit to the Celestial Kingdom. He speaks enthusiastically of the sights of Ancient Cathay and tells of the sound of guns north of Canton. There are yet "wars and rumors of wars" -- and Mars treads familiar ways, unhampered by Peace Treaties and Hague Conferences, in China, at least. The sights and sounds of China, but he fails to mention the smells - "There are disappointments even in Paradise."

Great splashing and bouncing upon the peaceful waters near the seaplane harbor marked the first solo hops of Lieuts. Laughinghouse and Lynch, as they took off and landed in the traditional series of graceful leaps and bounds. Up on the hill, on the steps of Headquarters, sit their fellow officers, all routine duties suspended. They sit --- and gloat.

A certain devine, who has been wont to disturb the Sunday morning siesta of our pilots with requests for aerial transportation to Manila in order to coach at the afternoon ball-game - very wisely went over by the boat last Sunday. Very wisely, for sooth, for the C.O. had craftily planned to send Lieuts. Laughinghouse and Lynch over with him as pilots, the former to make the take-off, the latter, the landing, thereby insuring a maximum of wetting and bouncing.

Lieut. Owens added another laurel to the exploits of the service, when he brought back a record load in an H boat. Besides suit-cases, grips, machine-gun parts, etc., he took the following animal cargo: Warrent-Officer Mason, 225 lbs. and Lt. York, 195 lbs. Ray scratched his head gloomily. "Where shall I put it all?" he pondered. Finally he stowed away one in the front cock-pit, with instructions to fill his lungs full of air during the take-off, and crowded himself down besides the other in the main cock-pit. As he gave her the gun and the good old Curtiss staggered over the waves, he thought that he would have to taxi the entire way. Finally ingenuity in jockeying won the day and the H-boat rose triumphant from the water. Reaching the home-port he leveled off at the customary height, but the over-burdened ship cut through the glide and settled with a morose bang upon the waves. Wishing to straighten out the landing, our pilot reached down for the throttle (which in a Curtiss sea-plane is situated between the two occupants who sit side by side) -- he reached down for the throttle to "tickle" her a little, but no throttle he found; for his companion, thrown over doubtless by the centrifugal action, had entirely covered the throttle over by a mound of tissue.

"Habeas corpus!" he exclaimed, hopelessly, and finished the landing as best he could. (this is a true story; all rights reserved, including the Scandinavian).

A certain Armament officer finds the Malinta swimming cove a pleasant place to pass away a heated afternoon, and occasionally finds "Official business" to take him over to the rock toward the end of the week. We neither blame him, nor begrudge him his escape from the heat of Manila. He smiles his genial broad-expanding smile and frolics mid the waves, and thinks regretfully, of the time when he, too, was a desizen of these wilds. Alas, poor Yorick!

Kindley Field, Fort Mills, P. I., May 7, 1923.

When is a storm not a storm? When its a typhoon. Thus does Experience teach us the fundamentals of Physical Geography. With a roar and a rush the Typhoon Season descended upon us, unexpected and unprepared for.

Saturday (which may be called a symbol for the March of events) reversed the usual, and coming in like a lamb, went out like a lion. The sun of Saturday rose on a world dry and dusty, the limp, brown leaves hung pendent from their heat-shriveled stems; Kindley Field -- more sun-baked than sun-kissed - drowsed in the hot still air; the sea -- to be classical -- was a shield of polished brass. As the day progressed "like an army mobilizing" cloud-legion after cloud-legion galloped out of the hinterland of space, and forming into Battalions, hovered on the horizon, like the Medes of old on the fringe of the fertile crescent of Mesopotamia. Then, as if a modern, albeit, ethereal, Cyrus had raised his spear as a signal, the offensive began. Vapor-chariot on vapor-chariot, swept across the sky, their banners of mist trailing behind them. The sun, wounded and outfaced, retreated to his inaccessible fortress and brooded over his defeat. We were left in the grip of an inexorable conqueror.

The edict has gone forth. We are to be blotted from the face of the earth. Ton upon ton of rain has descended upon us. We ooze and drip water from every pore. We are a new Venice "a dyke-destroyed Holland". We are one with Kipling's soldiers "slugging" thru Africa; there are "Boots, boots, moving up and down again" to the left and to the right of us, "wallowing and blundering" over the wet, squashy ground.

The fore part of the week was the calm before the storm. Most of our men "feasted in Babylon" (if we may give Manila so romantic a cognomen) and those of us who were left behind -- handicapped by lack of Hands -- launched and laughed, or launched -- and did otherwise according to our several dispositions.

Cpl. Wheeler, erstwhile Kindley Field Typist Extraordinary, succumbed to the lure of "Home, Sweet Home", and planking down \$170 (It seems like more when you "Pesoize" it) on the Finance Officer's desk, purchased his discharge. He is proceeding Statesward via commercial steamers. We watched the little Indo-Chinese steamer that bears him to Hong-Kong sail by in Lilliputian majesty, and we were bound fast in the coils of the Green-eyed Monster - but that was before the bad weather set in. Now we go about with bland smiles on our streaming countenances. "What Ho! Mates." We strongly suspect that Brother Wheeler is echoing the "Ancient Mariner's: Water, water, everywhere": or whispering between shut teeth the more modern maxim "Any port in a storm".

The afore-mentioned Cpl. Wheeler also experienced the joys of seaplaning from the rock to Manila, as the first lap in the trek back home. We trust his familiarity with the volumes of provisional regulations that passed through his hands will help him to "bull" his way through his classes in college.

Lieut. Owens flew to Manila on Friday with a cargo of typewriters for the P.A.D. and brought back Lts. York and Taylor for a week-end inspection visit.

Plans are under way to build a new ramp and runway on the north side of Kindley Field, going up to the further of the old balloon hangars. This will allow us to fly from that slide during the typhoon season, and from the main location during the monsoon season. Thus our charge account with the salvage will be materially reduced.

Clark Field, Pampanga, P.I., April 24, 1923.

A campaign is now under way to recruit the Philippine Scouts up to the authorized peace time strength. A large number of posters, pamphlets, and miscellaneous literature relative to enlistments in the Scout Organizations are being dropped by our planes in towns and barrios throughout Luzon. Upon visiting the Regimental Drill Grounds one will see that our work has not been in vain. Hep, Hep, Hep, Right, Left, 1-2-3-4-, and new recruits are being matriculated into army lift.

Captain L. N. Keesling and 2nd Lieut. C. H. Barrett are experiencing a hard season. Both are sick in quarters and are reported as being very sick.

1st Lieut. Mark R. Woodward, back from a period of Detached Service, is again occupying his old chair in Headquarters as Adjutant. He relieved Lieut. McHenry, who is now on duty with the 24th Field Artillery.

Rumor is the spice of army life. If all that is to happen should reach maturity the tears of some would likely drown the happiness of the lucky few. "The 28th Squadron is to move to Camp Nichols in the very near future?" As yet there is nothing official or any authority upon which to base such a rumor.

1st Lieut. W.S. Gravely and C. R. Evans returned from Detached Service at Fort Mills. Lieut. Gravely assumed command of the 28th Squadron in absence of Captain J.H. Houghton, who is now on Detached Service at Camp John Hay.

Clark Field, Pampanga, P.I., April 28, 1923.

The annual pistol practice is to commence April 30th. Lieut. W.S. Gravely, range officer, is busy with the erection of targets and instructing soldiers in the handling of pistols. Due to lack of time, the pistol practice of last year was rushed a little and the results were not altogether satisfactory. All available time is now being spent in studying the Manual of Pistol Marksmanship. Regular classes of instruction are now in progress and all departments are reduced to an absolute working minimum in order to insure a maximum class attendance.

Lieut. Col. Andres, of the Inspector General's Department inspected Clark Field Saturday Morning, April 28th.

Mention was made in a previous letter of a proposed trip to Mindoro and the probability of officers of Clark Field being "out of luck" on the final choosing of personnel. However, Captain G.T. Collar, Commanding Officer of the Detachment, and Lieuts. John I. Moore and B. S. Thompson were among the six officers of the expedition. The flight took off from Camp Nichols with all their equipment (both personal and otherwise) aboard and started out to find a landing field. News has drifted back that all was well with them and difficulties experienced are now interesting fireside reminiscences.

Captain J.H. Houghton, and family are spending a month at Baguio. Captain A.H. Gilkeson, Lieuts. Hackett and Cook are also enjoying a little respite at Camp John Hay from the heat of the lowlands.

Camp Nichols, Rizal, P.I., April 14, 1923.

A "Hangar Dance" was given by the Officers of the post Saturday evening, April 14th, honoring Captain and Mrs. Benjamin G. Weir. Captain Weir is the new Commanding Officer.

Lieuts. Malcolm S. Lawton and John R. Glascock are spending a month's detached service in Baguio.

Photographic work is still in operation in connection with Artillery firing at Fort Mills, P.I.

Machine gun and bombing practice was in operation here during the past week and much progress was observed.

On April 7th, Lieut. Weddington, on photo mission to Baguio from this station, with Clark Field as a base, experienced engine trouble and was forced to land in the Trinidad Valley, near his objective. Lieut. Halverson, his companion on the mission, followed him down, to render such assistance as might be needed. Both officers were compelled to remain at Baguio until the following Tuesday when a new carburetor enabled them to return.

Camp Nichols, Rizal, P.I., April 21, 1923.

Six ships left this station for the Island of Mindoro, April 19th, on photographic mission; pilots, Captain G.T. Collar, Commanding, First Lieuts. R.A. Hicks, E.R. McReynolds, J.I. Moore, W.R. Taylor, and B.S. Thompson; enlisted personnel, Technical Sergeant C. A. Fritiofsen, Sergeants H.F. Nichodemis and W.J. Wilkerson, and Privates O.O. Hansen, H.W. Todd, and H.C. Grady, cook. The flight will rely upon the air for all communication and supply with its base. Due to the nature of the country, it will be necessary to send even the drinking water from this station. It is expected that interesting data will be secured. (This data appears elsewhere in this issue - Ed.)

The enlisted personnel of this station put on a vaudeville show Thursday last, which was a decided success, justifying the large attendance, both local and from Manila and other posts.

First Lieut. F.E. White, A.S., who has recently returned to duty from Sternberg General Hospital, where he was undergoing treatment for broken collar bone, left for Baguio on April 23, for 30 days' detached service.

Camp Nichols, Rizal, P.I., May 5, 1923.

First Lieuts. M.S. Lawton and J.R. Glascock, Air Service, returned from one month's detached service at Camp John Hay, Baguio. They report a 600 kilometer hike into the back country of Northern Luzon. Lieut. Lawton reports many interesting customs observed among the primitive people.

First Lieuts. Cyrus Bettis and E.E. Aldrin, Air Service, returned from an extensive tour through China, Japan, and Korea.

First Lieut. F.E. White, Air Service, left for one month's detached service at Camp John Hay.

Captain G.T. Collar and Lieuts. John I. Moore and B.S. Thompson, Air Service, returned to Clark Field, Camp Stotsenburg, after having completed photographic mission to the Island of Mindoro.

Rockwell Air Intermediate Depot, Coronado, Calif., June 1, 1923.

Lieut. E.P. Gaines and Sergeant A.J. Hilton, who dropped in here last week from Pope Field in DeHaviland 4B1 #64580, which was immediately condemned by the Chief Inspector at this Depot, left for their home station via San Francisco, in a new DeHaviland 4B1 plane, #68656.

Among the improvements made at this Field within the last few days is the completion of a new Flight Section Dispatch Office, on the line between hangars three and four, equipped with a locker-room for the officers' flying clothes; also separate lockers for visiting officers and pilots. An office, small work-shop and oil service room completes the inside arrangement, and Mr. C.C. Cole, Hangar Chief, is busy moving from the old shack, which has been an eyesore for some time, into his new quarters.

Another improvement which will eliminate the bad impression of all Inspecting Officers at this Depot, is the removal of the two expeditionary tent-hangars located east of the railroad track, which have been used as storage hangars for various classes of unused property at this Depot, and thanks to Fox & Sons, who conducted the auction sale of surplus Air Service property, these tents went before the hammer, as did carloads of other junk which was taking up valuable storage space here.

Major George E.A. Reinberg, A.S., who has been visiting friends in Coronado, left for San Francisco, from which point he sailed for the Philippines. We all wish Major and Mrs. Reinberg a pleasant journey and hope they will have the best of luck during their time of Foreign service. Major Reinberg goes to Manila to assume the duties of Air Officer, Philippine Division.

Major S.W. FitzGerald, A.S., left here for San Antonio, Texas, via Tucson and El Paso. The Major flew a rebuilt DeHaviland #63770, which has been fitted up for him at this Depot.

Rockwell Air Intermediate Depot, Coronado, Calif., June 8, 1923.

Major Thurman H. Bane, A.S. (Retired), former Commanding Officer of McCook Field, was a visitor at this Depot during the week.

Lieuts. Lowell H. Smith and J.P. Richter, A.S., made a flying trip to Mather Field for the purpose of inspecting Air Service property at that field. Their return trip was made from Crissy Field in four hours and eight minutes.

Felix (Chief) Steinle, Master Sergeant, A.S., Crissy Field, reported here for the purpose of ferrying a Curtiss JN6HG1 to Vancouver Barracks, Washington. The Chief left at 10:50 A.M., Thursday, expecting to fly to Fresno on his first leg of the journey.

Rockwell Air Intermediate Depot, Coronado, Calif., June 16, 1923.

The following officers and enlisted men on duty at the Rockwell Air Intermediate Depot, Rockwell Field, were attached to Troop "G", 11th Cavalry, for the

purpose of firing the regular course at target practice.

Major H. H. Arnold, A.S.
Major Henry D. F. Munnikhuysen, Q.M.C.
First Lieut. Lowell H. Smith, A.S.
First Lieut. Virgil Hine, A.S.
First Lieut. John P. Richter, A.S.
First Lieut. Frank W. Seifert, A.S.
Sergeant Jesse Steadman, Ordnance Dept.
Sergeant Spar E. Olsson, Q.M.C.

This course was shot on the morning of the 15th and resulted in good scores being hung up, considering the limited time spent in preliminary firing due to the other activities at this Depot. Lieut. Lowell H. Smith, Chief Engineer Officer, run up the high score of 307 and was closely followed by the other officers, the lowest score being 286, which again demonstrates the fact that the Air Service personnel can put up a good showing on the range as well as in the air.

Mr. Ray L. Hankinson, Inspector of Wood and Wood Parts reported for temporary duty here for the purpose of inspecting all propellers and wooden parts pertaining to airplane construction at this Depot.

Major Charles E. McBrayer, M.C., Sanitary Inspector of the 9th Corps Area, reported at this Field and made an inspection of the Depot.

The moving of surplus property sold at the public auction held here last month is progressing in a very satisfactory manner, considering the fact that Los Angeles firms, who were heavy purchasers, are moving most of their material by truck. Approximately 80 per cent of this property has left the field and the remaining 20 per cent should be out of the way within the next ten days.

During the past two weeks much activity has been going on in the Shipping Department at this Depot. Ten DH4 airplanes have been shipped to Boeing Airplane Company, Seattle, Washington, in addition to six rear section fuselages, to be remodeled into DH4B1 planes. This is the second shipment of planes to the Boeing Airplane Company. Twelve JN6HG1 airplanes have been shipped to Langley Field, Va. on the U.S. Navy Transport Schaumont, which sailed from San Diego on Monday, June 11th. Owing to the fact that the Navy transport could only accommodate 50 per cent of the Langley Field Order, which called for 24 planes, the remaining 12 will go forward in the near future. Five Liberty Engines were shipped to Crissy Field during the past fifteen days.

San Antonio Air Intermediate Depot, Kelly Field, Texas, June 20, 1923.

The Eighth Corps Area Commander finished an inspection at this Depot June 12th, and commented very favorably on the arrangement and storage of supplies and, in particular, on the storage of motors. He was also favorably impressed with the system followed in the assembly and the coordination of motors and the attention given to detail in the administration of the Depot.

The Repair Department under the direction of Acting Engineer Officer 1st Lieut. Charles E. Branshaw, A.S., overhauled, repaired, tested, and placed in condition for service during the first fifteen days of June: 1 Martin Bomber, 3 JN6H's, 1 Spad, 16 Liberty Engines, and 9 Wright Engines.

A regular 95-foot flag staff has been erected in a 6-foot concrete foundation near the tennis courts and the entrance to the Depot.

In addition to his regular duties of Adjutant, Personnel Adjutant, Agent Finance Officer, Fire Marshal, Police Officer, Post Exchange Officer, Information, E & R Officer, Investigating, Intelligence, pilot, 'n everything, Lieut. Lewis A. Dayton, A.S., assumed the roll of a dare-devil steeple jack, when he mounted the new 95-foot flag pole of this Depot during a strong wind at retreat, June 18th, to release the flag so it could be lowered.

It seemed for a time that "Old Glory" would have to fly throughout the night, but on seeing two of the guards (who come under his jurisdiction as Police Officer) were unable to lower it, Lieut. Dayton went to their assistance. With their valient aid the "dare-devil" nervously hoisted himself to the top of the "nervous flag pole, where after a few palpatating moments he succeeded in getting the hal-yards to run through the pulley.

Although it was the most "perpendicular Take-off" he has made in sometime, the only thing he regrets is the ruining of a pair of new trousers in doing the grizzly bear hug on the pole. Whenever his knees touched the pole, one-fourth inch dents were made and still remain.

This Depot has again won the cup for the third time in the beautiful yards contest. The Yards Contest is an annual event, the object being to interest the home owners and business houses in developing a beautiful and orderly city.

Plans have been made and the work of moving and converting the old sub-post exchange building into an administration building are under way. The administration building will be centrally located with reference to the ware-houses and repair shops, with a great saving of time in administration.

A drive is under way for the extermination of all rats which have suddenly made their appearance around the warehouses. By the expenditure of a few dollars for meat and poison thousands of dollars worth of Government property will be saved from the ravages of these rodents.

An allotment of \$4,500.00 has been received for the installation of a modern fire-alarm system for the protection of the warehouses and repair shops. The installation will be carried on under the direction of 1st Lieut. Myron R. Wood, A.S. This protection is urgently needed to replace the make-shift system now in use of calling the Fire Department by telephone in case of fire.

Mrs. Dorwin Lackland, the mother of Major Frank D. Lackland, gave a tea on the afternoon of June 6 in honor of Mrs. Wood and Mrs. Asp. Mrs. Wood is the bride of Lieut. Myron R. Wood. Before her marriage Mrs. Wood was Miss. Isabelle Wefing. Mrs. Asp is the guest of Mrs. Lackland during Lieut. Melvin Asp's flight to Florida and New York.

Lieut. and Mrs. Barney Giles gave a buffet supper at Medina Lake the 7th in honor of Captain Ben Giles and his bride and Doctor R.B. Giles and his wife of Dallas, Texas. Mrs. Ben Giles was Miss Helen Gaul before her marriage.

Mrs. Dorwin Lackland gave a swimming party and a buffet breakfast Sunday morning. There were about twenty-five guests present who had an enjoyable time.

Fairfield Air Intermediate Depot, Fairfield, Ohio, June 5, 1923.

Twenty-two officers and instructors, including the Commandant, Major T.D. Milling, of the Air Service Tactical School, visited this station recently for a tour of inspection. After being shown through the various departments, a luncheon was enjoyed at the Post Cafeteria.

Major H.J. Knerr, commanding officer of the 88th Obs. Sqdn., while flying Model Airways, was forced to land on the side of a mountain, due to a defective motor. The landing was made 25 miles east of Moundsville, W. Va., in the heart of a very mountainous country. The wings and fuselage were damaged beyond repair, while the motor was uninjured. Another ship was sent him from this field, in which he continued his trip and arrived at the home station on schedule time.

First Lieut. Louis C. Mallory, who has been granted 30 days' leave, will visit Mississippi and Kentucky.

Major A.W. Robbins, Commanding Officer, accompanied Lieut. Guy L. Kirksey on a cross-country trip to Columbus, Ohio, where they delivered photographs and enlargements of Fort Hayes and vicinity to the Commanding General of the Fifth Corps Area.

Lieut. Irwin S. Amberg, Engineering Officer of the 88th Obs. sqdn., is conducting a class on motors and rigging for the enlisted men of the squadron.

The 7th Photo Section Laboratory is nearing completion, and will in a short time be equipped for all phases of aerial and ground photography.

Lieuts. J.L. Stromme and C.E. Thomas ferried two DeHaviland planes to Maxwell Field, Montgomery, Ala., on June 2nd.

Two carloads of remodeled Liberty engines have been received at the Fairfield Depot from the Rock Island Arsenal. These engines have been overhauled and remodeled in accordance with the latest technical orders. The Rock Island Arsenal secured the contract for this work from the Procurement Section of the Air Service, and it is expected that several hundred Liberties will be overhauled.

The new "Airways" plane, designed at this Depot in accordance with specifications from the Engineering Division at McCook Field, is now being built in the

shops. It is known as the DH4B4, and it is planned to build a large number of these "Airways" ships during the summer. A special DeHaviland for General Wm. Mitchell is also being built here.

The following letter was recently received by Lieut. H.H. Mills, Air Service, from the Chamber of Commerce of Muskogee, Okla.:

"Receipt is acknowledged of your letter of the 21st, wherein you so kindly commented with reference to the treatment received in this city. We are mighty glad to receive your letter. I feel I am safe in saying that the entire citizenship of Muskogee feels very kindly indeed toward the men serving in the Air Service. I know they are "sold" on the necessity of encouraging in every way possible our Government to provide adequately for this branch of our defense. The people of this community want you and all Air Service men to stop over in this city when possible, even for just an hour or so. We don't want your expense money. We want you to keep all of that that is possible. We simply want you to know that in this city you are among friends, among citizens that believe in the wonderful possibilities of your branch of the service, and they are willing to do all possible to make your stop as pleasant as possible."

Mitchel Field, L.I., New York, June 6, 1923.

Work on the polo field is progressing satisfactorily, and it is hoped that when the Army Polo Team arrives the field will be in playing condition. The general prisoners sent to this station by the Commanding General, 2nd Corps Area, are rapidly completing the stable, and it is believed that it will not be necessary to use the Mineola Fair Ground Stables this year.

Several pilots flew to Washington on June 5th for the purpose of attending the Shriners' Convention. In the majority of cases they were accompanied by enlisted men who were personally interested in the Convention. There were many applications for this privilege, and the maximum number were accommodated.

Lieut. Russell L. Maughan returned to Mitchel Field from his pathfinding trip preliminary to his attempted coast to coast flight from sunrise to sunset. His story will be in the making when he hops off for Crissy Field. His projected trip with the passing of one sun stirs the imagination even more than the mile stone in aviation marked by Lieuts. Kelly and Macready. If he is successful, once again all the news of world interest will be subordinated to the achievement of the U.S. Air Service, and the entire nation can be justly proud of their representative who, in addition to making a record, has made history.

Scott Field, Ill., June 22, 1923.

Capt. F.L. Pratt and Lieut. E.T. Kennedy left Scott Field on June 9th in a DH4B plane for a cross-country flight to Linnous, Mo. They returned three days later, being held up at Mobile, Mo., on account of a very severe rain storm. The total distance covered in their flight was 200 miles.

Private Harold A. Kurstedt, 21st Airship Group, the only man in this Corps Area who successfully passed the examination at Jefferson Barracks on February 6th for appointment to the Military Academy, received orders to proceed to West Point, N. Y. for discharge from the Army and for admission to West Point as a cadet.

Lieut. Charles M. Savage, who for 2½ months has been on detached service at Camp Bragg, N.C., doing observation work for the Artillery School, visited the post for a few days while on leave. During his stay at Scott Field Lieut. Savage appeared before the examining board for promotion to Captain.

Lieut.-Col. Ira F. Fravel, from the Office of the Chief of Air Service, arrived at Scott Field Monday, June 10th, and remained until Wednesday evening. On Wednesday afternoon Mrs. Fravel joined him and both were guests of honor at tea at the Officers' Club, the entire commissioned personnel of the post with their families being present. On Tuesday Col. Fravel was a guest at a luncheon given by the Rotary Club of Belleville.

Lieut. Douglas Johnson recently reported for duty and training in lighter-than-air work. Lieut. Johnson comes from the heavier-than-air branch of the service, his last station being Kelly Field, from which place he motored overland to Scott Field. Previous to his Kelly Field detail Lieut. Johnson completed a tour of foreign service in the Hawaiian Islands. Until such time as he will be

assigned to instruction in the Airship School, he has been assigned for duty with the 12th Airship Company.

Lieut. Philip Schneeberger received orders to proceed to Camp Bragg, N.C. for observation work for the Artillery School. He will remain there until the school year closes in September and will then return to Scott Field.

Lieut. R.L. Maughan, who is planning to make the dawn to dark coast to coast flight, arrived at Scott Field by train Saturday morning, June 16th, after his plane was smashed in a forced landing near Philadelphia, Mo., in the vicinity of Palmyra. He left his plane in the field and started at once for Scott Field, which he reached shortly before 10:00 o'clock Saturday morning. He secured permission from Major Paegelow, Commanding Officer of Scott Field, to take the photographic plane from here and continue his flight. Within 30 minutes after he reached Scott Field, the photographic plane was being made in readiness for him, and he hopped off again at 11:25 a.m.

Lieut. Henry W. Kunkle, of Chanute Field, Rantoul, Ill., was a visitor on Tuesday afternoon, June 12th, and gave the men of the field a lecture on the possibilities and opportunities of the Air Service Technical School, outlining the different courses that are open to men who care to take advantage of the Army's offer. He stated that there are 18 courses to choose from. The lecture was one of a series to be given by Lieut. Kunkle at various Air Service stations throughout the Army. His last lecture was delivered at Maxwell Field, Montgomery, Ala., on June 8th. Lieut. Kunkle returned to Chanute Field the following morning.

Mr. C.R. Nyman, formerly of the United States Bureau of Mines, and now at the Helium purification plant at Langley Field, Va., recently visited Scott Field for the purpose of deciding upon the location for the installation of a Helium purification plant at the field.

Capt. B.S. Wright, from the Office of the Chief of Air Service, Washington, D.C., visited Scott Field recently while en route via DH4B plane to Chanute Field.

Lieut. F.M. McKee recently made a flight in a DH4B airplane to Fort Leavenworth, Kansas, for the purpose of locating a site for an airship mooring mast at that place.

Division Air Service, 1st Cavalry Div., Fort Bliss, Texas, May 26, 1923.

A son was born to Lieut. and Mrs. C.L. Chennault. The Lieutenant considers that naturally the most important event of the week, as do all others here, inasmuch as the future Air Force of the United States has been increased by one pilot.

Major L.G. Heffernan and Lieut. C.W. Sullivan went to Kelly Field Wednesday on official business returning to their station Friday afternoon.

Lieuts. O'Connell and Gale flew to Kelly Field Thursday to secure a photographic plane for use of the Division Air Service here.

A new K-3 camera was received and used on a photo mission in making a mosaic of part of the city of El Paso, Texas, for use of the International Boundary Commission.

Every available moment was utilized during the past week preparing for a period of two weeks' field service from June 3rd to 12th. The entire Air Service of the Division will proceed to Ruidoso, New Mexico, by plane and truck, carrying out maneuvers and exercises enroute and while in camp.

One of our best mechanics and soldiers, Sergeant A.L. Kimzey, was discharged last week on account of dependency. The Squadron suffered a real loss by his discharge.

Preparation has been made for the training of the fifteen Reserve Officers of the Air Service who have been ordered here for training during the period July 15th to 29th.

The Division Air Service was inspected by the Inspector General, First Cavalry Division, May 23rd. No irregularities or deficiencies were noted and, in consequence thereof, a holiday was declared.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE JULY 23, 1923.

AIRPLANE WAGES WAR AGAINST BOLL WEEVIL

That airplanes can be successfully employed to apply poison to plants infected by growth feeding insects at a great saving in time, labor and money, was the conclusion arrived at by officials of the U.S. Dept. of Agriculture as a result of tests conducted last summer at Tallulah, La., when airplanes were used for distributing poison over several cotton fields in that locality to check the ravages of the cotton boll weevil, and more especially the cotton leaf worm, the extermination of the latter having become urgent because it made inroads in southern cotton fields in such vast numbers and began to breed so rapidly that whole acres of cotton were practically kept from blooming.

Not only was the airplane a more efficient means of scattering and applying the poison powder, but it was an economical factor as well, for it was found that only an average of about two pounds of calcium of arsenate per acre was required with an airplane, whereas previous to its use an average of five pounds per acre were required.

When the devastation among cotton fields by the leaf worm reached alarming proportions, the Department of Agriculture decided that experiments should be made to exterminate this pest through the use of calcium arsenate and paris green scattered freely by hand over the plants during the night or early morning, when the dew on the leaves would cause the powder to stick to the leaf, and thus have some effect. To cover any one cotton field entailed a great deal of labor, because the applications would have to be repeated from time to time.

Airplane experiments were next considered, and through cooperation with the Army Air Service, two planes were rigged up to conduct experiments at Tallulah. It was soon found that one airplane could scatter in a few hours enough calcium arsenate to kill all of the cotton leaf worms on a field; furthermore, the destruction of these leaf worms was practically complete.

The Bureau of Entomology, Department of Agriculture, recently submitted to the Army Air Service a comprehensive report covering these cotton dusting experiments by airplane, same being compiled by Mr. B.R. Coad, Entomologist of the U.S. Bureau of Entomology; Mr. E. Johnson, Agricultural Engineer, U.S. Bureau of Roads, and 1st Lieut. G.L. McNeil of the Army Air Service. Mr. Coad, who had heretofore opposed the idea of dusting plants from airplanes upon a purely theoretical standpoint, states that he has seen enough to completely change his views on the subject, and is of the opinion that, with a further development of dust feeding equipment, dusting applications can be made for boll weevil control.

The two airplanes sent from the Montgomery Air Intermediate Depot, Montgomery, Ala., to Tallulah, La. to make these tests were piloted by Lieuts. G.L. McNeil, and Charles T. Skow, Army Air Service. Lt. Skow was replaced shortly afterwards by Lt. C.L. Simon. In addition to the pilots, three enlisted men were detailed on this duty, and the experimental work was further assisted for a few days by the presence of a photographic airplane from the Montgomery Depot, piloted by Lieut. Arnold.

One of the drawbacks in the cotton dusting experiments was the lack of an efficient container or hopper for discharging the poison from the airplane. A hopper of galvanized iron was constructed and fitted inside of the observer's cockpit, which occupied practically one-half of the space, leaving barely room enough for the observer to stand and turn the feed crank. The hopper was provided with a hinged lid for filling from the top and had a capacity of 12,500 cubic inches. The first results with this hopper were not satisfactory, as the rush of air caused by the propeller had a tendency to draw back up into the outlet tube of the hopper which was fitted through the bottom of the fuselage, thus interfering with the proper delivery of the dust. Furthermore, the eddies of air created behind the tube tended to draw the dust upward around the fuselage instead of causing it to blow downward.

Another hopper of similar shape was constructed, intended to be entirely automatic in operation, except the opening and closing of the feeder valve, but like its predecessor, it was a crude affair and could stand considerable improvement. No further efforts were made, however, to perfect the mechanical delivery of the poison powder, and the work resolved itself into a study of whether or not cotton plants could be effectively poisoned in this manner.

At the outset two problems were paramount; first, could the planes be operated over a cotton field in such manner that it would be thoroughly subjected to the cloud of dust; second, could the dust be scattered from the plane into the cotton plants and caused to adhere to them in a quantity sufficient to effect insect control? To settle these questions, operations on a more or less plantation basis were undertaken. Two farms, located from $1\frac{1}{2}$ to 5 miles from Tallulah, were selected for the study. A landing field was located near the center of what is called the Shirley Plantation. Both of these farms were heavily infested with cotton leaf worms during the first generation, and a very large number of these pupated successfully in the few fields which had been practically stripped of foliage by that generation. These pupa matured and the eggs laid by the adults started hatching about August 20th. The number of adults became so exceedingly great that the infestation of worms which developed proved to be one of the heaviest ever noted by the writers. Practically all of the plants were absolutely covered with eggs, and as these hatched some fields were found to have apparently an average of about 50 worms to the plant at the very outset.

The first studies conducted were for the purpose of noting the behaviour of the dust in the air. In ordinary methods of poisoning, successful dusting can be done only when the air is calm and its success is greatly enhanced by the presence of moisture on cotton leaves. For these reasons, ordinary cotton dusting has become almost entirely a nocturnal affair, starting usually from 6 to 8 o'clock in the evening and continuing in the morning until the dew dried from the leaves and the breeze sprung up, which was usually sometime between 6 and 8 o'clock in the morning.

The first cotton dusting flights furnished an absolute surprise for all concerned. It was found that when the calcium arsenate was dropped from the plane it was immediately broken up into a circular cloud which was quickly blown down among the plants. This was obviously due to the tremendous air blast created by the propeller or, as it is commonly termed, the "propeller wash" of the plane. This blast was so terrific that the powder encountering it became entirely subjected to its force, and the effect of ordinary air conditions was very largely overcome. Throughout the experimental period, flights were made at varying elevations, ranging from five to fifty feet above the cotton plants, and while it was sometimes possible to distribute the dust down among the plants from even as high as fifty feet or more, it was almost always possible to secure a distribution from 25 feet or lower, regardless of air conditions.

The planes were prepared in the late evening for operation without delay the next morning; then everyone was on the field and the motors were warmed before the first break of day. Just as soon as it was light enough to see to fly, the planes took off, giving a very weird effect in the ground haze. This haze was so heavy that vision did not extend far enough down the field to see them when they left the ground, and they seemed to simply disappear in the fog. Thirty feet above the ground the pilots found that they were out of this fog and that they had perfectly good air and good vision for flying, but from the ground it was very difficult to see the planes operate.

The planes then crossed back and forth over the cotton fields, flying at about the same level as during the daytime earlier in the work, about 15 ft. altitude, and a most curious effect was noted. Instead of a white dust cloud being swept out behind the plane, almost none was visible, although the feeders were wide open and putting out the dust at the usual rate. Flying at this elevation, the planes were inside of the fog of ground haze and they seemed to churn out a channel just slightly larger than the propeller, and the dust delivered was entirely confined by the wall of the fog surrounding this channel and did not spread out at all, merely coming down in a strip which did not cover more than three rows of cotton.

In the next flights, made just as soon as the hoppers could be reloaded, different tactics were tried. This time the planes were operated a few feet above the top of the fog, and the behaviour of the dust changed entirely. It was blown downward until it encountered the fog, but instead of immediately penetrating through it, it spread out on top of the fog in a layer from 50 to 100 feet wide.

It seemed to remain at this point without motion, and the observers standing around in the cotton field under this fog were puzzled to know what would become of the dust. It could be observed on the fog for some few moments and then it seemed to gradually disappear. About the same instant, however, everyone in the cotton field noted that the air was absolutely filled with fine, almost invisible particles of dust falling to the plants. Furthermore, after a couple of minutes the plants which had been perfectly green before presented the whitened appearance of a very heavy dusting. It would seem useless to fly the plane within the ground haze, but when the dust is distributed on top of this fog it apparently is spread very thoroughly and settled on the plants in an effective manner. More studies, however, must be conducted on this point before any definite conclusions can be reached regarding operating under these conditions.

Analyses disclosed the fact that an astonishing amount of poison adhered to the cotton plants over a very wide path under atmospheric conditions such as to make it absolutely impossible to use a ground dusting machine and successfully treat the plants. The exact cause of this adhesion can only be guessed at, but judging from observations which have been made on the efficiency of different types of ground machines, with varying velocities of air blast, it seems quite possible that this remarkable result is again due to the tremendous blast of the propeller. From studies made it was evident that calcium arsenate dust could be blown down from an airplane onto the cotton plants at almost any time of the day and made to adhere to the plants in sufficient quantity to apparently effect insect control.

Time tests showed that it required two minutes and fifteen seconds to empty a hopper containing 120 pounds of calcium arsenate, during which time the plane was operating at an average speed of 84 miles an hour, covering 3.3 miles. The average width of the strip covered with powder on these tests was 150 feet, showing that only two pounds of poison were utilized per acre, in decided contrast to the ordinary performance of cotton dusting, when the amount of powder used per acre is from five to six pounds.

Experiments were also made in dusting cotton plants with paris green. This material, however, flowed so rapidly through the opening in the hopper that the plants received too heavy a dosage, and were in many cases completely burnt up as a result. After a number of experiments in mixing the paris green with other ingredients it was found that a most effective mixture was one part of paris green, one-half part of lime and five parts of white flour. This combination proved to work quite satisfactorily in the plane, and spread through the cotton and adhered to the plants very nicely. As far as worm control is concerned, the effect of the paris green was much more pronounced than any other chemical utilized, since paris green is much more toxic to these larvae than other arsenicals. In every instance practically complete control was secured immediately after such applications, and it was thus shown that the instances of partial control with either calcium arsenate or lead arsenate were due to the lower toxicity of these materials rather than to faulty distribution.

The only observation made on the effect of these poisons on the boll weevil was a rather casual one, but somewhat significant in a way. Neither of the two farms had been poisoned during the season, and weevils were exceedingly abundant on both. In fact, for a period of fully two weeks or more before the first airplane poisoning was done the weevils had so thoroughly infested both plantations that not a cotton bloom was visible. This condition persisted throughout the beginning of the experiments, but by the time nearly all the fields on the two properties had received one or two applications of calcium arsenate for weevil control it was suddenly noted that cotton squares not infested with boll weevils were becoming fairly common, and by the end of the experimental period both plantations were blooming rather freely wherever the poisoning had been applied. Of course, this cannot be positively accredited entirely to the dusting, since it quite frequently happens that when the weevils have very heavily infested a field for a few weeks they leave it in search of new food and give it a period of rest during which a few blooms may struggle through to opening, but certainly considerable weevil control had been secured, since the blooming of these properties was much more pronounced than on other adjoining fields where no applications had been made. Furthermore, this late blooming did not develop on the few fields which had never developed sufficient worm infestation to require poisoning.

In conclusion, the report states that the studies made suggested many possibilities for future consideration. These studies were of a purely preliminary nature, but they did show quite definitely that the dust poisons could be effective.

tively distributed over the cotton plants as far as worm control is concerned. Whether or not this distribution was sufficiently thorough to effect boll weevil control is another problem which must still be determined, since it requires much more thorough treatment to control the weevil than the worm. The results secured, however, justify rather optimistic views regarding the possibility of developing this method to the point where it can be successfully used against the weevil, especially since every step of the work conducted was in its most rudimentary and crude stage, and a great improvement in efficiency can be made in many ways.

Whether or not it will ever prove practicable to undertake commercial treatment of cotton fields for boll weevil control with the airplane is a question which has not yet been settled, but the results secured certainly warrant further consideration. Financially speaking, the use of the airplane does not seem to be out of the question. In fact, there is considerable possibility of pronounced economy as compared with ground machines. Furthermore, it has the advantage of centralizing the control of the operation and placing the whole thing on a more skilled basis which would undoubtedly greatly tend to increase the quality of the results attained. On the other hand, no farmer can afford to buy a single plane and figure on dusting his cotton, since it is absolutely not safe to place all of the eggs in one basket in this manner. Motors will go wrong and cotton poisoning is an operation which cannot be delayed when needed. On this basis the operation could be only considered as a community affair or for planters whose acreage would be large enough to justify purchasing more than one plane. In reality, to organize in safety, one plane should be provided in reserve for every one or two which are kept in flight. All of these are questions which can be worked out only by time and trial, but many districts in the south have now reached the point in public sentiment where the desirability of community weevil control can be seen, and it is only by some such methods as the use of the airplane that such community poisoning can be even considered in the near future.

Further experiments are being conducted this summer in Louisiana, using DH4B airplanes instead of the Curtiss JN's. It is expected that better results will be obtained, since efforts are being made at the present time to provide a more suitable and efficient type of apparatus for distributing the poison powder.

OFFICERS SELECTED TO MAKE PATH FINDING TRIP AROUND WORLD

First Lieutenants Clifford Nutt and Clarence E. Crumrine, Army Air Service, have been selected to proceed on a "Pathfinding Trip" for the purpose of gathering data in connection with a proposed flight around the world. Both of these officers are experienced cross-country pilots, and both were members of the memorable flying expedition from New York to Nome, Alaska, and return, a pioneer aerial jaunt which involved a total mileage of nearly 8,700 miles, and which started on July 15, 1920 and ended on October 20 of that year.

Lieut. Crumrine, who is now stationed at the Air Service Engineering Division at McCook Field, Dayton, Ohio, will proceed to the British Isles, and from there will make visits to Greenland, Iceland, Faroe Islands, France and Italy. He will return to the United States via Canada.

Lieut. Nutt, who is now serving a tour of duty in the Philippine Islands, will proceed from there to Japan, thence to the Kurile Islands, Aleutian Islands and Alaska, returning over the same route.

These two officers will gather data on landing facilities, weather conditions, etc., and upon their return will make a report of the conditions found in the various countries visited. It is believed that the pathfinding trip will not be completed until the end of the summer. Upon the return of these officers, the War Department will consider definite plans for the selection of the proposed route to be followed during the flight around the world.

AIR SERVICE TROOPS ON BORDER RECEIVE FIELD TRAINING

The Division Air Service, First Cavalry Division, returned to Fort Bliss, El Paso, Texas, their home station, on June 16th, after a period of two weeks field training spent in camp at Ruidoso, New Mexico, a distance of about 140 miles from the home airdrome. This period of field training was requested in order that the functioning of the various sections and departments might be given a practical test before going into the field with the First Cavalry Division at Marfa, Texas,

during September and October. The units taking part in the training were the Headquarters Division, Air Service; Twelfth Observation Squadron; First Photo Section, and 32nd Air Intelligence Section.

Complete equipment was taken, and flying missions and general training carried out. The truck train consisted of fifteen trucks, photo truck and trailer, field lighting set, gas and oil tank truck and cargo trailers. That part of the route to camp between Newman and Oro Grande, N.M. was found to be through deep sand, and great difficulty was experienced in getting the trucks through. One stretch of about a quarter of a mile required three hours to pass. The train, for this reason, did not arrive at it's first stop, Alamogorodo, N.M., until twelve hours after time scheduled. The second day's march, however, was made over hard roads, and while the road ascends from four to seven thousand feet over the Sacramento Mountains, the train arrived at it's final destination on schedule time and a part of the camp was established the same night. The Air Service is equipped with Garford trucks, and a lot of trouble was had with burnt out bearings.

The airplanes of the Squadron arrived at camp at 6:00 p.m., June 4, and the camp was complete and ready for any type of aerial mission.

The wives and children of officers and soldiers arrived in camp on June 4th and found tents, messes, etc., all prepared.

The camp was named "Camp Milyard" in memory of a former member of the 12th Squadron who was killed in an airplane crash.

Ruidoso, New Mexico, is located just north of the Mescalero Indian Reservation, and the altitude is about eight thousand feet. It is surrounded by high mountains covered with heavy pine forest. A beautiful, clear, cold mountain stream the Ruidoso River, flows past the settlement. The Air Service Camp was on the bank of this river, and many hours of good sport was had trout fishing. In addition to the benefit derived from the field training and operations carried out, the morale and "pep" of the personnel was vastly improved by the vacation spent in this high cold climate.

ADDED COMFORT FOR ALTITUDE FLYING ✓

We have all seen the advertisement of the successful business man, sitting at his desk beside a window beneath which is a neat radiator, while he looks out registering perfect comfort upon a bleak and frozen wintry scene. McCook Field has again given the ultra-modern touch by making that expression possible in an airplane.

A small cockpit heater, 15 inches wide, 2 inches deep, and constructed of 9-inch standard radiator tubing, has been devised for making use of the circulating water from the engine to heat the cockpit, thus making altitude flying less of a punishment. Above 20,000 feet it is difficult to keep warm under the most favorable conditions. On the first altitude flights made with a supercharged LePere, Major Schroeder and Lieut. Elsey suffered extremely from the cold. Before Lieut. Macready's flight to 40,800 feet, the pipe from the water header to the radiator was passed through the pilot's cockpit and supplied a small amount of heat.

Later the heater above referred to was substituted, insuring a comfortable temperature for the pilot for the zero degrees of Fahrenheit. This heater is placed on a line between the radiator expansion tank and the main radiator in the pilot's cockpit. On warm days and near the ground the heat from this device is excessive, so a bypass line with a valve to control the amount of water passing through the heater has been added to regulate the temperature, even as the business man may do. This heater adds but a few pounds increase of weight to the airplane.

IMPROVED RADIO SERVICE AT WILBUR WRIGHT FIELD ✓

Two new radio towers, 165 feet high, have been erected at Wilbur Wright Field, Fairfield, O. The towers were painted black and white, the antenna have been put in position, and all necessary equipment installed in the new radio building. This new station supersedes the old radio station, and Fairfield is now in a position to handle all official messages "with neatness and dispatch".

SEGREGATION OF LIBERTY-12 SPECIAL PRODUCTION TOOLS ✓

An important piece of work has just been accomplished by personnel attached to the Maintenance Section of the Property Maintenance and Cost Compilation,

Fairfield Air Intermediate Depot, Fairfield, O. The work undertaken included the segregation, classification and storage of a set of Liberty engine production tools as a war reserve.

Upon the signing of the Armistice in November, 1918, the contractors building or preparing to build Liberty engines turned over the tools which they were using to the Government, in accordance with their contracts. Many of the tools had been in use for some time and were practically worn out; others were in excellent condition. A decision was made to retain one set of Liberty tools, and these were shipped to Middletown, Pa., Montgomery, Ala., and Fairfield, Ohio. Due to the pressure of other work which existed in the Office of the Chief of Air Service at that time, no attempt was made to segregate and classify these tools until February, 1922, at which time the project was started and has extended over a period of sixteen months.

The actual segregation required personnel of the highest class. These men traveled to the fields where the tools were located, selected such tools as would be necessary for this work, and superintended their packing and loading for shipment to Fairfield, where they are now stored.

It is estimated that 10,500 individual pieces were handled in this segregation weighing approximately 137 tons, 57 tons of which were shipped to Fairfield from Montgomery and Middletown. The final selection comprises over 6000 pieces, weighing 127 tons.

These tools are now in a permanent fireproof storage space at the Fairfield Air Intermediate Depot, and will be retained indefinitely, to be used in the production of Liberty engines should an emergency ever arise.

A NEW WRECKING TRUCK FOR CRASHED AIRPLANES ✓

The 68th Service Squadron at Kelly Field is about to complete a special wrecking truck. Special steel bows have been built and installed on the body of a White Truck. Suspended from these bows is a track fitted with a chain hoist. This track extends far enough from the rear of the truck to make it possible for an airplane motor to be hoisted from the ground to the truck or to the plane.

AIR SERVICE GIVES BOMBING DEMONSTRATION AT CAMP STANLEY

A joint bombing and machine gun demonstration was recently engaged in at Camp Stanley, Texas, where a dummy artillery battery had been emplaced for the purpose. The dummy artillery pieces were made up of sections of telephone poles mounted on old escort wagon wheels, the gun crews being represented by silhouette targets. The bomb attack was carried out by the bombing section of the 10th School Group (Kelly Field) and the machine gun attack by the Attack Group. Although no official report has as yet been received from the Artillery, it is known that the Artillery considered the battery practically wiped out. The guns were either turned over or otherwise damaged, and the targets representing the personnel were almost all pierced by fragments of bombs, or machine gun bullets.

"MAGGIE" AND HER ROLLING PIN ADOPTED AS AN INSIGNIA ✓

George McManus, the famous cartoonist and originator of the world known cartoon "Bringing Up Father", one of the most popular of the comic strips which appear in the daily papers, probably never had the faintest notion that his pet subject would be adopted as the insignia for an aero squadron. Our correspondent from Kelly Field states that the 41st Squadron at that station has adopted as its insignia a replica of "Maggie" with the inevitable rolling pin in her right hand, pointing onward to the attack with the left. This insignia was selected as being emblematic of the name and functions of a squadron as a school of attack aviation.

Thus we see another instance of the ridiculous being converted into the sublime, and yet the idea intended to be conveyed as the function of an attack squadron could hardly be pictured more appropriately. It has always been said that the use of slang oftentimes expresses an idea in a manner which it would be difficult to convey in severe English.

While on the subject of cartoons, it might not be amiss for some bombardment squadron adopting as its insignia a cartoon of "Ignatz" Mouse in the act of hurling a brick at Crazy Kat; or some pursuit squadron a cartoon of Mutt hotfooting it after Jeff.

FAIR SEX IN PHILIPPINES MAKE THEIR FIRST FLIGHT

The wives of Air Service officers stationed in the Philippine Islands were not slow to take advantage of the orders recently issued by the Army Air Service permitting the wives and mothers of U. S. Army aviators to make two flights a year in Army planes. Our Clark Field Correspondent states that the offer did not go unheeded at Clark Field, adding that if there is anyone who, in their long-faced pessimism, tries to hang crepe on twentieth century romance, we stand ready to offer vehement protest. There has been no age in which romance played so great a part as at present, and there is no institution or organization in which real true romance is encountered so frequently and embraced so affectionately as the Army. Aircraft have heretofore been considered by the Army not exactly an ideal pleasure or means of transportation for their ladies. With the Liberty motor and the DH-4 plane, the factor of safety is about 98% perfect.

Many women have been permitted a ride, for pleasure or otherwise, in aircraft by commercial concerns, but the rigidity of army regulations has barrèd this procedure with government aircraft. Mrs. A.H. Gilkeson, wife of the Commanding Officer of Clark Field was the first to start the ball a rolling. In the afternoon at 2:00 o'clock, the line was active with female interest. Five planes were available, and as if they sensed their delicate responsibility, they hummed a tune of contented security. "The ladies of the air" were out en masse as game as the best airman. Second Lieut. John H. Wilson, just returned from Sternburg General Hospital, where he had been a patient for four months as the result of an accident, proved that he had lost none of his confidence or ability. "Some of the ladies got a kick out of living" that day.

HOW LONG CAN AN AIRPLANE REMAIN IN THE AIR ON SUSTAINED FLIGHT?

When Lieuts. Kelly and Macready on April 17th and 18th last remained in the air in their Army Transport Monoplane T-2 for 36 hours, 4 minutes and 31 seconds, and thereby established a world's airplane duration record, few persons thought that this high mark stood any chance of being bettered for some time to come. It was also generally believed that if this record were eclipsed it would have to be accomplished with a larger and more powerful ship than the T-2 and one capable of carrying considerably more than the 735 gallons of gasoline which the famous monoplane successfully carried aloft.

But American ingenuity is a force that cannot lightly be reckoned with. Two Army aviators at Rockwell Field, San Diego, Calif., Lieuts. Lowell H. Smith and John P. Richter, announced their determination to go up in the air in a DeHaviland airplane, remain in the realm of King Ozone for four days and nights and thus shatter all duration records for days and days to come. To the uninitiated the idea seemed absurd, since the gasoline capacity of their plane was only 200 gallons, not quite 30% that of the T-2. How then was the thing to be done? Well, to come to the point, by refueling their plane while it is flying through the air. Another wild idea, you might say. No, not exactly, although it might appear so at first thought. But the thing is actually an accomplished fact, and while these two air-men did not succeed in breaking the duration record, they did demonstrate that refueling in the air is perfectly feasible.

Lieuts. Smith and Richter had clipped off almost 24 hours in their duration flight when the failure of the reserve gasoline tank to function forced them to land. Although disappointed over their failure to realize their ambition, these two fliers may find consolation in the fact that they set up new marks for speed over 2500 and 3000 kilometers, taking these two honors away from Lieuts. Kelly and Macready. Their time for the 2500 kilometers was 18 hours, 15 minutes and 8³/₅ seconds and for the 3000 kilometers 22 hours, 3 minutes and 41³/₅ seconds, as against the previous marks of 21 hours, 37 minutes, 28.21 seconds and 26 hours, 1 minute and 29.64 seconds.

While it is not now known whether another attempt to break the duration record in the novel manner in which Lieuts. Smith and Richter set about to do it will be undertaken in the near future, the chances seem good that, since the practicability of refueling airplanes during flight has been proven, duration flights of the future will likely be a question of days rather than hours. And so we have reached the stage where duration flights in airplanes can no longer be limited by the amount of gasoline an airplane can carry, but rather as to how long an aviation engine can run in the air before the inevitable wear and tear forces it to lose power and eventually stop.

Our Rockwell Field Correspondent gives the following detailed report of the flight:

"On Wednesday, June 27th, 1st Lieuts. Lowell H. Smith and John P. Richter, A.S., made an unsuccessful attempt to break all endurance records held by both American and foreign aviators, in a special DeHaviland airplane which had been remodeled at this Depot. This plane has an extra gas tank back of the rear cockpit fitted with a large opening to allow gas to be delivered from a plane flying above and gasoline, oil and food can be delivered while in flight. Several tests were made and gasoline was successfully transferred to this ship from a DeHaviland 4B1 plane, piloted by Lieut. Virgil Hine, assisted by Lieut. Frank W. Seifert, A.S. The servicing ship is also equipped with special fittings and a 50 ft. length of hose with a quick acting shut-off valve enables the aviators to make contact while flying, fifty feet above. This was successfully carried out on the morning of the 27th and two contacts were made, 25 gallons of gasoline being delivered at one time and 50 gallon the next, but owing to the burning out of the generator on the endurance plane, Lieuts. Smith and Richter were forced to land at Rockwell Field at 10:22 A.M., having been in the air six hours and thirty-eight minutes.

Lieuts. Smith and Richter were very much disappointed over their failure, but determined to accomplish the results for which they had set out, and after installing a generator and making a few minor changes stood by for the second attempt, which started at 4:44 A.M. the morning of the 28th. During the first twenty laps of the 50 Kilometer course fuel was delivered to them twice, while flying at approximately 90 miles an hour. During the day 294 gallons of gasoline were delivered to the speeding plane and 15 gallons of oil. Water and food were also sent up and successfully passed to Lieutenant Richter and by night-fall everything was working fine and the two aviators settled down for the all-night steady grind before them. Fuel enough to run until after 4:00 A.M. of the 29th had been taken aboard late in the evening and a full moon arose over the city, making the visibility excellent for night flying. Pylon #2, located at the old South Spot on North Island had been connected by telephone and at this point all messages from the flyers were received, communication being carried on by messages being dropped in small message bags and transmitted to Headquarters by phone. Messages were also given the aviators by the refueling ship and a telegram filed in Los Angeles at 9:40 A.M. was delivered to Lieut. Smith in mid-air before noon. During the night several messages were dropped reporting everything working fine and up to 3:00 A.M. nothing had happened to cause any worry on the part of the flyers or the timer stationed on the triangular course. At 3:00 A.M. in the morning of the 29th, a heavy fog bank rolled in from the sea which caused Lieut. Smith to change his course from the 50 kilometer certified speedway to an inside airplane of 25 Kilometers. At 4:00 A.M. Lieuts. Hine and Seifert went aloft with fuel and at 4:30 made contact but owing to the heavy fog, which by this time formed a thick blanket over the entire course, they were forced to make several attempts before 15 gallons of gasoline could be delivered to the plane and ten minutes later or at 4:40 A.M. the DeHaviland was forced down on the mud flats east of North Island and approximately half way between Rockwell Field and Coronado, due to the reserve gasoline tank failing to function properly. Neither of the aviators were injured and the big DeHaviland was but slightly damaged, due to the expert handling in case of emergency and the flight which was causing the whole world to set up and take notice was brought to a sudden end.

During the flight 309 gallons of gasoline, 15 gallons of oil and 2 hot meals were delivered to the racing plane, and at the time of the crash the plane had been in the air 23 hours and 48 minutes and had established the following records:

2500 Kilometers--	18 hrs.	15 minutes	-8-3/5 seconds
3000	"	-- 22 "	03 " -41-3/5 "

The fueling of one airplane by another in the air caused considerable excitement here during the past few days and attracted newspaper men from various parts of the state, who obtained some remarkable photographs, which have been published in both San Diego and Los Angeles papers; also the movie men were on the job and it is hoped that all readers of the news letter will have an opportunity to see the ships in action on the screen at their favorite picture-house in the near future, as both the Pathe News and International News Service had representatives here and the Commanding Officer assisted in every way possible to give the people through the Movie News Service, an opportunity to witness this remarkable feat as performed by the level headed aviators from this Depot."

McCOOK FIELD ENTERTAINS THE SECRETARY OF THE NAVY

The Hon. Edwin Denby, Secretary of the Navy, was the guest of honor at an Aerial Demonstration on July 4th at McCook Field, which in variety of performance eclipsed, perhaps, any exhibition of flying ever given at this Post. Lt. W. H. Brookley, Chief of the Flight Test Branch, had full charge of the program and was one of its most spectacular performers. The McCook Field gates were open to the public and a crowd estimated at 30,000 streamed into the Field or thronged the banks of the river which circle it. Great interest was shown in the T-2, famous for its transcontinental, non-stop flight, the Air Service Ambulance Plane, A-1 (Sister ship of the T-2), the Verville-Sperry Racer and other airplanes which were in line for examination by the visitors.

Major L.W. McIntosh, Chief of the Engineering Division, Victor Donahey, Governor of Ohio, Colonel Gunkel and other guests of distinction, formed a party who with Secretary Denby occupied a special reviewing stand for witnessing the flying.

Formation flying, with five DH4's from Wilbur Wright Field, led by Major Knerr, opened the program. With these ships at altitude, Lt. "Jimmie" Doolittle in the DH4G, which was mounted with ten machine guns, flew low over the Field with the guns operating. This was followed by a parachute demonstration, in which dummies were sent off from the Martin Bomber. A 64-foot parachute, which is the largest known parachute in the world, was dropped from an observation balloon, carrying the basket and weight equivalent to a crew of five. Live parachute jumps were made by Alva F. Starr, A.C.R., James R. Ingram, A.C.R., and Lyman H. Ford, A.C.R. Lieutenants Van Veghten and Brookley were pilots in these events. There was a bombing demonstration by Lt. Fletcher, aerial combat work by Lts. Doolittle and Van Veghten, formation stunt flying by Lt. Pearson, holder of the thousand kilometer world speed record, and Lt. Brookley. This formation work was so perfect that it seemed in the loops and turns as if but one plane were in the air. Lt. Brookley also accomplished some startling effects with smoke signalling, bringing forth cries of appreciation for his flying from those looking on.

One of the most delightful performances of the afternoon, however, was that of the inanimate target glider which was taken up attached to the upper wings of a JN airplane, to an altitude of about 800 feet, by Lt. Carroll, and then released. Its first astonished movement upon discovering itself free in the air was to describe a loop and for a second it seemed that it must stall and plunge to earth. But almost as if directed by a will, it righted itself, dove down, swooped off at a gentle climb toward the sky, at the peak of the climb seemed about to stall, righted itself, dove down and accomplished another gentle curve upward. This graceful curving and frolicking across the sky lasted several minutes, though to spectators it seemed much longer. As it gradually lost altitude, the dimensions assumed more the proportions of a full sized airplane and it was easy to realize the value of this contrivance as a practice target for our anti-aircraft gunners. As if possessed of dramatic instinct, the buoyant little glider did not descend in sight of the crowd, but when last seen was still planing bravely, disappearing behind a line of office buildings. When borne back to the Field upon the shoulders of a guard a few minutes later, there was an attitude of respect as well as amusement in the glances that followed it.

AN AERIAL PAGEANT IN PALESTINE

Palestine, the ancient Holy Land, so rich in religious traditions amongst Christians, Jews and Mohammedans alike, is assuming a more modern aspect with the passing of each day. For the first time in the history of that country the natives witnessed an aerial pageant, which was participated in by members of the 14th Squadron of the British Royal Air Force stationed at the Ramleh Airdrome. It was estimated that some seven or eight thousand people witnessed the various aerial demonstrations, special trains and bus services being run to convey visitors from Jerusalem, Jaffa and the surrounding districts. The splendid program of nine events was carried out promptly to time without any hitch of any description, and embraced a relay race between three teams of three planes each, exhibition flying, aerial combat, stunting, several races over a triangular course, landing for mark, message dropping, and bombing mission. Many distinguished visitors were among those present and the official program listing the various events was a most novel one, being printed in English, Arabic and Hebrew.

The British Aeronautical publication "Flight", in touching upon this event states: "Though we live in an age of advanced mechanical and scientific development,

these pageants always fill us with wonder at the progress made by man. What, then, must have been the feelings of those people of the East - in old-world Palestine - who witnessed one of these displays of mastery of the air? What, if they were looking on, did the spirits of Ancient Holyland think of the proceedings?"

BUMPS

By Corporal Contact
From the Luke Field FISH-TALE

"Air Pockets" the Naval Air calls them. This island of Oahu has more of them to the square mile than any of a long list of stations at which I've soldiered and flown. In fact, they are so plentiful over the cane fields and gulches that an aerial contour map which one of our rear cockpit aviators is working on, secretly, bids fair to rival a detailed map of the Sierra Nevada mountains in California in the vicinity of their peaks.

"Where is the biggest bump in Oahu?" will start a heated argument when the barracks bombers are in session. Staff Sergeant Adams, of the 23rd Bomb. Squadron, always enters his description of a bump he struck while crossing the Koolau Range at a few hundred feet above the peaks. Sergeant Adams said: "I was standing up, keeping a sharp lookout for wild goat and pig or a casual ti root established, when suddenly the floor of the cockpit dropped out from under me. It took the rest of the airplane with it, I discovered later. The trick belt worn by bombers is all that saved me from going A.W.O.L. from old 31, and I still remember looking over the top center section before I bounced back into the cockpit.

Trailing Jesus Carrizzo ✓

"When I was at Maria," said a certain pilot at this field, who requested at the same time, with the inherent modesty of all brave men, that his name be kept out of this narrative, "the Chief of Air Service wired our flight that the bloodthirsty bandit Jesus Carrizzo, scourge of the Chihuahua district, was on the rampage again.

"Scarcely had the ink on the telegram dried before our famous flight leapt into the air in a right hand chaundel, every plane heavily armed with Marlins, Lewis's Very pistols and 45's. Straight for the hinterland of the sun-scorched mountains of Chihuahua flew the intrepid five, propellers tugging at their hubs and struts vibrating with eagerness.

"At a signal from the leader, the formation scattered; each pilot flew into the fastness of the mountains bent on raising the hair of Carrizzo. My gas was getting low. I had fired all of my ammunition at rattlesnakes and tarantulas. Suddenly, as I banked up to make a turn in the narrow granite canyon, I beheld the bandit's camp. Spasmodically I shoved forward on the stick. Then I realized that my ammunition was gone. I heard a rattle of shots from the ground. Three soft-nosed Winchester bullets passed through my empennage. A terrific series of explosions took place in the rear cockpit. My Observer, Sgt. "H", was returning the bandit's fusillade with a Very pistol in each hand. The bandits were routed.

"I learned later that they all fled to the American side, and Carrizzo is now operating a Chile Parlor, thankful to have escaped with his life from my murderous attack."

"It may be so -- " ✓

In connection with the recent exploit of Lieut. Milo Clark in bringing a DeHavilland plane down from 4,000 feet, with the rudder doing barrel rolls at the end of the control wires, Lt. Hart is reminded of an incident said to have happened at one of the Texas fields during the war.

"A Cadet, while doing acrobatics, had the misfortune to lose the entire tail assembly of his plane, the ship immediately falling into a nose dive. With the earth several thousand feet below, the Cadet, either with the idea of hastening the apparently inevitable crash or possibly through presence of mind, opened the throttle wide. The nose of the ship then rose into a stall until it again fell into a dive. Repeating this maneuver, the Cadet descended into a series of dives and stalls and so timed the distance of his last dive that by the use of his motor he was able to flatten out and make a safe landing. Believe it if you can.

Former Supply Sergeant McNair of the 23rd, now with the 6th Pursuit Squadron, claims to have been an eye witness to another rare happening. "A seaplane gliding to a landing in San Francisco Bay failed to level off and dived into the water.

After being completely submerged for about twenty minutes, the plane rose to the surface at a point 100 feet farther on, and the motor was still running." Sgt. McNair admitted, however, that this occurred before prohibition.

AVIATION RECORDS HOMOLOGATED

The Federation Aeronautique Internationale has just homologated as world's records the following performances:

Class D (gliders), altitude (France), 545 m. (1,790 ft.), Adjutant Descamps at Biskra (February 7, 1923), on the Dewoitine.

Class C (heavier-than-air): Greatest speed (U.S.), Lieut. Maughan on Curtiss R. 6, 465 h.p. Curtiss, March 29, 1923, 380.751 kms. (236 m.p.h.)

Greatest speed over 500 kms. (U.S.): Lieut. A. Pearson, on Verville-Sperry, 350 h.p. Wright, March 29, 1923, 270 kms. (167.4 m.p.h.).

Greatest speed over 1,000 kms. (U.S.): Lieut. H.R. Harris and R. Lockwood, on D.H. 4 L. 400 h.p. Liberty, March 29, 1923, 205 kms. (127.2 mph).

Greatest speed over 1,500 kms. (U.S.): Lieut. H.R. Harris, on D.H. 4L, 400 h.p. Liberty, March 29, 1923, 184.03 kms. (114.2 m.p.h.).

Greatest speed over 2,000 kms. (U.S.): Lieut. H.R. Harris, on D.H. 4L, 400 h.p. Liberty, April 17, 1923, 183.83 kms. (114. m.p.h.).

Greatest speed over 2,500 kms. (U.S.): Lieuts. Oakley Kelly and J. Macready, on U.S. Army T.2, (Fokker F.LV), 400 h.p. Liberty, April 16-17, 1923, 115.6 kms. (71.7 m.p.h.).

Greatest speed over 3,000 kms. (U.S.): Lieuts. Oakley Kelly and J. Macready, on U.S. Army T-2, 400 Liberty, April 16-17, 1923, 115.27 kms. (71.5 m.p.h.).

Greatest speed over 4,000 kms. (U.S.): Lieuts. Oakley Kelly and J. Macready, on U.S. Army T.2, 400 Liberty, April 16, 17, 1923, 113.39 kms. (113.4 m.p.h.).

Greatest duration without landing (U.S.): Lieuts. Oakley Kelly and J. Macready, on U.S. Army T.2, 400 Liberty, April 16-17, 1923, 36 hours, 4 mins. 34 secs.

Greatest distance without landing (U.S.): Lieuts. Oakley Kelly and J. Macready, on U.S. Army T.2, 400 Liberty, April 16-17, 1923, 4050 kms. (2,500 miles).

CAPTAIN ADLER INVESTIGATES AIR SERVICE SUPPLY SITUATION

Captain E.E. Adler, Officer in Charge of Property, Maintenance and Cost Compilation, Fairfield Air Intermediate Depot, Fairfield, Ohio, recently returned from a two months' inspection trip, during which he visited Crissy Field, Mather Field, Rockwell Air Intermediate Depot, Kelly Field, Brooks Field and the San Antonio Air Intermediate Depot. He made a detailed study of the Supply Departments and Engineering Departments at each of the fields he visited and expressed himself as being greatly pleased with the progress that has been made. The Repair Shops at San Antonio and Coronado, Captain Adler states, have reached a high degree of efficiency. Both of these shops have capable Engineer Officers in charge, and the civilian personnel is made up of loyal, hard-working men who "know their stuff" and who are delivering the goods. The responsibility of maintaining our flying equipment rests, in no small degree, with the faithful mechanics (both civilians and enlisted men) in our Repair Depots and Service Squadrons, and every pilot realizes it.

Captain Adler also consulted with the Supply Officers regarding storage of supplies; inspection of the same to prevent deterioration insofar as this is possible; proper classification of supplies in accordance with Circular #88; nomenclature in accordance with Air Service Catalogs; issue of supplies to tactical organizations, etc. (By the way, if you are a Supply Officer, and if you don't know what Circular #88 is all about, take a little tip from your Uncle Jim and arrange your supplies like they are in #88.) Here's another tip - if you haven't seen any of the new Air Service catalogs, you don't know what you have missed. They are free as long as the supply lasts.

Captain Adler is delighted with the Pacific Coast - the climate, the cities, the orange groves, the people, and especially the interest which is being shown in aviation. He saw more commercial flying out there than he ever heard of in all the eastern states combined. The only reason why civilian aviation has not made more progress in the East is because we have not enough of the California spirit (and we don't mean light wines either).

AIR SERVICE OFFICERS AWARDED DISTINGUISHED SERVICE CROSS

Two Air Service officers, 1st Lieuts. Clayton Bissell and Martinus Stenseth, both bearing the unofficial title of "ace", were recently awarded the Distinguished Service Cross for exceptional service rendered during the World War.

Lieut. Bissell, who is assistant to General Wm. Mitchell, Office Chief of Air Service, Washington, D.C., was given the D.S.C. in the Office of the Secretary of War on Monday, June 11. The citation reads as follows:

"Clayton L. Bissell, First Lieutenant, Air Service, then First Lieutenant, 148th Aero Squadron, Air Service. For extraordinary heroism in action on October 28, 1918, in the vicinity of Janlain, France. While a member of a flight he was attacked by greatly superior numbers of enemy planes. Lieut. Bissell observing an allied plane attacked by eight of the enemy, dived into their midst destroying one plane, whereupon he was set upon by three enemy Fokkers, one of which he shot down, driving the remaining planes to their own lines. His own plane was so badly crippled as to be beyond repair. The outstanding bravery displayed by Lieut. Bissell greatly inspired the members of his squadron.

Lieut. Bissell also received the following silver star citation:

"Clayton L. Bissell, First Lieutenant, Air Service, then First Lieutenant, 148th Aero Squadron, Air Service. For gallantry in action near Marquion, France, September 4, 1918. While on an offensive patrol at 7.00 a.m., he discovered two enemy planes firing upon an American machine, he dove into the midst of the combat and shot down one of the enemy which crashed near the Canal du Nord. He was then attacked by two enemy planes but by serious fighting and skillful maneuvering he succeeded in shooting down another of the enemy machines out of control."

An impressive ceremony was held at Fort Des Moines, Iowa, when Brigadier General Halstead Dorey, Commanding the 14th Infantry Brigade, presented the Distinguished Service Cross to 1st Lieut. Martinus Stenseth, Air Service, Executive Officer of the 313th Observation Squadron, 88th Division, for extraordinary heroism in action during the World War. The citation reads as follows:

"Martinus Stenseth, 1st Lieutenant, Air Service, then 1st Lieutenant, 28th Aero Squadron, Air Service: For extraordinary heroism in action October 28, 1918, over the Argonne Forest when he went to the rescue of a French plane attacked by six enemy Fokker planes with twelve additional enemy planes in reserve. Attacking the enemy with vigor single-handed, he drove down and destroyed one enemy plane and put to flight the remainder. His gallant act in the face of overwhelming odds proved an inspiration to the men of his squadron."

Lieutenant Stenseth is officially credited with bringing down six enemy planes, and Lieutenant Bissell with five.

BALTIMOREANS INDORSE AVIATION

The Kiwanis Club of Baltimore, Md., recently sent the Chief of Air Service a copy of the following resolution which they adopted:

"Resolved, That the Kiwanis Club of Baltimore indorses the efforts to increase the efficiency of airplane development in the State and country, and that it pledges its influence to this end."

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, June 30, 1923.

The schedule of instruction of the Advanced Flying School for the first month was completed without serious mishap.

The 40th, 41st, 42nd and 43rd Squadrons are all busily engaged in explaining to the students who arrived here from Brooks Field the mysteries of the service type planes.

Mrs. Hickam gave a tea at the Aviation Club to acquaint the student officers with the permanent officers. The affair was acclaimed a success by all.

A JN6H ambulance plane has been received and put in shape for emergency use.

Lieut. R.L. Williamson, 68th Service Squadron, has been in the hospital for the past three weeks, and the supply of the 68th Service Squadron has been taken over by Lieut. Davidson.

Major Burwell flew to Junction, Texas, in a DH to give an aerial demonstration to the American Legion at that place.

Lieut. John A. Laird upon a return from a flight to El Paso was heard to express a desire to have the El Paso Landing Field moved across the River. We wonder why.

Eighteen officers and six enlisted men from this station, on June 11th, went to Fort Leavenworth with six DH4B's, two Martin Bombers, and four MB3A's, under the command of Major Brereton, for the purpose of giving an Air Service demonstration for the School of the Line.

A few new bomb racks are being installed on the planes in the Attack Group, these are of the Mark VIII type.

Lieut. Martinus Stenseth paid a visit to the Post and to the 90th Squadron, which he formerly commanded. He left here by air for Kansas City.

The Photo Section is preparing to install a new enlarging camera. A new K-1 room has also been built, and a new dark room is under construction.

The 43rd Squadron received seven new Fokker monoplanes from Selfridge Field. The officers are not very keen about flying these planes, because they seem to be of the "Flapper" species and do the "shimmy" most excellently and at the most unexpected times, by shaking their wings most beautifully or horribly, depending upon from where you are looking. Lieut. Gaffney had a box seat a few days ago at an altitude of 4,000 feet, when the particular flapper to which he had taken a fancy, did the "shimmy" so violently that it shook an aileron off. Lieut. Gaffney, however, refused to fall for anything like that. He claims these flappers play too rough and he is off of them. Several officers have had reserved seats at these shimmy exhibitions and orders have been issued now to keep away from these flappers until further orders.

Lieut. Strickland recently made a cross-country to Beaumont and got stuck in the mud when he landed. The plane is still there waiting for the mud to dry up sufficiently to take it off.

The 40th School Squadron celebrated organization day on June 22nd. The Squadron was one year old. The day was given over to athletics, including a baseball game between the old timers and the recruits of the Squadron. A dance was held at the Hostess House in the evening.

The 42nd School Squadron organized a fishing trip last week. Twenty men attended and had such a good time that more trips like it are being planned.

While many officers and men were away at Leavenworth demonstrating air force advances to the General Service School, those of the Attack Group who remained here took advantage of the time and carried on a general police of the group area, including a good deal of painting.

The 13th Attack Squadron has orders to turn its GAX's over to the 10th School Group. The Squadron will be equipped with DH4B's.

The Wing Operations Officer recently received proofs of strip maps between San Antonio and Sanderson, Texas. These maps have been tried out and a criticism is now being written up. The criticisms are minor, and the maps are generally acclaimed as being very good.

The task of writing up the air-log route information between this station and El Paso, thence to Dallas and return to this station, has been completed. Like

information will be written on a flight to Brownsville, to Houston and return to this station, also a flight east as far as Memphis, Tenn., and return.

Colonel C. C. Culver, the Air Officer, 8th Corps Area, recently made a flight from here to Denver, Colo., and return, carrying Staff Sgt. Richards as mechanic.

Air Service, Tennessee Natl. Guard, Nashville, Tenn., June 26, 1923.

To date fourteen towns have sent in requests for planes on the 4th of July, but due to the proximity of the summer encampment the requests were denied, the reason for such action being due to the desire of the Squadron Commander to take all the planes to Maxwell Field.

The wives and mothers of all the squadron officers were quick to grasp their opportunity to fly, and are now thorough converts to the art which heretofore they looked upon with alarm. The day chosen to give them their first hop was ideal for flying and enough clouds were aloft to give them all a real ride through them.

The past month was a very busy one from all angles. A number of visiting planes landed at Blackwood Field, among them a Martin Bomber from Langley Field piloted by Lieut. Aubrey Hornsby. Our other visitors from Chanute, Wilbur Wright and Maxwell Fields, were Lieuts. Kunkel, Arnold, Stromme, Thomas, Bartron, Dawson, and Major Meissner and Captain Kirkham from Birmingham.

On Decoration Day a formation went to Jackson, Tennessee to participate in the ceremonies at that town, and the entire personnel returned singing its praises.

Lieut. Blackard recently went up for his promotion to Captaincy, and Lieut. D. Lansden, a former member of the 91st Squadron and an A.E.F. veteran, has become a member of the squadron and is a valuable addition to our list of observers.

Our Photo Section is practically complete and will be ready for Federal recognition on July 1, 1923. It will be under the command of Lieut. Tyler Rascoe.

At last the hangars are receiving a much needed coat of paint. The letters Blackwood Field have been painted on the roof and are large enough to be readily discernible from an altitude of ten thousand feet.

On June 23rd the Squadron flew in formation to Murfreesboro, where a new Battery of Field Artillery was being organized. Governor Peay, General Tyson and other notables were present to add to the impressiveness of the occasion. The required quota of fifty men was exceeded by nine. Sunday morning all names of the enlisted men were put in a box and the first ten drawn were given rides over town. After this was over a committee from the Kiwanis Club met the Squadron officers and explained their plans for the new 79-acre municipal landing field one mile from town.

Division Air Service, 1st Cavalry Div., Fort Bliss, Texas, June 30, 1923.

Major Heffernan and Lieut. Douglas left Monday morning on an airways mapping flight to Nogales, Arizona, via Tucson, and returned to the airdrome Friday night at 7:00 p.m. Nothing unusual occurred during the flight.

Lieut. Chennault returned Saturday from a cross-country flight to Gilbert, Louisiana. The flight was made from this station to Gilbert in one day, about eleven hundred miles. When returning Saturday the Lieutenant had made the flight in one day as far as Fabens, Texas, when he made a forced landing, necessitating his continuing the trip to the airdrome by automobile. Fabens is about thirty miles from the airdrome.

Three officers and four enlisted men left this station Monday July 2nd, for Marfa, Texas, by airplane and truck for the purpose of making a mosaic of part of the maneuver area to be used by the First Cavalry Division at that place during September and October.

Ten Air Service/Reserve officers have been placed on active duty and ordered to report at this station for a period of training from July 15th to 29th. All arrangements have been made for the training of these officers and it is believed that they will derive the fullest benefit possible for so short a training period.

Trap shooting is now being had twice weekly at this station and some very rapid improvement was made in shooting by some officers, as evidenced by comparison of score cards of three weeks ago and those of the past week.

An examination for flying cadet status will be held here July 10th. Six candidates have been ordered to appear before the Board to date. These cadets are from civil life and from troops stationed at Fort Bliss.

Lieut. Morris, on duty with the Organized Reserves of the 90th Division, with headquarters at El Paso, Texas, reported for temporary duty during the Air Service Reserve Officers Training Camp at this station.

Clark Field, Pampanga, P.I., May 5, 1923.

Captain A. H. Gilkeson and wife returned from a visiting tour of Baguio and vicinity on May 3rd. They left here a month ago, with full camp equipment, and expressed their intentions of "roughing it". Apparently, no ill effects resulted, as the Commanding Officer is in a very amiable frame of mind and things are running smoothly.

Since returning to the "Orthodox Organization", a special training program has been instituted for officers. A training schedule for soldiers has been under way since April 1st. Operations Order #2, these headquarters, provides for a training period of five consecutive months, of one hour class instruction daily. Ground instruction includes aerial gunnery, aerial navigation, adjustment of artillery fire, bombing, communications, Cavalry and Artillery Liaison, photography, methods of operations and Supply, and Maintenance of Equipment. These subjects have been assigned to individual instructors who have sub-divided the general subjects and designated the hour and date for their particular class. The present shortage of equipment will necessarily curtail aerial instruction. However, the receipt of five new DH4-B's has relieved a portion of this restriction.

The Department Inspector, Colonel Andres, who inspected Clark Field last Saturday, expressed his pleasure over the good appearance made by the Air Service. The men were inspected in front of the barracks, and the different detachments were inspected immediately afterward.

Lieut. Cook was granted fifteen days' extension of his Detached Service at Camp John Hay.

Old Dame Nature is a little early this year, in her tearful uncertainty. For three days now, she has been driving in with a vengeance, and yet there is no sign of a recess. We are vividly reminded of a forty-five day session three years ago during which a great deal of damage was done to the roads and railroads throughout central Luzon. "More Power" to her; more rain - more rest.

Clark Field, Pampanga, P.I., May 12, 1923.

"Smile and the world smiles with you - weep and you weep alone". The truth of that philosophy can only now be fully appreciated at a time when some are anticipating a change of organization and possibly of station. To some it will be a welcomed experience. Some are even now sending forth wails of anguish. The "homeless squadron" (28th Bombardment) is about to witness another move. Officers and soldiers alike are advancing endless arguments and opinions relative to such an event. Corregidor Island is desirable, with certain reservations, as is also Camp Nichols. The publishing of G.O. #13, Headquarters Philippine Department, is expected daily. This is the order which is to decide the disposition of the 28th Squadron. "Where do we go from here, boys", is the war cry of the 28th Squadron.

The monotony of the routine garrison duties is to be pleasantly broken Sunday, May 13th. Plans have been laid for a regal occasion upon the anniversary of organization of the 3rd Pursuit Squadron. The 3rd Squadron was organized May 13th, 1919, at Mitchel Field, New York. Captain Charles T. Philipps, Commanding Officer, brought the squadron to the Philippine Islands. At the time of embarkation the squadron boasted a strength of three officers, 168 Air Service men and two Medical Corps men, attached. Of the initial personnel there remain only Master Sergeant Wm. C. Hunter, Staff Sergeants Harvill B. Srote, Royal Z. Peck, Salvator Calvino and Private 1st class Alexander Szavo. Many valuable additions have been received, and we always regret the loss of our members. We feel justified in affirming that we have been commanded and led by the best officers in the Service. Aside from the trivial differences that must arise when mortal man assumes responsibility, we have progressed and operated smoothly and efficiently. Around a nucleus of five soldiers, tried and true, has been built an organization of sterling quality. The 3rd Squadron has operated throughout the Islands, and mention of its achievements is occasion for proud acknowledgment and an air of benevolent superiority. Each and every member of the organization, from the Commanding Officer to the last buck on K.P., is with his squadron, wholeheartedly, in any endeavor that may be undertaken.

Our history is a silver sheet, shining in individual cooperation and accomplishments. Our future, in conformity with our history, must be directed with the end in view of creating a golden ledger.

After a week of continuous rain, without even one glimpse of the smiling sun, Friday morning broke clear and fair. Aerial work prescribed in Operations Order #2, these headquarters, was started as early as possible. The bark of a "Liberty" awakened us from our lethargy, and the activities on the line aroused new interest. We dislike to experience the enforced inactivity of another rainy (winter) season. Men, like their equipment, become rusty through non-use. A busy day is an excellent cure for the blues. We plan to make the most of the remaining bright days.

The blow has at last fallen. Special Order #109, Headquarters Philippine Department, has made a thorough shift in officers of the Air Service stationed in the Philippines. Prior to the issuance of S.O. #109, the 3rd Pursuit Squadron, Clark Field, had a strength of 26 officers, while the 28th Squadron, same station, had only eight officers. Both squadrons now have fifteen officers each. Orders involving a change of station for the 28th Squadron are expected to arrive hourly.

A new screen magazine has been inaugurated here, and one publication released for public approval. 1st Lieut. John Beveridge, Jr., Officer in Charge of "Moving Pictures", is greatly interested in the particular phase of his job, and offers encouragement to those who feel an urge for artistic employment. The success with which our first publication was received, has led us to believe that the Clark Field "Pancake" will be highly entertaining and a welcome diversion.

Camp Nichols, Rizal, P.I., May 12, 1923.

First Lieut. Royal D. Sundell, A.S., O.R.C., reported at this station for two weeks' active duty.

The enlisted men of Camp Nichols organized a vaudeville company, which gave an exceptionally successful performance at the 31st Infantry Barracks on May 7th. The same show was repeated at this station.

Kindley Field, Fort Mills, P.I., May 14, 1923.

The typhoon of last week is over and now the squadron spends the time shoveling rocks off of the beach, so that a plane can be launched. The typhoon completely wrecked the "patent" ramp that has been doing service at Kindley Field for the past two seasons. If many more typhoons come, Sergeant Joe Robinson's "Gold-diggers" will put the mess fund in a debit column.

Private Earle Ring, the author of news letters from Kindley Field in the past, is now on his way to China, via commercial liner. Here's wishing him a pleasant trip.

Captain Reinartz, our flight surgeon, received orders to take station at Camp Nichols. We hate to lose the Captain, but "orders is orders."

Mah-Jongg has taken a hold in this outfit among the enlisted men. Staff Sgt. Kerr and Sgt. Robins have both purchased sets and now they have the Chino tailor for an instructor. They both thought they could play, but the Chino beat them hands down.

Flying at this field has been meager this month; only two officers and one enlisted man have gotten in their time. If the weather stays as calm as it is today the pilots can hop every day.

The recent typhoon put our tennis court on the bum, and we will have to put in a couple of afternoons' work to get it in shape again.

The native kitchen police must have formed unions; we can't keep them for over a week at a time. We have also tried Chino K.P.'s but they break enough dishes to supply a Chino Army, so they faded with the mess sergeant tearing his hair.

Kindley Field launching pier for seaplanes had a two-ton hole punches in it by the wanton typhoon of last week. However, Lieut. Gullet and his flight of bathing beauties managed to bridge over the gap with planks and our ships take the sea and air as per usual.

Fort Mills' Monte Carlo was doing a flourishing business among the enlisted men of the post; it was the rendezvous of all the garrison winners throughout the 'rock, who brought in their pay-day winnings for a final show-down. A merry time

was being had by all, when General Todds raiders appeared upon the scene, bringing woe and special courts to many a non-com. Among those captured was Lieut. Creighton's Jack of Spades (Right Bower) of the late lamented Airdrome Company.

KindleyField, Fort Mills, P.I., May 21, 1923.

KindleyField has been enjoying good hot tropical weather during the past week and the good weather afforded everybody the opportunity to get in their flying time, of which the pilots and enlisted men took advantage.

Sergeant Winters brought his new launching ramp to completion, and once more planes can be put in the water without having to shovel rocks away.

The men of this organization who were on detached service at Camp John Hay, Mountain Province, the "summer" resort of the Philippines, returned for duty and reported a very pleasant trip, with the exception of the typhoon.

Lieut. Lynch and Corporal Henderson have been detailed to take the gas course given at Topside by Captain Walton, C.W.S. They go up every morning and flirt with Chloracetophenone and white phosphorus grenades. So far there have been no casualties.

Private Rago, who enchants the morning air down in the balloon hangar with practice strains on his bugle of guard mount, taps, retreat and other appropriate melodies, has a new function, - that of tennis caddy. When Mesdames Laughinghouse and Lynch come down for their matutinal tennis, the "Battling Wop" may be seen scurrying hither and yon in quest of the elusive balls.

If you noticed how peaceful it was along Officers' Row last week, it was because the Owens kids had their tonsils clipped and had not yet recovered their vocal abilities.

Lieut. Creighton, our garrison quartermaster, got a case of acute dyspepsia from sampling the whistle berries at the mess, and had to be hauled up to the Hospital for repair.

Selfridge Field, Mt. Clemens, Mich., July 3, 1923.

During the past week there has been great aerial activity between Red and Blue forces at Selfridge. The Reds are usually the enemy invading the United States from Canada or being invaded. One side is represented by pilots flying out of the 27th and 95th and the other by the 94th and 17th. Each day some pilot is assigned the problem for the following day. He acts as umpire. Many valuable points are being developed. The activity in the air is totally eclipsed by the brilliant linguistic frats on the ground at the critique. Who shot down whom and why and the framing of alibis furnishes much conversation, and someone has to buy the drinks at the PX. Whoever pulls the biggest "boner" is elected.

The Grosse Pointe Horse Show attracted the attendance of several members of the Group last week, largely because General Mitchell had several entries.

It has become customary since the advent of the boat to take a trial run of about a mile each afternoon. The officers of the Group who so desired would go out for a swim in deep water. It was a delightful surprise to find that the water, which had had about eighteen inches of ice all winter, could become as warm as it is.

Fishing continues to be not so good. Great hoards of May flies furnish too much natural food for any sensible fish to be attracted by artificial lure. Capt. Skeel saw a bass jump the other day. He cast and caught him. He fished hopefully for three more hours in the same spot but no more fish.

Fairfield Air Intermediate Depot, Fairfield, O., June 20, 1923.

Three DH-4B airplanes, recently reconstructed at this Depot, were ferried to their destination, Maxwell Field, Montgomery, Ala., by three pilots from this station. On June 2nd Lieut. J.L. Stromme and Lieut. C.E. Thomas pushed off about noon, and after stopping at Louisville for oil and gas, concluded the day's flight at Nashville, Tenn., where they spent the night with Lieut. Malloy and his force in a general inspection of conditions and the needs of Lieut. Malloy at that point. Resuming the flight on the following day, they landed successfully at their destination with an elapsed flying time of approximately 7 hours. The third plane

was ferried a week later by Lieut. H.A. Bartron, who, having no business at Nashville, made the trip straight through, stopping at Louisville and Nashville for service only. Being possessed of a desire to set a record for this trip, he pushed his plane the entire distance, covering the 670 miles in five and one-half hours. These figures result in an average speed of 122 miles per hour, which, unaccompanied by any particular helpful breeze, justified Lieut. Bartron in the belief that he made an exceptionally fast trip.

Col. R.C. Williams, Cavalry, retired, travelled from Chanute Field to Fairfield in a DH plane on June 9th. Colonel Williams was the passenger, while his son, 2nd Lieut. C.L. Williams, was the pilot. After spending a few hours at the Fairfield Depot, they flew back to Chanute Field the same day.

Lieut. G.V. McPike, Supply Officer, left June 6th for Ft. Riley, Kan. in a DH plane which had been remodeled in our Repair Shop. Lieut. McPike took with him Mr. Ross Clabaugh, of Property Maintenance and Cost Compilation, who is in charge of Radio, Electrical and Signalling Supplies, Aerial Photographic Equipment and Aircraft Armament.

Lieut. H.H. Mills, Officer in Charge of Flying at Fairfield Air Intermediate Depot, left on June 6 in a Martin Bomber for Washington, D.C., to attend the Shrine Convention. With him were Captain B.J. Peters, Medical Officer at the Post, and the following civilians from this Post: Frank Rutland, Joseph Riblet and William Haddon. After spending three busy days at the National Capital, the party returned to Fairfield, arriving by air on the evening of June 9. They made a non-stop flight on the trip to Washington, but encountered several storms on the return trip and made a brief stop at Moundsville, West Virginia.

Their annual field maneuvers over, Major Hugh Knerr and forty officers and men of the 88th Observation Squadron returned to Wilbur Wright Field Thursday, June 14, from Camp Knox, Kentucky. The Squadron spent six weeks in the Kentucky camp taking extensive war-time training. During the tactics the aerial warriors cooperated with the ground troops in conducting sham battles, raids and attacks.

Captain Edward Laughlin, Engineer Officer at San Antonio Air Intermediate Depot, San Antonio, Texas, arrived at this Field June 15 enroute from Washington to his station at San Antonio. Captain Laughlin is in charge of the Repair Shops at San Antonio where the overhauling of planes and engines is conducted for that section similarly as at Wilbur Wright Field for this locality. Capt. Laughlin remained here for several days observing the latest developments in design and repair at McCook Field, as well as at this Field.

Lieut. F.P. Kenny, Chief of the Cost Accounting Section at Wilbur Wright Field, just returned from an automobile trip of ten days, being accompanied by Mrs. Kenny and her sister. Five days were spent in Washington taking in the Shrine Convention and two days in a trip through the Shenandoah Valley, visiting the caverns of the Shenandoah.

Lieut. and Mrs. Mallory have just returned from a short leave of absence, their return being hastened by the necessity of Lieut. Mallory relieving Lieut. Tucker, Post Exchange Officer, the latter having been ordered immediately to Panama.

The usual Wednesday evening meeting of the Officers' Club was held on Wednesday evening, June 13, the evening being spent largely with bridge. The prize winners being Mrs. A.W. Robbins and Lieut. Bartron.

Lieut. Gothlin, of the 88th Squadron, at present on leave at Fort Sheridan, Ill., has just advised Wilbur Wright Field that upon Wednesday last, a daughter was added to the personnel of this Post. As usual, the mother and daughter are "doing fine".

On Thursday afternoon, last, Miss Mary Horton, the charming daughter of Capt. Horton, the Post Surgeon, entertained at a swimming party in the Post Gymnasium, classmates of her's entering their Sophomore year at Steele High School. Following the swimming event, a dainty luncheon was served by the hostess, the party adjourning about 6:30.

The Officers, enlisted men and civilian employees of the Quartermaster Corps held their annual picnic at Eastwood Park, near Dayton, Ohio, Monday, June 18, in celebration of the 148th anniversary of the birth of the Quartermaster Corps. The afternoon was spent in games and other fitting forms of entertainment suitable for the occasion. Dinner was served at 6 p.m., at which time the message of the Quartermaster General was read to the 49 present. The success of the party was due largely to the following committee: Miss Hopfengardner, Chairman, of the Property Dept., Miss Critchelow of the Utilities Dept., and Sergeant Lehrke of the Garage.

McCook Field, Dayton, Ohio, July 6, 1923.

McCook Field's bachelor list suffered a heavy mortality this past month, when four of its most popular names were removed, to be added to the more solid phalanx of those written under "married". Lieut. Macready gave us the first surprise when word came that he had succumbed in California. The announcement of Lieut. Kelly's engagement from the same place prepared us for his stepping off in Washington. Lieut. Monteith's engagement was a matter of several month's standing, so there was general resignation when that date was named. But when our good old reliable, Lieut. George Polk, without warning, went and got tied up, we could only exclaim with a brother officer, "The rock of ages has floated at last".

Now we hope a good A.G.O., or whoever holds the guiding reins of the destinies of good looking unmarried officers in the palm of his hand, will make up our deficiencies with four as good.

(Now we know who writes McCook Field Notes for the News Letters - Ed)

Lieut. Oakley G. Kelly left McCook Field on June 23rd for Mitchel Field, N.Y. where he has been transferred for permanent duty.

The following reserve officers from McCook Field have received orders to report to the Commandant, Reserve Officers' Training Camp, Wilbur Wright Field, Fairfield, Ohio, for the course in intensive training to be held there for two weeks beginning July 8th and ending July 22nd: Captains Robert E. Ellis, Louis G. Meister, Charles Cleary and Russell Walsh.

Lieuts. William F. Sadtler and Albert Svihra reported on July 3rd at this station for permanent duty in connection with meteorological work.

Captain Clinton W. Howard, A.S., reported at this station on June 17th, after two years' duty at the Massachusetts Institute of Technology, and has been assigned for permanent duty with the Engineering Division.

Lieuts. A.F. Hegenberger, Oscar Monthan and Carl W. Pyle have received orders to proceed to San Francisco at the proper time to enable them to sail on the transport scheduled to leave on or about September 25th for Hawaii.

Lieut. Grandison Gardner will leave this station for San Francisco, from where he will sail on the transport scheduled to leave about August 4th, for foreign service in the Hawaiian Department.

Rockwell Air Intermediate Depot, Coronado, Calif., June 29, 1923.

The Indoor Aviators, a name adopted by the shop hands at this Depot, will hold their second annual picnic at Indian Springs on July 22nd. The place is a beautiful mountain resort, located about 30 miles back of San Diego, and all employees connected with the Rockwell Air Intermediate Depot expect to spend one wonderful day. Last year's picnic was a decided success, and the families of the mechanics were brought together in games and sports more closely than by anything ever planned at the Field, and we hope that the reports from the second annual frolic of the Indoor Aviators will again bring out the better halves of the men who work hard day by day keeping Rockwell Field on the map.

First Lieut. Lowell H. Smith, Chief Engineer at this Depot, has been ordered to proceed to the Fairfield Air Intermediate Depot, Fairfield, Ohio, for the purpose of coordination of engineering and shop methods. It is expected Lieut. Smith will leave as soon as he has rested up from his recent 23-hour grind over the 50-kilometer course here.

France Field, Panama Canal Zone.

Secretary of War Weeks, on his inspection trip through the Canal, included us in his itinerary. Practically the whole party of Congressmen, their families, and accompanying Army officers viewing with the Secretary our station, its equipment and buildings, and our flying materiel and personnel. Before their departure from the Isthmus, some of the party who were interested witnessed at Balboa Field a demonstration by the several different types of planes we have here of their various landings for distance. All present concurred with us in the conclusion that Balboa Field, while long enough for the DH's was pitifully inadequate for a flight of MB3A's, or loaded bombers, or for that matter for a full

squadron of any type of planes operating in time of war or under war time conditions. We have shown those with power to help us what we need, and it looks as if we are getting results. When Balboa Field blossoms out into a real field about two or three times its present size and is made fit to land on and take off from all during the rainy season, then we can feel as though our efforts have been fully rewarded.

France Field was fortunate in procuring from the Chemical Warfare Service a shipment of 100 smoke candles of the Mark II S-I type, a candle of English manufacture. These were experimented with in order to determine their usefulness as wind tell-tales in coming into a strange field and also as part of cross-country equipment in Panama, where in the event of a forced landing in the jungles the crew of the lost plane could set up a smoke signal whenever searching planes are seen hovering nearby, and thus disclose their position.

Hdqs. Division Air Service, 1st Cavalry Div., Fort Bliss, Texas, June 22.

The Division Air Service has been notified that it would be sent to Marfa, Texas, sometime during September and October for a period of maneuvers with the 1st Cavalry Division. Preparations are being made for this work now, and all will be in readiness when the time comes.

Lieut. J.J. O'Connell returned by plane from Camp Bullis, where he represented the Division Air Service in the pistol competition.

Preparations were made by the enlisted men of the Division Air Service to spend Independence Day at Mesilla Dam, New Mexico. The Squadron Baseball team was scheduled to meet the strong LeMesa team in the afternoon, during the progress of the social picnic and barbecue.

Lieut. Weddington has joined from the Hawaiian Department and has been assigned as photographic officer.

Lieut. Charles Douglas, Air Service, who joined from Kelly Field, has been assigned as Communications Officer, taking the place of Lieut. Prosser, who has been transferred to the Hawaiian Department.

Major Heffernan and Lieut. Douglas left on June 25th for Nogales, Ariz., via Tucson, by airplane, for duty in connection with mapping Airway Routes.

A puff target range is in course of construction on the field, and some shoots will be pulled off soon.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE August 6, 1923.

ARMY AIR SERVICE AGAIN VICTORIOUS IN NATIONAL BALLOON RACE

For the second consecutive time it fell to the lot of an Army Air Service team (Lieut. Robert S. Olmstead, Pilot, and Lieut. John W. Shoptaw, aide) to carry off first honors in the National Balloon Race, which started this year on July 4th from Indianapolis, Ind. It will be recalled that Major Oscar Westover and Lieut. Carlton F. Bond constituted the winning team last year.

A very regrettable incident which marred the Lighter-than-Air classic this year was the sad fate which overtook the Navy team of Lieuts. L.J. Roth and T.B. Null. The unfortunate officers were evidently forced down while flying over Lake Erie, for several days later the missing balloon without the basket was found floating on the water by a passing tug boat, and subsequently a fishing boat found the missing basket with the body of Lieut. Roth strapped to it. The belief is expressed that Lieut. Roth died of exposure after being caught in the terrific storm which swept over Lake Erie on July 5th. No trace of Lieut. Null has thus far been found. The Army Air Service deeply sympathizes with its sister service in the Navy over the loss of these two gallant young aeronauts.

Altogether thirteen teams entered the competition, three from the Army Air Service, four from the Navy, and six civilian teams, and the order of start of the contestants and their landing places are as follows:

1. Army S6. Lieut. R.S. Olmstead, pilot; Lieut. J.W. Shoptaw, aide. Landed at Marilla, N.Y., 500 miles.
2. City of Akron. W.T. Van Orman, pilot; H.V. Thaden, aide. Landed 5 miles N. of Hartford City, Ind., 75 miles.
3. St. Louis. H.E. Honeywell, pilot; J.P. McCullough, aide. Landed Brocton, N.Y.; 450 miles.
4. American Legionnaire. Capt. C.E. McCullough, pilot; Lieut. C.R. Bond, aide. Landed Frankfort Springs, Pa.; 400 miles.
5. Navy A 6700. Lieut. L.J. Lawrence, pilot; Lieut. F.W. Reichelderfer, aide. Landed Glenn Campbell, Pa.; 400 miles.
6. Goodyear II. J.A. Boettner, pilot; J.M. Yolton, aide. Landed Freemont, Ohio; 250 miles.
7. Detroit. Ralph Upson, pilot; C.G. Andrus, aide. Landed near Wapakoneta, Ohio; 150 miles.
8. Navy A 6698. Lieut. L.J. Roth, pilot; Lieut. T.B. Null, aide. Landed in Lake Erie. Balloon without basket or crew found floating 25 miles S.S.E. of Port Stanley, Ontario.
9. Navy A6074. Lt. Comdr. J.P. Norfleet, pilot; Lieut. J.B. Anderson, aide. Landed Mount Eaton, O., 300 miles.
10. City of Springfield. Roy F. Donaldson, pilot; P.A. Erlach, aide. Landed 8 miles N.E. of Bryan, Ohio; 169 miles.
11. Army S. 5. Capt. L.T. Miller, pilot; Lieut. C.M. Brown, aide. Landed Ford City, Pa.; 400 miles.
12. Navy A6699. Lieut. F.B. Culbert, pilot; Lieut. T.D. Quinn, aide. Landed Alliance, Ohio; 310 miles.
13. Army S7. Lieut. J.B. Jordan, pilot; M.F. Moyer, aide. Landed Macedonia, Ohio; 150 miles.

By virtue of their victory, Lieuts. Olmstead and Shoptaw will comprise the team which will represent the Army Air Service in the International Balloon Race to be held at Brussels, Belgium, on September 23d next.

Lieut. Olmstead's official report covering his flight is as follows:

"I arrived in Indianapolis on June 27th and my aide, Lieut. John W. Shoptaw, on June 28th. On arrival I found Lieut. J.P. Bailey, Army Operations Officer, already on the ground. He reported all vital equipment pertaining to Balloon S-6 the one we (Shoptaw and myself) had been assigned from Washington, on hand at the Speedway. Lieut. Bailey cooperated very intelligently and effectively from first

to last in his capacity of Operations Officer. The envelope of the S-6 caused us some uneasiness, until we had opened it up and examined it, due to its being coated with White Tung Oil Varnish on the outside. Upon opening, however, it was found in excellent condition, which condition improved during the flight. Tung Oil gives a very fine surface for the outside of a Balloon, being impermeable to gas and absolutely non absorbent of water. Upon single ply fabric, however, where sharp folding angles occur, it cracks. On the S-6 it's single ply construction exists only below the Rigging Band where a limited proportion of the balloons surface is exposed to only moderate gas pressures. Such a coating might prove desirable for use upon airship envelopes which are losing their gas holding properties. A balloon which is not absolutely gas tight has no place in a race, and the S-6 was subject to the very closest inspection before the take-off. That we would get into the air with a leaky balloon was our greatest fear, and it was with great relief that we observed the good behavior of the S-6 in this respect during the flight. The valves commonly used in free balloons, and the S-6 was no exception to this rule, are of the butterfly type and fundamentally of unsound design. Once opened during a flight it is questionable whether they are gas tight for the remainder of the trip. The felt lips are forever coming unglued, and a hinge joint is a poor device for such a purpose as holding gas. The valve of the S-6, however, was sealed with a good grade of cup grease and did not open throughout the flight until a few minutes before landing and therefore developed no leaks.

The gas was turned on the afternoon of July 3rd, and found the S-6 all laid out and ready to receive. The inflation was nearly continuous from then on until about two hours before the take-off, This operation was conducted in an almost continuous rain up to five A.M. of July 4th. The sky remained overcast until the take-off, thereby allowing all balloons to get away under nearly identical atmospheric conditions. The S-6 being No. 1 off would have been somewhat handicapped should the sky have been bright and the last of the fourteen balloons been able to start when the sun was at a greater degree of declination. From four P.M. until sunset the sun loses its intensity for objects on the surface very rapidly.

At the time of starting the race, we thoroughly believed that we had the best balloon in the race, and while not the lightest by several hundred pounds, it was probably the most gas tight and the least affected by rain of any. Our method of piloting was definitely agreed upon unless some extraordinary conditions arose, which from the weather charts appeared quite improbable. Promptly on the starting time, 4:00 P.M. (to be more exact, we left the ground at 3:58) we left the ground getting away with two bags false lift. We had 43 bags on weighing off, leaving us 41 bags with which to start the race. These bags had originally been weighed in at 33 pounds each, but they had absorbed water to varying and unknown degrees, and, therefore, we will probably never know just what our actual lift was. However, a start with 41 bags of water-heavy sand is very good and speaks well for the lifting quality of the coal gas furnished by the Gas Company. We found that the most northerly wind available was upon the ground, and as our plan was to get as far as possible into the Great Lake Region before starting easterly, we struck an equilibrium and flew the entire night at between 300 feet and 2400 feet in altitude. We watched Capt. McCullough and Lt. Bond in the American Legionnaire, also Lt. Lawrence of the Navy rise to over 5000 feet and pass out of sight to the eastward. We noted with great interest Mr. H.E. Honeywell following our lead exactly until darkness blotted him out. Van Orman also followed us but appeared to be losing gas so fast, thru a leaky balloon, that in attempting to strike an equilibrium he was continually bobbing up to two or three thousand feet and then down to the ground. Our sympathies went out to him, for it is an exceedingly disheartening situation to experience, "that of flying a leaking balloon in a Race". Honeywell was the only competitor we really feared, and it gave us great satisfaction to observe that his tactics were identical with ours. After darkness set in we saw no other balloons for the remainder of the flight. In the morning long and diligent search failed to reveal Honeywell, so we concluded that he had either out maneuvered us and obtained more nothing or we had beaten him on the same score. I believe now that the latter is the case and that we traveled farther north than any balloon in the race. At about 8:00 A.M., July 5th, while 25 miles S.E. of Toledo, Ohio, we received Radio reports that four balloons were seen bunched over Detroit. That news gave us a bad jolt, but after serious consideration we decided it to be false, and later such proved to be the case. This incident brings in the Radio. We had hardly left the ground before we were receiving radio messages with great clearness. The entire Radio equipment weighed hardly more than a bag of sand, and was constructed in such a manner

that it could be disassembled and distributed as ballast efficiently. We received by rounds reports of the Dempsey-Gibbons Prize Fight, weather data, musical programs and last, but not least, news of the termination of the flights of our competitors. The stations received from included Washington, Detroit, Buffalo, Chicago, Louisville and Schenectady, particularly the latter station and demonstrated to us of what great value a radio set was on a Balloon Race. In the future all Racing Balloons should be Radio equipped. We sailed along all night over Indiana and Ohio, the 300 ft. drag rope touching just three times when near Bluffton, Ind. From 5:00 A.M. to 7:00 A.M., July 5th, we passed over or near to, the Ohio towns of Custer, Weston and Bowling Green, and at 8:15 A.M. we crossed the shore line of Lake Erie at a point about 25 miles S.E. of Toledo, Ohio. The S-6 had gradually swung eastward in a great circle until now we were traveling about N.60° E., whereas when we left Indianapolis we had taken a course N.30° E. With the coming of the sun our altitude had increased to 5,000 feet. After crossing onto Lake Erie we passed over the north edge of Pelee Island to Point Pelee, Ontario, thence out of sight of land until at 12:30 P.M. we discerned a shore line which we decided was Point aux Pins. This shore line faded away and we saw nothing more of land until 3:20 P.M. when we made out what we found to be Long Point, Ontario. We passed over Long Point gradually swinging more and more eastward and crossed Lake Erie passing into New York State at Angola, N.Y. at 5:50 P.M. by our watches. During the passage over Lake Erie our altitude had varied from 2,800 feet to 14,000 feet gradually increasing as we progressed. At about 1:30 P.M., while about opposite Burwell, Ont., and flying at 10,000 ft., a severe thunder storm passed about twenty (20) miles to our rear. This storm would be about opposite Port Stanley where Lts. Roth and Null had their accident and may indicate the time at which their balloon went down. We were tending to a south of easterly course upon passing Angola at 10,000 feet. Having discovered that the air currents were northerly down at 5,000 feet and of greater velocity we decided to try to strike an equilibrium at the lower altitude and cross Lake Ontario at right angles to its length. This decision proved our undoing, for we were unable to obtain an equilibrium in this lower air current expending eight of our seventeen remaining bags of sand with startling rapidity. To add to our troubles it began to rain and became pitch dark. We decided that, rather than attempt to cross Lake Ontario in the storm and darkness with but nine bags of ballast remaining, our best policy lay in making a landing. At 8:15 P.M., Central Std. time we dropped into an Oat Field belonging to the farm of Mr. Frank Banko of Marilla, N.Y. Marilla is located about 15 miles east of Buffalo. Had we stayed up above 10,000 ft., where we had an equilibrium established for the night, we would have probably reached Eastern New York and the Hudson River before having to land.

Upon examining the S-6 on the morning of July 6th we found her none the worse for the trip. In fact, the envelope had improved, the Tung Oil having obtained its set, making the whole bag tough, yet pliable. Wishing to use the S-6 in the International, we folded it, after draining as much of the water off as possible, onto a truck and carried it to the Curtiss Elmwood Air Reserve Depot, where we spread it out to dry. The bag would have been ruined had we not done this, for even in the short truck ride from Marilla to Buffalo it heated up quite perceptibly. The S-6 was shipped by Express on July 11th to Scott Field where, if it arrives in as good condition as I hope, it will doubtless be reconditioned preparatory to its entry in the International Race to take place from Belgium upon September 23, 1923.

DESCRIPTION OF LANGIN FIELD, MOUNDSVILLE, W. VA. ✓

For the benefit of the airplane pilots who have not stopped at Langin Field, W.Va., lately, and for those who have never been there, it is desired to make it known that Langin Field is not the same class of a field that it was approximately one year ago, when the equipment of the field consisted of a ragged Bessonnau hangar, a pair of pliers, an antiquated, improvised radio station of short working range, and a landing field approximately 300 by 1200 feet.

Langin Field is situated one-half mile north of the city of Moundsville, W.Va., and lies between the Ohio River on the west and the tracks of the B. & O. Railroad on the east. The flying field proper is now a rectangle, approximately 600 feet (E. & W.) by 3,000 feet (N. & S.) and the surface compares favorably with the best of the flying fields of the Air Service of equal size in the eastern part of the United States. Landings may be made from either the north or south ends of the field, depending, of course, upon the direction of the wind. Due to the fact that the field lies directly between hills on both the east and west sides, winds from

either of these two directions have very little effect upon either north or south landings. A high tension electric line on 35 ft. poles extends from east to west 800 feet south of the flying field. This line, however, offers but little hazard to flyers and, furthermore, it is marked with red pennants strung along it and spaced 25 feet apart.

A steel hangar, 66 feet by 120 feet, has been erected on the western side of the flying field at the southern extremity of the field, in which are kept the airplane spare parts, one DH4B airplane, an Engineer Corps searchlight truck, and the other transportation belonging to the field. On both sides of the top of the roof of the hangar is painted "LANGIN FIELD MOUNDVILLE" in white letters on a red background extending across the entire length of the roof. This lettering is visible on clear days at a height of 8,000 feet.

The gasoline filling connection is located on the western side of the flying field just south of the steel hangar and is so located that 4 Martin Bombers or 8 DeHavillands may be "gassed" from the one connection without moving the planes. At the present time all gasoline is pumped into the planes by hand, but electric equipment is being installed, and by this means it is hoped to decrease the amount of time required to "gas up" airplanes stopping at this field. At the present time, with the manually operated gasoline pump, it requires an average time of 8 minutes to service a DH airplane.

Located directly across the Baltimore & Ohio Railroad tracks from the hangar on the flying field are the headquarters of the field, in a new building erected for this purpose, and the radio and meteorological station. The radio equipment consists of a Navy type 2KW Federal Arc Transmitter and a Navy Type #1420 Receiving Set. The T shaped antenna is supported by two tubular steel masts, each 200 feet high and located 400 feet apart. This radio station works directly with Mitchel, Bolling, Langley, Fairfield, Chanute and Selfridge Fields, and handles on an average of 100 messages daily. Small red pennants have been strung on both of the two outer horizontal wires of the antenna. These pennants not only serve to make the antenna more visible to airplane pilots, but also tend to give the antenna a sort of a "dressed up - sea going" appearance. Red wind cones are also displayed on either end and the center of the radio antenna. The required electric lights are located on top of both of the masts.

Commercial telephones (Am. Bell System) are installed in headquarters building (Moundville 568) and in the radio and meteorological station (Moundville 557) and pilots having forced landings in this vicinity or desiring weather reports may obtain the necessary relief or information by calling either of these two telephones. A Western Union telegraph office is located in Moundville, $\frac{1}{2}$ mile distant from the flying field.

The regular hours of duty on the flying field are 7:00 a.m. to 6:30 p.m. during the summer months. Whenever airplanes are reported as en route to this station, the mechanics and radio operators remain on duty until the planes have arrived or have been otherwise reported.

The hotel accommodations in Moundville are fair, but compare favorably with the best, in any like town of 10,000 population. Better accommodations may be obtained in Wheeling, W. Va., located 11 miles north of Moundville and reached by street car, railroad or taxi.

The present personnel at the field consists of: 1 officer of the Air Service, 1 Warrant Officer, 3 enlisted meteorologists of the Signal Corps, 2 radio operators and 7 mechanics (enlisted) of the Air Service.

June, 1923, was the banner month for service at Langin Field, 130 airplanes having been serviced. Since the Air Service has taken over the field more than 1,000 airplanes have been serviced and only 3 minor accidents have occurred to airplanes in either landing or taking off.

General William Mitchell stopped off at Langin Field for two hours on July 8th and made an inspection of the field and also visited the large Indian burial mound located in the center of the City of Moundville. This mound is one of the largest of its kind in the United States but has not as yet received quite as much notoriety as the tomb of King Tutankhamen. Nevertheless, it is quite interesting.

REMODELING OF CURTISS JN AIRPLANES

The first lot of 40 remodeled JN type of Curtiss planes for use in primary training and for the R.O.T.C. and National Guard are coming through the shops at the Fairfield Air Intermediate Depot, Fairfield, Ohio. Of several thousand of

various types of this plane built by the Curtiss Company during the war, quite a number are still on hand to be remodeled.

It will be remembered that the original planes furnished in '17 were given the symbol or type designation of JN, which gave rise to the familiar name of "Jennie". The earlier types were JN4A, JN4B, JN4C and finally the JN4D, best known to the cadet of late '17 and early '18 as the "Crate", and which was equipped with the old reliable OX5 motor.

Later types furnished early in 1918 were equipped with the Hispano-Suiza engine, now known as the Wright engine, and to the JN4 symbol was added the letter "H" to designate such equipment. Subsequent models furnished carried additional letters, denoting the particular type of work for which it was designed and also introducing the double aileron with a change in the symbol from 4 to 6, chief among which were the JN6HB (Bombing) JN6HO (Observation) JN6HG (Gunnery) JN6HP (Photographic) and so on with many additional symbols added by the flying fields to designate certain changes, good or bad, which have been incorporated at that field.

Following a recent decision to rebuild a large number of these old planes, the necessity of standardization was apparent and, consequently, the designing and drafting forces at Wilbur Wright Field went to work upon this project, producing a composite model for dual control which was given the symbol JNS.

The Wright "I" engine was adopted for this model and equipped with ample oil tank and radiator. The standard gasoline tank has been retained and an emergency gravity tank in the central section included. Control for both tanks is available from either cockpit. The old electrical system has been retained, but a safeguard is introduced in the nature of a little metallic flag which normally folds against the outside of the fuselage when the switch is "on", but is immediately thrown out at right angles to the fuselage when the switch is "off", thereby giving positive information as to the condition of the switch to whoever may be working on the engine or propeller.

Elevator controls have been redesigned and are somewhat heavier than before. The single aileron has been retained and otherwise all surfaces remain the same.

Instrument boards have been changed to some slight extent. The board in the front cockpit carries a complete set of instruments while the rear board carries compass, altimeter and oil and gasoline pressure gauges. The rear board is also perforated with two holes of about 7" in diameter thru which the pilot in the rear cockpit may have full view of all instruments on the front board.

Control sticks are of laminated wood, since it has been demonstrated that this type of stick is nearly three times as strong as the steel stick formerly used.

This standardization, it is expected, will reduce by 50% the number of parts formerly required to be carried by Supply Depots to keep all of the older models in condition. It is expected that a complete catalog with price lists on this new standard "Jennie" will soon be prepared for issue by the Property Maintenance and Cost Compilation, Fairfield Air Intermediate Depot.

THE DEDICATION OF NORTON FIELD

Wilbur Wright Field, Fairfield, Ohio, was well represented on Saturday, June 30th, at the dedication of the new flying field at Columbus, Ohio, (Norton Field). Five DeHaviland planes from the 88th Observation Squadron, a photographic plane and two Vought stunting planes comprised the air fleet from that Depot. The five planes from the Squadron flew in battle formation, executing many tactical evolutions, while the two stunting planes gave an exhibition of acrobatics. Lieut. Kirksey, with a photographic plane, took various photographs of the field and of the afternoon's festivities, developing, finishing and delivering a number of the finished pictures to officials and guests of the meet before its conclusion. This latter was made possible through the 7th Photo Section sending their photographic equipment on ahead. Captain "Eddy" Rickenbacker, who had left from Detroit early in the day, was compelled to make a forced landing at Marion, Ohio, because of engine trouble. Communicating with Major Knerr, of the 88th Squadron, at Columbus, and explaining his difficulty, Lieut. Stromme was immediately dispatched as a relief expedition of one, returning with Captain Rickenbacker in time to participate in the exercises.

BROADCASTING METEOROLOGICAL REPORTS BY RADIO

✓✓✓ The broadcasting of meteorological reports from Arlington by remote control from Bolling Field on 30 K.W. Navy arc set on a wave length of 5950 meters began at 7:30 a.m. on July 20th.

These broadcasts are made daily, Sundays and holidays, at the following hours, Eastern Standard Time: 7:30 to 7:50 a.m.; 9:30 to 10:00 a.m.; 1:00 to 1:20 p.m.; 3:00 to 5:20 p.m.

These broadcasts contain current weather conditions along routes of the model airway. In addition, at the completion of the 9:30 broadcast, the weather forecast for all routes on the model airway for the afternoon and following morning are sent out.

AN INCENTIVE TO EFFICIENCY

There is no denying the fact that the Army Air Service has an excellent corps of trained aviation mechanics, due principally to the successful operation of the Air Service Technical School at Chanute Field, Rantoul, Ill. The many exceptional flights by Air Service pilots bears out this statement.

Believing that there is nothing like competition to spur one on to his best efforts, Lieut. Edwin J. House, commanding the 6th Pursuit Squadron, stationed at Luke Field, H.T., adopted a novel scheme of promoting efficiency amongst the mechanics of his squadron. At the weekly inspection of airplanes, the ship awarded "excellent" rates a silver star, to be placed after the crew chief's name on the fuselage. The first chief who received five silver stars will be awarded a silver efficiency trophy by Lieut. House. The planes are inspected carefully from every angle, and to win a star the crew chief and his crew must work hard and pay strict attention to business at all times.

At last reports Sergeant Wm. B. Fox, crew chief of DH4B plane No. 12 was setting the pace with two silver stars to his credit. Much interest is being shown by the various crews, and every chief has hopes of overcoming the lead held by Sgt. Fox.

An Air Service officer who lately arrived from Luke Field and is now stationed in the Office of the Chief of Air Service, Washington, states that the efficiency competition inaugurated by Lieut. House has produced most excellent results. Other squadron commanders would do well to follow the example set by Lt. House.

THE WIND FACTOR IN FLIGHT

From an analysis of one year's records of the Air Mail Service between New York and San Francisco, it has been found that at the average altitude of flight, about 1,500 feet above the ground, allowance must be made for a wind of 7 miles per hour from the west. In other words, westward flights will, on the average, be made at a speed of 14 miles per hour less than will eastward flights. A more detailed study of the New York to Chicago part of the route gives almost exactly the same wind factor as for the entire trans-continental route. This value of the wind factor has been verified by an examination of 9,267 free-air observations with kites and pilot balloons, and the agreement is remarkably close. The importance of this agreement lies in the fact that, in fixing flight schedules in other regions or at other altitudes, dependence can be placed upon either method in case only one is available.

From a further study of the data, schedules that can be guaranteed 90 percent of the time have been determined for aircraft of any cruising speed between 50 and 150 miles per hour. In making up these schedules allowance has been made for head winds of 36 miles per hour or more in westward flight and 20 miles per hour or more in eastward flight, these being the wind speeds that are shown by kite and balloon records to occur 5 percent of the time. When they do occur, the flights will be somewhat delayed, but nevertheless completed. During the remaining 5 percent of the time flights are likely to fail altogether or be seriously delayed because of exceptionally unfavorable weather, such as severe rain or snow storms, poor visibility, etc.

Finally, a general wind curve has been prepared by means of which various schedules based on other percentage performances, greater or less than 90 percent and for different lengths of routes, may be determined. With the normal and high cruising speeds known quantities, allowance is made for an adverse wind such that the flight can be made in any desired time. The percentage frequency of this adverse wind is then read from the curve and thus is determined the percentage of the time that the desired schedule can be guaranteed.

LIEUT. MAUGHAN LOSES IN RACE AGAINST THE SUN

Although twice balked in his ambition to fly across the American continent between sunrise and sunset, both failures being due to mechanical breakages in the

fuel feeding system of his plane, Lieut. Russell L. Maughan, Army Air Service, champion speed pilot of the world, demonstrated that a daylight transcontinental flight is within the realms of possibility. It will be recalled that Lieut. Kelly and Macready, famous for their non-stop flight across the continent and other remarkable aeronautical achievements, twice met with reverses before they finally succeeded. It may be that history will repeat itself in Lieut. Maughan's case and that he will be successful in his third attempt. The Chief of Air Service has decided against a further attempt to make this flight this year, since the necessary repairs to the plane will involve some delay and each day's delay occasions a loss of several precious minutes and serves as a continually growing handicap in the effort to reach the Pacific coast before darkness.

Notwithstanding his failure, Lieut. Maughan established several additional records in addition to the three he already possesses for high speed over 100 and 200 kilometers over a closed circuit and for one kilometer straightaway. His flight of 1911 miles, the distance from Mitchel Field, N.Y., to Rock Springs, Wyo., where he was forced to land because of a leak in the oil cooler, is the longest one-man flight thus far made by daylight. Also, he negotiated this flight at a rate of speed in excess of that made by any other pilot for approximately that distance. After passing over the Air Mail Field at Rock Springs, Wyoming, headed for his next stopping point (Salduro, Utah) he was forced to return to the former field ten minutes later because of the excessive leakage of oil. He landed at 5:08 p.m. Mountain Time, ^{or 7:08 p.m. Eastern Time,} so that his elapsed time for the trip was exactly 13 hours, inasmuch as he left Mitchel Field at 4:08 a.m. Eastern Time.

It may be mentioned here, simply to demonstrate the advance that has been made in the science of aviation on the score of airplane speed performances, that Lieut. James H. Doolittle, Army Air Service, in his one intermediate stop flight of 2070 miles across the continent on September 5, 1922, from Jacksonville, Fla., to San Diego, Calif., negotiated this distance in 22 hours and 35 minutes elapsed time, while on June 14, 1919, the British pilots, Captain John Alcock and Lieut. A.W. Brown, successfully completed the first and only non-stop flight across the Atlantic Ocean, a distance of 1936 miles, in 15 hours and 57 minutes. Lieut. Maughan's actual flying time to Rock Springs was 11 hours and 9 minutes, one hour and 51 minutes having been consumed through stops at Dayton, St. Joseph and Cheyenne.

When Lieut. Maughan made application to the Chief of Air Service to attempt his daylight transcontinental flight, he set forth therein the following considerations which led him to believe that such a flight would be successful. He figured on leaving Mitchel Field at 4:00 a.m. and landing at San Francisco at 9:00 p.m. a stretch of 17 hours, to which should be added the three hours gained in the change of time between the Atlantic and the Pacific coast. Flying the Curtiss Pursuit ship, the average speed of which he computed at 160 miles an hour, he calculated that the 2670 miles between New York and San Francisco should be covered in 16.7 hours, the remaining time being consumed by 30-minute stops at Dayton, Ohio; St. Joseph, Mo.; Cheyenne, Wyo.; and Salduro, Utah, leaving 1.3 hours for any minor repairs that might be necessary.

Lieut. Maughan estimated that, barring accidents, he would cover the distance of 570 miles from New York to Dayton by 7:15 a.m., a similar distance to St. Joseph, Mo., by 11:15 a.m., Central Time; 540 miles to Cheyenne by 2:30 p.m. Mountain Time; 470 miles to Salduro by 4:45 p.m. Western Time, and the last leg of the journey, 420 miles to Crissy Field, San Francisco, Calif., by 9:00 p.m. Western Time.

The plane he flew is modeled along the same line as the Curtiss Racer in which he established his world's speed records. It is powered with a Curtiss D-12 engine, the same one which was used in the racing tests at Dayton. Prior to his first flight, this engine had 65 hours of operation, but it had been gone over at the Curtiss airplane factory to the minutest detail in order to insure its perfect condition for the grueling test before it. The Curtiss Pursuit ship was selected by reason of the fact that its armament and equipment, weighing approximately 270 pounds, could be removed and extra gasoline and oil tanks to make up this weight substituted therefor, thus prolonging the range of this ship. All parts of the plane had been strengthened and the pilot's seat so arranged as to afford him every possible comfort for his long trip.

On his first attempt on July 9th, Lieut. Maughan, when about 10 miles of his second stopping point, St. Joseph, Mo., was forced to land in a cow pasture at Avenue City, Mo., due to engine trouble caused by a clogged gasoline feed. As he was landing he was forced to turn his plane in order to avoid running into one of the animals, and in doing so damaged the landing gear to such an extent that further flight that day was impossible. He faced a big handicap that day, being over two

hours behind his schedule by reason of the fact that he encountered heavy fogs and a generally hazy atmosphere between New York and Dayton, causing him to wander off his course.

After the necessary repairs were made, Lieut. Maughan flew his plane back to Mitchel Field and made preparations for another attempt. Weather reports for July 19th gave promise of excellent flying conditions. Lieut. Maughan arose very early that morning, partook of a light breakfast, and at 4:08 a.m. his plane was off on its journey westward. In addition to newspapers, he carried with him a small pouch of mail, including letters from the Mayor of New York to the Mayor of San Francisco and ranking army officers in the east to commanders of Pacific coast stations. Arriving at McCook Field at 8:35 a.m. Eastern Standard Time, he covered the 570 miles in 4 hours and 27 minutes, over an hour behind his original schedule. Press dispatches stated that Lieut. Maughan admitted that his flying time was not so good but, bearing in mind his first attempt when he wandered off his course on his first lap, on account of hazy atmosphere, he flew a circuitous course, using familiar landmarks to guide him, instead of flying by compass or straight course.

Only 18 minutes were consumed at McCook Field in refueling his plane. It might be remarked here that while Lieut. Maughan originally calculated on 30-minute stops, a new system of refueling his airplane without stopping the motor made it possible to cut this time in half. The gas tanks had openings through the bottom of the fuselage and, by means of connecting hose it was possible to pump gasoline into the tanks at the rate of 30 gallons a minute without any extra fire risk. This is the first time any system has been devised of refueling an airplane with the engine running, previous attempts to do so having failed on account of the blast from the propeller.

As an extra safeguard to insure the success of the flight, a mechanic was stationed at each stopping point with various accessories on hand ready for immediate installation in case of need, such as spare wheels, shock absorbers, propeller, etc.

Departing from McCook Field at 8:53 a.m., Lieut. Maughan landed at St. Joseph, at 11:25 a.m. Central Standard Time, 3 hours and 32 minutes later, and only 10 minutes behind his original schedule. It will thus be seen that he made excellent time over the second lap of 570 miles, his average speed being 161 miles an hour. According to his story to press representatives, he flew at a height of about 1,000 feet most of the way; that fair weather was experienced all the way except for the heavy fogs that overhung the valleys before he got to Lancaster, Ohio, which he circled several times in order to obtain his bearings.

At the flying field at St. Joseph he was met by the Aviation Committee of the Chamber of Commerce, who escorted him to a tent to enable him to relax for a brief time. After partaking of a lunch prepared for him, during which time the plane was refueled and the mechanics made sure that everything was in perfect working order Lieut. Maughan took the air again at 12:03 o'clock, bound for his next stopping point, Cheyenne, Wyo.

It was on this leg of the trip that he encountered trouble, and when he landed on the Air Mail field at 2:32 p.m. (Mountain Time) the motor was leaking oil badly. Mechanics quickly set to work to repair the leak, but it appeared doubtful if the makeshift repairs would hold on account of the vibration caused by the high speed of the plane. It was 3:27 p.m. before Lieut. Maughan again went aloft, bound for the Air Mail field at Salduro, Utah, 470 miles distant. An Associated Press dispatch stated that he passed over Rock Springs at 4:58 p.m., so that he must have covered the distance of 231 miles between Cheyenne and that point at a speed of 154 miles an hour. His return to Rock Springs ten minutes later was an indication that it was useless to continue the journey. Air Mail pilots at that station found further leakages around the edges of the points that had been soldered at Cheyenne and state it would take several hours to make the necessary repairs, and so Lieut. Maughan regretfully left the field for a much needed rest at a hotel.

What it was intended to demonstrate through the medium of Lieut. Maughan's flight was outlined by Mr. Frank H. Russell, Vice President and General Manager of the Curtiss Airplane and Motor Corporation, at a luncheon at which he was host on the day before the flight. Mr. Russell stated:

"When the war ended, we turned our attention to what must be the key to all military aviation - the pursuit plane. We developed the fastest plane in the world. But that wasn't all. The strategic problem so far as the United States is concerned involved the necessity of getting this fastest pursuit plane in sufficient numbers to any point on either seaboard or either boundary where they might be needed. As pursuit planes stood then their cruising radius was not over three hundred miles.

That meant that adequate forces of pursuit planes should be stationed every three hundred miles all 'round the ring. When they came to figure that up in terms of annual appropriations it was Congressionally impossible. So we turned to the development of a pursuit plane that could be stationed at some central point and dispatched as the need arose to the point where needed, arriving there ready for fight

Lieut. Maughan was, through no fault of his own, deprived of the wonderful achievement of completing a coast to coast flight between the rising and setting of the sun. Each failure augurs for better success on the next attempt, for it is only by a thorough test of any equipment that defects are found and constructors are enabled to take proper steps to correct them.

America has the champion airplane speed pilot, the fastest racing airplane in the world and the fastest airplane capable of making "hops" approximately 600 miles in length, and if the daylight transcontinental flight cannot be numbered among America's wonderful aviation achievements for 1923, it will surely occupy a prominent place in American aviation history next year. With another year's delay there can hardly be any room for doubt that the producers of the Pursuit plane will have made such refinements and improvements thereon as to leave no doubt as to the successful outcome of the attempt next summer.

CHINESE OFFICERS VISIT CAMP NICHOLS

The Flying Field at Camp Nichols, Rizal, P.I., was recently visited several times during one week by Brigadier General Chung and Colonel Ching of the Chinese Army. These officers are interested in aviation, and it is understood that they are making a trip around the world, visiting various countries with a view to inspecting air service activities, both commercial and military. During their visit at Camp Nichols they were taken on several flights, one of which was to Camp Stotsenburg and return. Both of these officers are very agreeable and pleasant in every way and have the personal element of aviation at heart as well as the technical.

RIDING THE WAVES IN A SEAPLANE

According to the Luke Field (H.T.) FISH TAIL, if you are looking for a thrill take the HS2L and land it out to sea. There are a few veterans who have tried their hand who are around yet, but even they seem to have lost their appetite for their seagoing airplanes. It has been noticed that the Navy pilots seldom try landing outside the harbor. Coming down isn't so bad, as the waves do not look so very high. The bottom about gives in the first wave you hit, you float down and immediately take off, repeating the operation about six times. The fun commences on the take-off. You push forward on the stick; it is not necessary for you to pull back on the stick, as the ship immediately points its nose to heaven, and when you are on the top of the bounce the nose drops and you are sure you are trying to imitate a submarine. You bring the nose up and the ship hits immediately, taking the air again. This operation is repeated, and if you are able to resist the temptation of closing the throttle and taxiing home you may take the air to stay, after the fifteenth bounce.

AIR SERVICE ORGANIZATIONS IN HAWAII "PREPARED"

This is what an officer stationed in Hawaii, writing for the Luke Field FISH TAIL, has to say on the state of preparedness of the Air Service in the mid-Pacific Islands:

"Most officers, myself included, when ordered to foreign duty, shrugged their shoulders and decided that it would be three years out of their army career that would be wasted, and decided to make the best of it.

Those who have been fortunate enough to be assigned to Luke Field have now decided otherwise. Nowhere in the Army does an Air Service officer get such a variety of training. Every time a plane leaves the airdrome it is on a tactical mission, simulating some maneuver for war training. The flying is always interesting. It never grows old, for one never does the same mission two days in succession.

Noncommissioned officers are trained as gunners, bombers and radio men.

There is not a station in the army that could be ready for war quicker. We are ready now. Perhaps that is why the Inspector General thought we were one of the best organizations in the Army."

U. S. NAVY TO COMPETE FOR THE SCHNEIDER CUP

In past years the annual international competition for the Schneider Cup, an Aviation classic for seaplanes, was confined to European countries - France, England and Italy being the principal competitors. This year the U.S. Navy has decided to participate, and three fast Navy seaplanes have been entered in the competition which will be held at Cowes, England, on September 28th. These seaplanes are small twin float types, of higher speed than any yet designed. World's records are expected to go by the board in this race. The Navy men will be pitted against entries from England, France and Italy.

Lieuts. F.W. Wead, Rutledge Irvine, A.W. Gorton and D. Rittenhouse, U.S. Navy, will represent this country in the race. They have been training at the Naval Air Station, Anacostia, D.C., practicing water maneuvers. At present they are supervising the final assembly of the seaplanes at the Curtiss Airplane and Motor, Corp., the Wright Aeronautical Corp. and the Naval Aircraft Factory, Philadelphia. They will sail for England on August 18th.

FAIRFIELD DEPOT TO REMODEL DH4B AIRPLANES

The Repair Depot at the Fairfield Air Intermediate Depot, Fairfield, O., has completed the design and started construction on the new DH-4B4 airplanes for use on the Model Airways.

Shortly after flight on the model airways was reduced to regular schedule the inadaptability of the standard DH4B became apparent, and plans were instituted for redesigning this job to more nearly fit the needs of this airways work. Suggestions were invited from all interested pilots and, as a result of these various suggestions, this new plane will soon be available for this work.

No real basic change has been made in the lines or surfaces of the old DH, but rather a rearrangement of the interior to provide a plane more adaptable to the needs of the service.

The old 88-gallon gasoline tank has been replaced by one of 110-gallon capacity, thereby adding 60 to 90 minutes flying radius. A new and larger oil tank with a capacity of 13 gallons has been installed. The front cockpit has been equipped with all the latest devices for the aid and comfort of the pilot. The rear cockpit has been replaced with a cargo compartment equipped with a streamline cover. This compartment is equipped with a collapsible seat so that a passenger may be carried in this compartment if it ever should become necessary. All compression members about this compartment have been materially strengthened or replaced by bulkheads, thus thoroughly bracing this compartment against distortion by the load to be carried. Standard DH parts have been used wherever practicable, but at least 160 new parts have been designed and incorporated in this new plane.

The initial order is for 21 planes of this type, and the first has just been completed and at the present time is undergoing its flight test.

DISSEMINATION OF INFORMATION ON AIRWAYS AND LANDING FACILITIES

The Airway Section, Office Chief of Air Service, has recently completed the publication of an Air Service Information Circular (No. 404 - Airways and Landing Facilities) which contains a description of all landing facilities reported in the Airways Section prior to March 1 of this year. From this information there has been published a landing facilities and proposed airway system map, which is being disseminated to various activities. It is believed that officers carrying with them a copy of the above circular and map on cross-country flights will find the information to be of great value in situations where courses must be changed or forced landings made. The Airways Section is keeping a record of all corrections and additions to this information, and since publication of the circular has made some four hundred changes. All personnel interested in having this information published correctly, should take it upon themselves to notify the Airways Section of any error or additions which might be of assistance in perfecting a route or routes.

A CORRECTION

Mistakes will happen. In the issue of the NEWS LETTER of July 10th, touching on the work of the Repair Department of the San Antonio Air Intermediate, Kelly Field Texas, for the first fifteen days of June, we omitted the important item of 12 DH4B airplanes, which should be added to the other ships and engines overhauled, repaired, tested and placed in condition for service, viz: 1 Martin Bomber, 3 JN6H's, 1 Spad, 16 Liberty Engines and 9 Wright Engines.



OO! Lookit what WE'VE got !!

"Well! Look who's here!!" exclaimed one of a party of 88th Squadron boys who were giving the double "O" to a handsome new D.H. plane which had just been rolled out of the Final Assembly for its test flight.

There, glistening in the morning sun, conspicuously emblazoned upon the fuselage where the world might see was the most grotesque little gnome imaginable, burdened with pack and tool kit, winged at shoulder and heel and whose garments rivaled for color the famed coat worn by Joseph in biblical days.

"Well! what's it all about," quoth another member of the curious bunch, whereupon Private Archie Miller, who had just joined the group broke out, with a snort, "Huh! If some of you fellows could get your nose beyond the feed bag you might know what was going on around here!"

Clearing his throat he continued, "Limber your ears while I wise you up. That is Old Man Service, the guiding spirit of the Fairfield Air Intermediate Depot. The bag on his back filled with supplies symbolizes the Supply Depot, while the tool kit in his hand represents, of course, the Repair Depot. The pen back of his ear acknowledges his duties with the Property, Maintenance and Cost Compilation and there you have the Trinity of activities included at F.A.I.D. With wings on his shoulders and heels, he is properly equipped to render the maximum of speed and service, and, being a flyer he naturally wears a stocking cap for luck, probably donated by some fair lady of his acquaintance. With red trunks, white belt, blue jacket and cap and an O.D. bag, his uniform is strictly regulation. Of course his shoes are black while his wings are silver."

Relieved of this outburst, Archie was about to retire when, "Well, who brung him here, and how come you to know so much about him?" stopped his progress. Hesitating for a moment he continued, "Well, Lt. Harry Mills originated the idea, I sketched it, Major Robins christened it and Major Rudolph with his bunch of painters did the rest."

THE USE OF SMOKE CANDLES

France Field, Panama Canal Zone, recently secured from the Chemical Warfare Service a shipment of 100 smoke candles of the Mark II S-I type, a candle of English manufacture. These were experimented with to determine their usefulness as wind tell-tales in coming into a strange field and also as part of cross-country equipment in Panama, where in the event of a forced landing in the jungles the crew of the lost plane could set up a smoke signal whenever they saw searching planes hovering about nearby, and thus disclose their position. A report of these experiments is given below, as follows:

Nomenclature: Candle, smoke, Mark II/L Type S-I.

Description: Cylindrical, 6" tall, 3½" diameter, weight 3½ lbs. English manufacture.

To ignite: Pull away tape crossing the top, thus disclosing igniting stem and detached striking tab. Scratch stem with tab until candle ignites. (Full directions for use are on each candle).

Time of burning: 4-1/4 minutes, 5 minutes maximum.

Experiments conducted with this candle on land, from airplane on land and water, on the water, and in mud, indicate that it is not incendiary. The candle smokes with little heat. While the can container becomes quite hot, there is little heat felt in the smoke coming from the candle. It may be used in water, the substance once ignited coming to the surface and there forming the smoke. The water has a damping effect on the smoke, however.

It may be dropped on land or water from an airplane, but should not be dropped on land from a height greater than 150 feet, as there is danger of the cans splitting and there is less precision in throwing the can from heights greater than this.

It burns with a yellow smoke, visible from two to ten miles away on land, and in the water one mile away.

It must be ordinarily struck with the striking tab about three times before igniting. It should be held about ten seconds (not less) after igniting before being dropped from an airplane.

Method of employment from airplanes.

Should be held firmly on the cowling by someone other than the pilot. Should be ignited too far back rather than too near the objective, as they may be held about one minute, but not longer, after igniting. There is the chance that it may not ignite immediately upon the first strike of the tab. Immediately upon igniting, the scratching tab should be thrown away, as this sometimes burns. The candle should be held for about ten or fifteen seconds and then dropped down in the slipstream of the lower wing. It will not roll a greater distance than 50 feet after striking smooth ground.

Suggestions for their use.

As part of cross-country equipment. Two for each bi-place, and one for each monoplace machine.

In case of forced landing may be used by the crew of the wrecked plane to indicate their position to searching planes whenever any are seen or heard overhead or nearby.

In finding wind direction by flight leader upon coming into a strange field.

In place of panels. The great distance their smoke column is visible from the air, and the fact that the smoke column may be controlled in puffs by the use of a canvas sheet, makes their use in place of panels practicable, but further experiments should be made in this direction.

In monoplace machines smoke candles should be carried only for use in case of forced landings.

THE ROUTE INFORMATION SERIES OF THE AERONAUTICAL BULLETINS

Great interest is being manifested by Army, Navy and civilian aviators in the investigation of airways for obtaining information for the Route Information Series published in the Aeronautical Bulletins by the Airways Section, Office of the Chief of Air Service. A loose-leaf sheet is printed covering each section of the airways system averaging between 100 and 200 miles in length, the first page covering information in one direction and the second page covering it in the return direction. The information given out on the various airways should prove of as much value to the aviator as the "Bluebook" for the automobile tourist.

Orders have been issued by the Office of the Chief of Air Service to 15 Air Service stations for carrying on the work of investigating airways. Descriptions of airways are being received from time to time, and up to the present time ten sections of the proposed airways system have been covered and reported on, as follows:

Bulletin No. 1 (Between San Francisco, Calif., and Sacramento, Calif.) and Bulletin No. 2 (Between Sacramento and Redding, Calif.) reported on by Crissy Field.

Bulletin No. 3 (Between Los Angeles, Calif. and San Diego, Calif.) reported by Rockwell Field.

Bulletin No. 4 (Between Wichita, Kansas, and Kansas City, Mo.) reported by Fort Riley.

Bulletin No. 5 (Between Washington, D.C. and Philadelphia, Pa.) reported by Aberdeen Proving Grounds, Md.

Bulletin No. 6 (Between Wilmington, N.C. and Langley Field, Va.) reported by Langley Field.

Bulletin No. 7 and 8 (Between El Paso, Texas, and Tucson, Ariz., and Tucson, Ariz. and Nogales, Ariz.) reported by Fort Bliss.

Bulletin No. 9 (Between Fort Sill and Tulsa, Okla.) and No. 10 (Between Fort Sill and Wichita, Kan.) reported by Post Field.

There are approximately 175 sections of the proposed airway system to be covered in this way, and as rapidly as sections are being described and information received in the Airways Section, O.C.A.S., Aeronautical Bulletins are being published and will be circulated with the same mailing list as the State Series of the Aeronautical Bulletins. Credit is being given in this bulletin to the officers making the report and, needless to say, it is hoped that great care will be taken in the preparation of this information in order that it may be entirely accurate.

MODEL AIRWAY A BUSY AIR LANE

During the month of May, 1923, 224 airplanes have passed over the Model Airways which now extends from New York to Dayton, Ohio. This is quite a startling increase in air traffic over the 12 trips made during the month of June, 1922, which was the first full month of operation.

At London, Ohio, there is in process of erection a tower with a revolving searchlight, which will be used for night flying experiments between Columbus and Dayton.

NOTES FROM AIR SERVICE FIELDS

Rockwell Field, Coronado, Calif., July 7, 1923.

First Lieut. Lowell H. Smith, A.S. left Thursday, July 5th, for Fairfield, Ohio, on official business and expects to be away from this station about three weeks.

Lieut. John P. Richter is the proud owner of a new Stutz roadster and we all hope he will enjoy himself during the beach season, as it is a well-known fact that there is nothing better in the way of entertainment than driving a cozy roadster, and "Ric" is a bachelor, too.

Captain R.G. Ervine, A.S., Chief of the Supply Department at this Depot, returned July 3d from a month's leave. The Captain spent his vacation in Philadelphia at the home of his mother. He also attended a Harvard Class Reunion, held in that city from June 17th to 23rd, and reports one solid week of riot. We can all appreciate the fact that if the class was entirely made up of such men as Captain Ervin, this reunion must have been a decided success.

First Lieut. Kenneth Bonnor Wolfe, accompanied by 1st Lieut. Dudley W. Watkins, dropped in from Brooks Field, having flown here in DeHaviland #22-351, and reported an uneventful trip from the Texas Field. 1st Lieut. Julian B. Haddon, piloting DeHaviland #22-361, with Sergeant Long as a passenger, also arrived from Brooks Field. Both of the above planes were in fairly good shape upon landing here, and after the regular "once-over" which the Rockwell Air Intermediate Depot is very careful to give all visiting planes, and spending a few days enjoying the cool San Diego weather, the men will leave for the north.

As a reward for the expert maneuvering of the fueling plane on the Smith-Richter endurance flight, which ended with a slight pile-up on the morning of June 29th, the stork, through the cooperation of Mrs. Virgil Hine, presented Lieut. Hine, Post Adjutant and pilot of the servicing plane, with a fine baby boy, on the morning of July 2nd. It is hoped the future "Chief of Staff, Hine" will get his 609 completed as soon as possible, so as to follow in the steps of his father in making history for aviation.

Camp Nichols, Rizal, P.I., May 26, 1923.

Reorganization of units stationed at this post is again in progress. Flight "B", 2nd Observation Squadron, is to be returned to Kindley Field, Corregidor, after an absence of nine months. The 28th Bombardment Squadron is to be transferred to Camp Nichols from Clark Field. After mutual transfers between 3rd Squadron men, who are on temporary duty at this field, the 28th Squadron men, who are on duty at Clark Field, only about forty men will actually change station. When the reorganization is completed, all enlisted men will be serving with their organizations at their proper stations. Due to lack of quarters and transportation funds, several officers must remain at Clark Field on detached service from Kindley Field and Camp Nichols.

Several of the Non-coms. of this post feel that they are playing in hard luck. Several who were receiving commutation of quarters, pooled their resources, rented a house, and started housekeeping. Their happy existence has now been disturbed, as the allotment for commutation of quarters has been practically exhausted and the Non-coms, above referred to, have been assigned quarters in the Cuartel de Espana, about five miles from the field. "Lady Luck" doesn't seem to visit this post any more - if ever.

Lieut. George H. Burgess, A.S., has taken advantage of 30 days' leave of absence. Lieut. A. J. Clayton, A.S. left on the Transport "Merritt" for 30 days' detached service in China. Lieut. Willis R. Taylor, A.S., wound up his detail in the Philippines today. Lieut. Taylor and family, accompanied by Mrs. John Y. York, Jr., will spend a month in China before sailing for the States. Mrs. York will return to Manila.

A temporary building is being erected just east of the hospital for use as an operations office and class room. This building will supply a long felt need and, we hope, will make Lieut. Palmer happy.

Many photographic missions have been made, and many are scheduled with a view to securing oblique photographs of towns and villages throughout the Island of Luzon for use in connection with historical data covering former campaigns and battles during the American Occupation.

The clearing and leveling of the south end of the flying field is now practically completed. To accomplish this an old barrio had to be removed, between sixty and seventy wells filled up, bamboo removed, marsh filled in, etc., etc. With all this improvement and increased drainage, the field still resembles a lake after a heavy rain. Kindley Field pilots threaten to land their seaplanes on our landing field, during the rainy season, instead of anchoring off Camp Claudio. Let them try - we claim our landing field is as good for seaplanes, after a rain, as is their landing field, on the "Rock", for a DH during any kind of weather.

Our Vaudeville Troupe is going strong. They performed at Fort McKinley and Fort Santiago, and have several advance dates. Sergeant Banks has aspirations of booking them up for the "Orpheum" or "Keith" Circuit just as soon as he can gather them together in the States.

The bodies of Sergeant B. Y. Landers and Private Samuel W. McBratney, Air Service, of this field, were found by Igorrotes near Santo Tomas. Private McBratney's body was found on May 21st, while that of Sergeant Lander's was not discovered until May 23rd. These men were on detached service at Camp John Hay, with several other men from Camp Nichols. When last seen they were on their way to Santo Tomas, a high mountain near the camp. The trip up Santo Tomas is one of the scenic trips of the vicinity, and few visitors to Baguio and Camp John Hay fail to make it. It is not considered a dangerous trip. Little, if any, light has been shed on their disappearance and ultimate end. A full official report has not been received. Our present information comes from meagre radiograms and men who have returned from detached service at Camp John Hay.

Active training in Aerial Gunnery and Bombing began in earnest this week. As a consequence, Lieut. Palmer, Post Operations Officer, is having a very busy time.

Lieut. E. E. Aldrin, Air Service, returned from Baguio, and was immediately admitted to Sternberg General Hospital with a case of Malaria Fever.

Captain Thomas J. Hanley has returned to duty, after a long siege in Sternberg General Hospital, to assume command of the 28th Squadron.

Kindley Field, Fort Mills, P.I., May 28, 1923.

About ten million locusts stopped over at Corregidor on their flight north from the Wilds of Mindanao. The air is still filled with our visitors, in spite of all the "Gooks" going out to catch them with butterfly nets - "good chow", they say. If the locusts stay with us a bit longer, they will solve the annual grass-cutting problem for us.

The ladies of Kindley Field are aglow with excitement at the prospect of seaplaning. There were some qualms and misgivings about the matter, but so far no lady has welched, and they will all go up this week.

At least two officers are expected to qualify as experts in the coming pistol practice, judging by recent performances. When you have three children in the house you cannot afford to have a gecko sounding off on the screen every night, and so after vainly trying to catch it and kill it humanely with a drop of alcohol on its tail, Lt. Owens drew his trusty .45 and punctured the stilly air, the gecko and the screen, with one shot. Not to be outdone, Lt. Laughinghouse, by the same means, silenced a yodeling alley-cat, enfilading its nine lives with one sure bullet.

Our two "Micks" returned from Baguio Sunday night - at least McGraw got here intact with wife and trophies, and McKinnon got as far as the Polo Club in Manila where it was necessary to rest for another day. Both officers report a happy time and a strenuous session of golf.

Kindley Field, Fort Mills, P.I., June 11, 1923.

The Powers that Be have taken pity on us. The underlying cause is grass. With the arrival of the Rainy Season the grass decided that it was high time to become high and promptly started to grow. It grew faster than it could be cut - we were short handed - and it seemed for a while that Kindley Field would be completely hidden. Then the proverbial little bird whispered in the ear of the man higher up, and lo and behold, Monday brought a score or more of husky Privates, each of whom handled a scythe like a Cossack handles a whip. The blades of grass

went down before the blades of the cutters and once more Kindley Field is clean-shaven and presentable. They may give you other and more prosaic reasons for the sudden advent of 26 new men, but the foregoing is our story and we are going to stick to it.

Bunyan's Pilgrim had nothing on us. He may have had to wade thru a little thing like the Slough of Despond, which after all was only a bog surrounded by dry land. We can go him one better. We are a bit of (relatively) dry land surrounded by mud. When you step off the porch you start to sink. It's "going down" with a vengeance. The only thing you can do is to cross your fingers and pray that it won't come up above your boot-tops - if you are lucky enough to have a pair of boots; but as Kipling says: That's another story.

Kipling never did tell those other stories that he was always referring to; but we won't be so aggravating. Apropos of Boots, Supply Sergeant Johnson has become suddenly popular. Every little rain drop sent his stocks up a point higher, because - Sergeant Johnson was in charge of issuing of boots. We suspect that he could give cards and spades to Poe when it comes to telling sad stories. They came to him with tears in their eyes and in agonized tones told him strange and divers reasons why their lives would be blighted and they would never be the same unless he issued them a pair of boots. And through it all the Supply Sergeant remained unmoved - weighing 250 lbs. It would be rather hard to move him anyway - and budged not an inch from his original stand that if you didn't work outside, you didn't need boots. We suspect him of cynicism. We recall one incident which we overheard. A weeping Pvt. had told his tale, the gist of which was that if he didn't have a pair of boots the Air Service on Corregidor would cease to function. We were weeping ourselves when he finished, but not so Sgt. Johnson. When the young and imaginative "Fisheye" had come to a plaintive close, the Sergeant removed his cigarette from his mouth, growled, then grinned and said: "Yes, it is muddy walking down to the Picture-show every night."

A certain Private who just returned from a month's furlough in China was describing his experiences with Gusto. Among other things he was heard to say that while in Canton he drank a glass of Oxen milk. This was followed by a deadly silence and then a long and loud shriek of laughter. The poor deluded soldier was led to one side and told gently just what an ox was and why it was unlikely to say the least that he had drunk Ox milk. When last seen he was feverishly turning the pages of an Encyclopedia, a strained expression on his face. We live and learn.

As will be seen from the above, the Second Observation Squadron is placidly pursuing its uneventful way and the Special Correspondent, being desirous of keeping the Field in the limelight was forced this week to be a "Teller of Tales" rather than a "Recorder of Significant Happenings".

We have gotten five new Garford trucks for the Squadron. They are fine trucks, but as Shakespeare rises to say: "What in the H-ll good is a truck without any gasoline:" all the gas the Q.M. puts out is for motorcycles, which is fine for those birds that have them (meaning the QM's) and they keep our motorcycle, O.D., complete with side-car, over in Manila all the time getting repaired. Our mail-orderly has to walk to the Topside, or else get a horse, and the only horse Lt. Creighton will give him is one that happens to have the itch, which is hard lines - "ain't it McCarron?"

Captain and Mrs. Edwards gave a buffet dinner Friday night, following which everybody went up to Topside Club for the weekly dance. There was a downpour of rain, but one of the new Garford trucks managed to plough its way up. We thought the dance was formal, and all wore our soup-and-fish, but those wise Topside fox-trotters all were there in their easies. Well, we all had a good time at Eddy's anyway, and some feed. There is a war on among the ladies as to who gets Mrs. Edwards' Chino cook when they go. Whoever gets the cook will have to give the parties from now on.

The indoor training schedule for officers started Monday with the traditional radio buzzer practice. Lt. Gullet was the titular instructor of this course, but as he wasn't quite sure which was Q and which was Y, he got Sgt. Ginsberg to do the buzzing. All provided themselves with chitbooks left over from the ex-provisional regiment to write the radio code down on (Thus at last settling the question of what to do with the blue sheet). The class soon split into two sections, advanced scholars who could take six words a minute and the dumbbells, who couldn't, and the former were excused to allow the latter to catch up, which may they take

as long as they want to in doing, is the wish of us in the advanced section.

Clark Field, Pampanga, P.I., June 2, 1923.

Once each year we set aside a day upon which we assemble over the graves of our patriotic dead to pay them tribute. This is a sacred duty, dedicated to the noble deeds of those who made the supreme sacrifice in order that we might enjoy the fullness of living. Great is the joy and applause following the accomplishment of a colossal mission. But when the scourge of a mighty war has rolled onto the pages of our national history, and the task of reconstruction dominates our conscious thought and even haunts our restless sleep, we are likely to forget the human sacrifices offered in behalf of liberty. As we cherish the liberty of our people and the integrity of our nation, let us, in quiet solemnity, do homage to those who live in memory's indelible fastness.

We were recently favored by a visit from two officials of the Chinese Federal Army. General Chang Hung and Colonel Ching flew to Clark Field from Camp Nichols Thursday. Captain F. I. Eglin and 1st Lieut. Harry Weddington piloted the visiting officers, who remained here only a few hours. Colonel Ching is a member of the Chinese Federal Air Service, and is quite familiar with Air Service activities in all of their varied phases. He displayed keen interest in the operations under way at the time of his arrival. General Chang Hung and Colonel Ching are now en route to the United States, where they intend to visit for a number of months.

1st Lieut. Frank D. Hackett reported for duty from 30 days' leave at Camp John Hay. 2nd Lieut. Carl H. Barrett, recently transferred to the 2nd Observation Squadron, and attached to the 3rd Pursuit Squadron, Clark Field, for duty, has been sent to Sternberg General Hospital for treatment. 1st Lieut. Frank M. Bartlett remains sick in quarters.

Due to the efforts of Captain Gregory, 26th Cavalry, Camp Stotsenburg, the enlisted men of the command have been permitted a welcome respite in the form of equine exercises. Twice a week he has been able to secure horses for approximately ten men of the command, and under his leadership cross-country rides of about four hours' duration have been carried to a successful, if not comical, conclusion. Thanks to Captain Gregory for his cooperation and willingness to aid in a most enjoyable exercise.

The Clark Field "Pancake", although new in experience, is old in its way. It attacks or favors those who are deserving of such notice, regardless. Contributions from the command are encouraged and the management is having a great time reading and segregating them according to their approximate value.

The continued good weather has permitted the officers to even surpass their wishes in piling up flying hours. One hundred and four man-hours were credited personnel during the week.

Training of officers and soldiers, aside from their routine duties, consumes the greater part of the daylight hours. Officers are busily engaged in radio practice, aerial and ground gunnery, formation flying, cross-country missions and obstacle landings. The annual pistol firing for soldiers is carried on under the supervision of Captain Ivan B. Shell, Range Officer. These classes in pistol instruction and firing are held in the afternoon at present, due to all available men being used in the transfer of the Radio Department to another location. Field Headquarters building will now house the radio department. The masts (105 ft.) are now being erected in that vicinity.

Authorizing the sending of soldiers to Camp John Hay for a period of fifteen days' detached service is considered an appropriate step for maintaining the morale and health of the command. Quarters, subsistence, etc., are furnished by the Quartermaster Corps, and no work is expected from men so detached. Separate quarters are provided for married soldiers and their families, who take advantage of this opportunity. Camp John Hay is beautifully situated. Surrounded by unparalleled scenic beauty, which is viewed from novel approaches, abounding in growing vegetables and flowers and offering all necessary conveniences, it is a healthy tonic for tired nerves.

San Antonio Air Intermediate Depot, Kelly Field, Texas, July 10, 1923.

Although the allotment of funds for the pay of the civilian personnel was seriously cut, the Engineer Branch of the Depot, under the direction of First Lieut.

Charles E. Branshaw, Acting Engineer Officer during the absence of Captain Edward Laughlin on leave, overhauled and rebuilt eight DH4-B's, two DH4-B3's, two DH4-B1's, two SE 5's, two Spad XIII E's, one Curtiss JN 6-H, nine Liberty 12-A Engines, five Wright I's, and four Wright E's, the last fifteen days of June.

Working at full speed, the Engineering Branch carried out its production program and was able to turn over to the School Group at Kelly Field fifty DH 4B's by June 4th, the opening date of the Advanced Flying School. Reports from the School show them standing up well under the hard knocks given them by the student aviators.

Four DH 4-B3's for the proposed Panama flight will probably be completed at the end of this month, the work now being held up awaiting the delivery of pumps from Fairfield.

Six Martin Bombers have been turned in from the Advanced Flying School at Kelly Field for overhaul. It is hoped that the rate of transfer of the Bombers for repair will slacken up, as at the present rate it will require an increase in the personnel of the Engineering Branch to handle this job alone.

It was necessary, due to the reduction in funds allotted for the employment of civilian personnel, to discharge approximately sixty employees on June 30th. This reduction has seriously hampered the operation of the whole Depot, but was made necessary by the reduction in funds.

First Lieut. Walter B. Hough, A.S., returned from Chanute Field, Rantoul, Ill., where he completed the course in radio communication. He is now under orders to proceed to Miller Field, Staten Island, New York, for duty with the Air Service Reserve Officers' Training Camp, upon completion of which he will go to France Field, C.Z., for permanent station.

Lieut. and Mrs. Myron R. Wood attended a dinner party given by Captain and Mrs. Stephen B. Massey at the Argonne Heights Club House, Fort Sam Houston, July 6th. After the dinner the party attended the weekly hop at the open-air pavilion.

Monday evening Major Lackland and his mother, Mrs. Dorwin Lackland, gave a buffet supper at their quarters to a number of visiting officers. The guests were Lieut.-Colonel Roy C. Kirtland, Major Frederick L. Martin, Major Thomas DeW. Milling, Major Jack Jouett, Captain Joseph McNarney, Major Sheplar W. Fitzgerald, Captain Lewis Knight, and Lieut. Richard Alsworth.

Mrs. Dorwin Lackland and Mrs. Lewis A. Dayton entertained with a charmingly appointed bridge party Friday afternoon in Major Lackland's quarters, complimenting Mrs. Samuel E. Brown, wife of Captain Brown of Kelly Field, who will leave shortly for their new station in the Philippine Islands. Mrs. Melvin B. Asp, with Miss Helen Luke and Miss Fredine Baird, assisted the hostesses. The rooms were attractively decorated in wicker baskets of brilliantly colored zinnias. There were six tables, each having a table prize of a fancy vanity.

Mrs. Lewis A. Dayton and Mrs. Leland S. Andrews entertained with a bridge luncheon in honor of Mrs. Samuel E. Brown, wife of Captain Brown, and Mrs. George Robertson, wife of Lieut. Robertson, who will soon leave for a tour of foreign service.

Captain Edward Laughlin and family spent a few days on his citrus grove near Brownsville, and has gone from there to Corpus Christi, Texas, where he has taken a cottage and will spend the remainder of his leave.

The swimming pool at this station is the Mecca of all at present.

Selfridge Field, Mt. Clemens, Mich., July 16, 1923.

And the battle still rages. At that, though, Lieut. Tourtellet was mighty lucky. He and Lieut. Summers were returning from Minneapolis, where they had gone in a couple of MB3A's. In landing at Bryan some of Turk's baggage jammed the elevator controls. Fortunately he was almost on the ground and in a stalling position. Result - landing gear spread open, ship turned somersault - complete washout. Pilot bumped his knees and received gasoline bath, which reminds us that Lieut. Matthews cracked up in a Jenny at Bowling Green, Ohio. Said he tried to zoom a fence without enough power. She wouldn't zoom.

Speaking of enlightening experiences it behooves the writer to tell one on himself before someone else does. Proceeding along the road the other night with a fair companion we noticed a little beastie in the road ahead, stopped, and identified same as one very young black and white "polaris kittenensis". He, or it

might have been she, looked very cute. Leastwise that was opinion expressed. The writer got out. The skunk looked very small and inoffensive. He appeared to want to back up instead of run away. His lack of fear inspired me to admit frankly that I was afraid of him. I feared also the mother might be about. I suspected perhaps he wasn't so young and innocent as he looked. Still I had read somewhere that they were harmless when very young. Then was when we should have climbed in the car and made a wide detour. I thought maybe we could take him home, so nothing would do but to try him out. He behaved pretty well up to a certain point. Then all at once he forgot himself. We fled the scene. The scene - or I should say the scent - followed us. We slipped by the sentry at the gate (I don't know if the sentry was scenting well that night or not!) I stopped in front of my quarters to change clothes. There was a dog across the street which was well known to me and which had always been friendly. She failed to recognize me, the hair rose along her spine, she growled, tucked her tail between her legs and showed unmistakable signs of hostility. And all this from away across the street! Even after changing clothes it was hard to reconcile another dog into being friends. And the party we rejoined were not above passing nasty remarks about us, but he was "terribly cunning", she said!

Sergt. Pomeroy made a successful cross-country trip to Rochester, N. Y. and return in the Loening monoplane.

Major Royce and Lieut. Chauncey stopped over for a couple of days on their way to Brooks Field. The Group escorted them as far as Ann Arbor.

An informal dance is scheduled the evening of the 17th to welcome the incoming Reserve Officers. An intensive course of instruction has been mapped out for them, and it is intended to solo them all on MB3A's as soon as possible.

Wilbur Wright Field, Fairfield, Ohio, June 25, 1923.

During the past two weeks, considerable flying has been accomplished by the officers of Wilbur Wright Field, most noticeable flight being, first, a Squadron formation of seven planes to Columbus on June 23. An aerial demonstration was staged at Norton Field, Columbus, in connection with a campaign being conducted in the interest of the Citizens' Military Training Camp.

On the afternoon of the 23rd, Captain H. Pascale, accompanied by Lieut. Hanlon, made a trip to Cleveland and return in a DH plane, visiting the Glen Martin Plant in that city.

On the 22nd, Lieut. Niergarth "pushed off" for Battle Creek, Mich. returning on the 24th, using a Fokker plane on the trip.

Lieut. Kirksey completed the regular airway trip to Langley Field, Norfolk, Va., and return.

Lieut. Goodrich from Chanute Field, Rantoul, Ill., in one plane, accompanied by Capt. F.H. Pritchard and Lieut. Moon from the same Station in another, were guests of the Field during the week.

Other recent visitors have been Major Royce and Lieut. Chauncy enroute to Washington from Brooks Field and Lieut. Austin enroute to Selfridge from Langley Field.

The regular Wednesday evening Officers' party of last week was in the nature of a swimming party, the same proving extremely pleasant in view of the protracted warm spell. A few of the non-swimmers indulged in bridge and all enjoyed hot dogs and coffee later in the evening.

Lieut. Bartron is the undisputed golf "champeen", having made the lowest net medal score in a Post Tournament just concluded.

The employees of the Compilation Section, numbering approximately 100, planned a picnic lunch for Thursday evening last. Because of the rain of that evening, the picnic was necessarily postponed until the following day and was held in the Side Slip Inn, proving to be a most enjoyable affair. A few appropriate remarks were made by Capt. Adler, Chief of the Compilation Section, followed by several readings of a humorous nature by Lieut. Stromme. An hour of dancing was enjoyed by all, the music being furnished by Miss Loeb, and Mr. Calder, members of the personnel. The success of the party was assured by the very efficient committee consisting of Miss Neff, Miss Doerfert and Miss Kittinger.

A squadron of four Martin Bombers, enroute from Selfridge Field, Mount Clemens,

Mich. to Kelly Field, Texas, stopped at Fairfield Air Intermediate Depot on Friday last. Three of the Bombers remained on this Field over Saturday, while the fourth continued on its way. The Squadron was commanded by Lieut. Peter Skance of Selfridge Field.

FLYING ACTIVITIES ON FORD ISLAND, HAWAII

Including the week ending May 26, and the weeks ending June 23, the Group carried out 625 missions for a total of 200 hours and 45 minutes.

Two flights were made during the week ending May 26th employing radio, both of which were successful. Traffic was handled with Department Headquarters during a period when the telegraph lines were out of order. Twenty-eight pigeons were carried in planes, ten of which were released during flight. Bird #3100 returned from the Nuuanu Pali in twenty minutes and trapped in thirty seconds.

On May 28th, a Martin Bomber piloted by Lieut. Ned Schramm with a radio escort of Lieut. Eubank and Lieut. Hart, flew to the Island of Molokai for the purpose of bringing back to Luke Field the entire motor of a Fourth Observation Squadron DeHaviland which crashed on Molokai the week before.

No difficulty was experienced in loading and ferrying the salvaged motor which, however, was dismantled before being loaded. A Liberty motor weighs 825 pounds while the carrying capacity of a Martin Bomber is well over one ton. Should the Fifth Group go into the field this summer on one of the other islands, the problem of fresh meat and ice for the messes will be easily solved through the medium of the Martin Bombers.

Flying during the week ending June 9th consisted largely of bombing and camera obscura practice. Lieut. Schramm brought back another complete Liberty motor from Molokai in the rear compartment of a Martin Bomber.

On Monday, June 11th, in response to a hurried call from the Chief of Staff, Hawaiian Department, three Luke Field DeH-4B's piloted by Lieuts. House, Kiel and Eubank, left the Airdrome at 6:00 A.M., carrying as passengers Congressmen Raker and Johnson and one radio operator. The Congressmen made an inspection of the Hawaiian Homes Project on the island of Molokai where a landing was effected.

An unique Aloha formation consisting of a Martin Bomber, DEH-4B, and an SE-5A was flown over the U.S.A.T. Grant as she steamed by Waikiki Beach. Lieut. Schramm flew the SE-5, Lieut. Madarasz was in the Bomber, and Lieut. Eubank piloted the DeH-4. None of the pilots reported difficulty in keeping up with or over running the Martin, which lead the formation.

A bomb raid consisting of three waves was launched against Kepepa Island on Friday the 8th. The 6th Pursuit Squadron led the assault followed by the 72nd and 23rd Bombardment Squadrons. A landing was then effected at one of the emergency landing fields which simulated a bomb dump. The three squadrons reloaded their bomb racks, figuratively, made another raid and then returned to Luke Field.

The only Group maneuver of the week ending the 23rd consisted of a Group bomb raid on Makolea Rock and Kepepa Island. Two Martin Bombers of the 23rd Squadron and three DeH-4B's of the 6th Squadron consisted the attacking force. The 6th Squadron established what is believed to be a record performance by registering four direct hits and placing the other fourteen bombs within a radius of twenty-five yards of Mokolea Rock, a pinnacle of rock about the size of a Martin Bomber. Had the target been any type of a ship and the bombs been loaded, the results would surely have been disastrous for the occupants of the ship.

NIGHT FLYING ACTIVITIES AT LUKE FIELD.

Two nights each week night flying is being carried on by all three squadrons, viz., the 72nd and 23rd Bombardment, and the 6th Pursuit.

Various missions are assigned and carried out, to date most of them being searchlight exercises, carried out in conjunction with the 64th Anti-Aircraft Artillery, stationed at Fort Shafter.

Also attack raids are being scheduled on our harbor target, the 72nd and 6th Squadrons using DeH-4B's and the 23rd using Martin Bombers,

The use of our new 60" Cadillac searchlight unit has facilitated this branch of tactical activities as it is now possible, by its use, to illuminate the target extremely well, while the field lighting set is sufficient to light the landing field.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE August 27, 1923. -----

THE SEXTANT
By our McCook Field Correspondent

Although for most of us the sextant is connected with our most treasured memories of sea yarns, this instrument having been rather an important one in maritime navigation since the early seventeen hundreds, when a description of it was found among Newton's papers after his death, experimentation at McCook Field has given it a new importance, with the discovery that it has a very practical place in aerial navigation as well.

The mariner uses this instrument to measure the angular height of the sun or other celestial body above the horizon. Where the sky and sea appear to meet is a reference point from which this altitude can be found. At the exact instant that the sun's elevation is found, the time is noted by an accurate chronometer kept at correct time for Greenwich, England, or some other standard place. The sun's exact position in the sky for any time throughout the year may be found from a "Nautical" almanac, which differs from an ordinary almanac, in that it furnishes complete information of the location and movements of the sun, moon and stars in the sky.

Having measured the sun's height with a sextant and noted the time, and having the proper data from the Nautical almanac, the observer can compute the ship's position, not at a definite point on the chart, but at some point along a certain line. This line is nautically known as a "position line". To determine the exact point on this line at which the ship is located, a second sight is taken and a second line which intersects the first will be found. The point of intersection of the two lines locates the exact position of the ship on the chart.

This method, which has long been in standard use at sea, may not only be used to advantage in air navigation, but has been used in instances where no other methods of determining position have been possible.

The navigation of airplanes up to the present time has been almost entirely by "dead reckoning" methods and pilotage. The flyer has a map spread out before him, showing the section of the country over which he travels and from which he can tell distances between towns as well as compass directions. In cross-country flying, he must make suitable allowance for drift caused by cross winds. Before a long flight he obtains all possible information concerning upper air conditions along the route. At present, the only source of this information is the Meteorological Section of the Signal Corps. But owing to the comparatively few stations and poor system of communication, the required information is not always available. If he knows before he starts the probable winds that he will encounter, he can calculate roughly his drift and set his course accordingly. If, unknown to him, the wind should shift, his original information is useless. Instruments have been devised to measure drift while in flight, but these require that a second man be in the plane and also that the ground be in sight. After the proper course is set, the various prominent land marks, rivers, railways, towns, etc., are checked as they are passed. This method of flying by landmarks with accurate maps, if the pilot knows the territory, is the most logical way of going over land on a clear day. It is even possible to go over sea or unknown ground, if further along the route, land is picked up which the flyer can identify.

"Land mark" flying, however, is inadequate for long flights over unknown territory, or over familiar territory when the ground is hidden by darkness or clouds, or for flying over water. And this is where the use of the sextant comes in.

Certain modifications of the mariner's sextant are necessary, of course, for its use in aircraft. Rushing through the air at 100 miles an hour, it is difficult to hold a sextant in the hand with sufficient steadiness to take an observation. At higher speed, it is almost impossible to keep the sextant from being torn from the hand. Then too, the aircraft navigator is hampered by being

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confined in a small cockpit seat. Another disadvantage is that the air is much more unstable than the sea. The "bumps" of an airplane are much more severe than the tossing about of a destroyer. While by bracing the body, the observer can nullify to a great extent the effect of the engine vibrations, the pitching, rolling and lurching of the airplane, all add to the difficulties of sextant observation. Probably the greatest difficulty, however, of the aerial observer is the horizon. At sea the navigator is usually not more than 50 feet above the water. The visible horizon is about eight miles away, plainly visible in fair weather and is a straight line. Over land at low altitude, the sky line is irregular. At a height of 1,000 ft., the land directly below the plane is easily visible. As one looks off to the side for a distance of ten or fifteen miles, it is still distinct, but ordinarily at greater distances the vision is hazy. The land becomes indistinct and vanishes in a purple haze. No definite horizon can be made out as the land and the sky gradually merge.

To overcome this latter difficulty, the Instrument Branch at McCook Field has been investigating various types of sextants which make use of artificial horizons. Artificial horizons are devices, such as pendulums, or spirit levels which give constant reference marks in a vertical or horizontal plane. By this means the sun's altitude can be measured, even though the natural horizon is invisible. With a suitable artificial horizon and by basing the calculations on nautical astronomy, observations may be taken at night as well as in the daytime.

To counteract the disadvantages named above, there are certain advantages in the use of the sextant for the airplane over the ship at sea which should not be overlooked. When the mariner is tossed about beneath black murky heavens, it is often possible for the aviator by climbing higher and higher to get above the clouds that hide the sun from his brethren of the sea and get up into smoother air where the sun may be seen and the sextant used. Then, too, the same degree of nicety of calculation is not required in the air as at sea, where there are often dangerous rocks or shoals to be narrowly avoided. At sea, if it is desired to make port on some island, and through inexactness of course, land is not sighted at the expected time, the captain orders his ship to circle about. The airplane would circle also but with its greater speed and wider vision, land would be that much more quickly sighted and the course deviation corrected.

With care and unfavorable conditions, rather remarkable work can be done with a sextant in the air. The most notable feat was that of the flight of two aviators from Portugal to South America. Admiral Coutinho of the Portuguese Navy was the navigator. The hop was from the Cape Verde Islands to the St. Paul Rocks, a flight of 11-1/2 hours over the open ocean and the Rocks, where it was planned to make a landing, were finally sighted dead ahead. These Rocks are only a few hundred feet long and scarcely 20 feet in height, so that the consequence of a slight error in course may be easily imagined.

The art of navigating in the air by means of astronomic sights is still in its infancy. A simpler method of defacing sight calculations, resulting in a saving of time of these computations from some twenty minutes to five minutes has already been accomplished, and other results obtained have been very encouraging. It is expected that in the near future the sextant will play a very important part in all aerial navigation.

Lt. A. F. Hegenberger, pilot, and Mr. Bradley Jones, observer, returned recently from a nine-day air trip from McCook Field, Dayton, Ohio to San Francisco, via Minneapolis, in connection with the testing of the "Pioneer" ground speed and drift meter over rough country, the comparing of the efficiency of the Bunge air sextant with that of the Engineering Division air sextant, and the practising of the reduction of observations by the pre-computation method.

Satisfactory results were obtained with the ground speed and drift meter as far west as Cheyenne. Over the mountainous country however, results were inconsistent and unsatisfactory, because of the difficulty of determining the actual height of the airplane above the object sighted.

The Engineering Division sextant performed better than any sextant tested thus far. The motion of the level or artificial horizon, which consists of a gyro-controlled ball-in-hand inclinometer, due to accelerations, was much less and through a smaller range than that of the usual type of artificial horizon. As a result, observations were made more easily and quickly than formerly, and

were consistent results were obtained. By means of a spirit level the sextant is held horizontal and the angular elevation of the sun can be read on a scale on the side of the instrument.

The flyers came through some very severe storms over the Wasach mountains, and Mr. Jones' face suffered some damage from frost. Had it not been ninety-nine in the shade on the day of the return, he might have received more sympathy. As it was, the idea of such recent contact with the frigid, no matter what the results, could only excite envy.

AIRWAYS INVESTIGATION WORK MAKES COMMENDABLE PROGRESS.

Since publishing the announcement in the last issue of the NEWS LETTER to the effect that ten sections of the proposed airway system of this country had been reported upon and the information thereon disseminated to all those interested, through Aeronautical Bulletins published by the Airways Section, Office, Chief of Air Service, seventeen additional sections have been reported upon and printed in Aeronautical Bulletins, as follows:

Bulletin No.	Route	Reported by
11	Between Omaha, Neb. and Fort Riley, Kansas.	Fort Riley
12	Between Omaha, Neb. and Sioux City, Iowa.	Fort Riley
13	Between Sioux City, Iowa, and Brookings, S.D.	Fort Riley
14	Between Davenport, Iowa, and Rantoul, Ill.	Chanute Field,
15	Between Kansas City, Mo. and Iowa City, Iowa.	Chanute Field
16	Between Chicago, Ill. and Indianapolis, Ind.	Chanute Field
17	Between Iowa City, Iowa, and Davenport, Iowa.	Chanute Field
18	Between Kansas City, Mo. and Springfield, Mo?	Chanute Field
19	Between Springfield, Mo. and St. Louis, Mo.	Chanute Field
20	Between Salt Lake City, Utah, and Elko, Nevada.	Crissy Field
21	Between Elko, Nevada, and Reno, Nevada.	Crissy Field
22	Between Reno, Nevada, and Sacramento, Calif.	Crissy Field
23	Between Sacramento, Calif. and Fresno, Calif.	Crissy Field
24	Between Fresno and Redding, Calif.	Crissy Field
25	Between Redding, Calif. and Ashland, Oregon.	Crissy Field.
26	Between Ashland, Oregon, and Eugene, Oregon.	Crissy Field
27	Between Eugene, Oregon, and Portland, Oregon.	Crissy Field

IMPROVEMENTS AT THE SAN ANTONIO AIR INTERMEDIATE DEPOT

The Headquarters of the San Antonio Air Intermediate Depot, Kelly Field, Texas, has taken unto itself a new home which is fitting to the class of work emanating therefrom. The new Headquarters is so located as to be equally accessible to both the Supply and Repair Branches, which permits the transaction of business with both branches in a far more efficient manner. The new building is located on the Main Road of the Post, and is made up of the Commanding Officer's office, and offices for the Adjutant and Personnel and Utilities Officers. The building has been arranged in such a manner as to permit of excellent light and ventilation. The grounds about the building are being improved and will soon have the beautiful appearance of the other grounds of this post. It might be remarked here that the Depot won for the third consecutive time the silver cup for the most beautiful Army Camp in this vicinity. Ample space has been allowed for a driveway, and a parking space provided in the rear of the building for vehicles.

SOME OF THE JOYS OF CROSS COUNTRY FLYING IN THE PHILIPPINES.

Cross-country flying in the Philippines is always replete with interest on account of the rugged and picturesque scenery, but it has its drawbacks at times, especially during the rainy season, for the roads are few and mud is everywhere, and luckless pilots who experience forced landings are, to use the Army expression, "cuta luck".

Recently Captain Gilbert T. Collar and 1st Lieut. Charles R. Evans, stationed at Clark Field, caused much uneasiness and anxiety to the personnel at that field for several days. They were reported to have left Camp Nichols, Rizal, in a DH4B airplane, at 2:25 p.m., bound for Clark Field, an aerial

journey of about an hour and a half. At 4:00 p.m. they had not arrived at Clark Field, and a radio message to Camp Nichols brought forth the response that they had not returned to that station. A low ceiling with rolling clouds and frequent showers made low flying necessary. At 4:25 p.m., however, three planes, led by Captain A. H. Gilkeson, took off in search of the missing plane. After two hours of flying no trace of the plane was discovered, and the flight returned to Clark Field. Messages were sent to different Provincial Constabulary commanders to be on the alert for any plane that might fly over or land near the command. A car was sent out at night from Camp Stotsenburg to make inquiry throughout the northern provinces. The following morning brought forth no report on the missing airmen, and planes were sent out in pairs to make a systematic search of Luzon. Luzon Island was divided into numerous sectors, two officers being assigned to a sector, with a relief schedule every two hours. The search continued until 9:30 a.m. the following morning, when the two much sought officers reported to Headquarters via a Calesa, none the worse for their experience, except that they were wet, hungry and in need of sleep.

Briefly, they were forced down some 25 miles Northeast of Clark Field and made a landing in a rice paddy without injury to person or plane. Arrangements were made for the recovery of the plane and due to lack of roads suitable for motor transportation, the plane will have to be floated down a stream to Arayat City and thence by truck to the airdrome. After leaving a native in charge of the plane, the two officers walked through the flooded rice fields during most of the night before any transportation could be secured to take them home.

ARRIVAL OF A FREE BALLOON IN COUNTRY TOWN CREATES SENSATION.

When the crew of a free balloon from Scott Field entered Hoyelton, Ill., a quiet little burg in Washington County, on Tuesday afternoon, July 24th, and landed on the outskirts of the town, they found every place of business closed and all the streets deserted. All of the inhabitants had turned out to see the birdmen land in their curious conveyance, and business had been suspended while proprietors and clerks went out to see the strange sight.

The balloon, a 35,000 cubic ft. capacity bag, left Scott Field Tuesday morning with two instructors, Capt. E. W. Hill and Lieut. W. J. Flood, and four reserve officers undergoing training - Lieuts. Guy Oatman, A. K. Harris, J.R. Rogers and J. L. Adams.

The balloon ascended at 9:45 a.m. to an altitude of 900 feet, taking a southeasterly direction. After a few minutes in the air, the pilot brought the balloon down to an altitude of 500 feet, which was held for the rest of the flight. A landing was made in an open field, one mile southeast of Hoyelton, Ill., and 60 miles southeast of Scott Field. In order to give the reserve officers the experience of a military landing, the balloon was brought to the ground at a speed of 800 feet per minute, causing the balloon to bounce several times before it settled to the ground. The curious spectators were more than anxious to help pack and make ready the balloon for its return to Scott Field. A truck from Scott Field finally arrived at 1:00 p.m., to bring the balloon and crew back to their station. The truck returned through Beasoupe, Okawville, Nashville and Mascoutah, Ill., arriving at Scott Field the same evening at 7:30 o'clock.

RADIO ACTIVITIES IN PANAMA CANAL ZONE.

A report summarizing the work actually done in radio communication at France Field, Panama Canal Zone, during the fiscal year ending June 30, 1923, shows that the total number of radio flights made during the year was 261, embracing radio test flights, voice-controlled formation flights, Coast Artillery reglages, Field Artillery reglages, tactical maneuvers and reconnaissance, and coast patrol work. Thus the radio performance by the Air Service on the Canal Zone averaged one radio flight per day, discounting Sundays and Saturdays, and counting only the remaining 261 actual working days.

The diversity as well as the volume of radio communication accomplished during the past fiscal year surpasses that of any previous year, inasmuch as heretofore no work had been attempted at France Field in tactical maneuvers, coast patrol, field artillery spotting and voice-controlled formation flying.

In connection with radio test flights, the report states that, while they are an important feature in promoting the efficiency of radio communications and many of them were made during the past fiscal year, they should be made with even greater frequency, as only in that way can radio equipment be kept in first class condition, particularly under the severely corrosive climate of the tropics. Furthermore, the training and experience gained by the regular and frequent use of radio equipment is of the utmost importance.

On the subject of voice-controlled formation flights, attention is invited to the fact that in view of the very successful results obtained in connection therewith during the U.S. Navy fleet maneuvers in Panama Bay from February 12th to March 22nd, and during the special demonstrations given at the annual tactical inspection at Balboa Flying Field on April 25th, it is not understood why more of such flights were not made. The recommendation is made that one of these voice-controlled flights should be made every week, or at least twice a month, in order to improve and train the personnel in radio communications and airplane tactics.

As to the Coast Artillery reglages held during the firing season from October 12 to December 12, 1922, these proved far superior to any heretofore held on the Canal Zone, not only in point of reliability and efficiency of two-way radio-telephone communication but also in the extension of the ranges for which this two-way radio communication was carried on. The Air Service, called upon by the Coast Artillery Defenses of Cristobal and Balboa to spot their fire for three Coast Artillery stations (Forts Amador, Sherman and Randolph) carried out 49 radio-telephone flights, all of which, according to the reports of the Coast Artillery District Commanders, were eminently successful, not a single failure being recorded.

The first attempt to use two-way radio-telephone to spot firing for the Field Artillery was for the 4th Field Artillery at Gatun, which employed 2.95" mountain batteries. A radio operating truck, type SCR-108, was sent to Gatun to be used as a mobile ground station, and this truck was connected by field telephone lines with the battery commander's station direct. The results of this reglage were very satisfactory and highly commended by Field Artillery officers. Special attention is called to the fact that four Field Artillery officers were utilized in spotting fire from the air. After 30 minutes of instruction in the use of the radio telephone they were qualified to operate the radio-telephone set in the airplane during the flight and adjust the fire of their battery.

The value of radio-telephone communication in giving and receiving instructions in the air was clearly demonstrated during the last tactical inspection by the Department Commander on April 25, 1923, when France Field was required to send all of its planes and flying personnel to the Balboa Flying Field for inspection and maneuvers. The work of the airplanes in proceeding to the various sectors and reporting positions and observations after arriving at those sectors proved the importance of reliable radio communication, and its success is indicative as to what should be expected in the future with more improved radio telephone and telegraph sets operating with ground radio sets of higher power than those now in use.

During the U.S. Navy maneuvers in Panama Bay in February and March of this year, the Air Service was called upon to do special reconnaissance work and patrol the Pacific coast for a distance of almost 100 miles to the southwest, some of the planes establishing their base at Aguadulce, Panama. That two DH4B airplanes, equipped with SCR-73 spark sets were able to send position reports in the air from Aguadulce, a distance of approximately 80 miles, to France Field radio station through interference was a feat that had never been accomplished before or even attempted at France Field. It is stated that SCR-73 spark sets are not to be compared with the ranges established by the SCR-68 radio-telephone sets on Martin Bombers, which have successfully sent position reports on two occasions by voice and buzzer modulation from Pearl Islands to France Field, a distance of almost 100 miles. The SCR-73 spark sets are installed on DH4B airplanes, and their maximum ranges in Panama have never been established. The belief is expressed, however, that their ranges in transmitting from the air to France Field should approximate in the neighborhood of from 150 to 200 miles without much trouble, and when installed on Martin Bombers should approximate in the neighborhood of from 200 to 300 miles.

CRISSY FIELD PILOTS ROLL UP CONSIDERABLE FLYING TIME.

Our Crissy Field Correspondent calls our attention to the fact that for the fiscal year ending June 30, 1923, the pilots stationed at that field have rolled up a total of something like 3,120 hours, and then, in the words of Hashimura Togo, goes on to articulate thusly:

"Now we have no desire to run in any statistics or comparisons on unsuspecting readers, so we won't go into the matter of how far the above number of hours would reach if placed end to end or side by side, or however one arranges hours to make the best showing. We would like to point out, however, that about 2,500 hours of this time were accumulated in cross-country flights - and cross-country flying around these parts means the traversing of considerable topography, to say nothing of large rough chunks of landscape.

About 575 hours of cross-country were put in by the Forest Patrol Detachment operating in Oregon last Fall; 1350 hours are chargeable to miscellaneous cross-country, as, for instance, ferrying ships to and from San Diego, photographic missions along the coast anywhere from Canada to Mexico, and various errands to all parts of the Corps Area.

Over 500 hours were spent on the Marshall-Webber hunt during December. On the face of it, this latter item does not loom up as any record-breaking achievement. In the light of the many records that have been established or broken recently, this mission has no particularly interesting news value. All that took place might be summed up as follows:

'Sixteen planes left Crissy Field about the middle of December, proceeded to points along the Mexican Border, made daily searching patrols, and at the end of about ten days returned to Crissy Field'. That's all there was to it; nothing startling maybe, but nevertheless worth looking into from a standpoint of what might be called every day aeronautical operations.

The point is this - that immediately upon receipt of orders and without any opportunity for unusual preparations, sixteen planes, carrying thirty-two pilots and observers, left this Field for the Mexican Border, over 500 miles away. The orders were not anticipated; the planes were the regular squadron planes in every-day use - all we had, in fact; the pilots were not hand-picked - just every one available; the weather in this entire region was bad, so bad, in fact, as to be prohibitive to any ordinary flying and making it necessary for every plane to fight its way through clouds and rain for a large portion of the southward trip. The daily patrols in the region between San Diego and Tucson, Arizona, were then carried out over territory entirely strange to most of the Crissy pilots, and including some of the worst geography in the entire collection of Messrs. Rand McNally. Even one forced landing would have diverted the operations of a number of other ships and might possibly have required the attention of the entire expedition. There were no forced landings and no delays of any sort due to mechanical trouble. The service was 100 per cent.

In other and more condensed words, the Ninety-First Squadron went away, did its stuff, and returned on schedule and, although that may not be any world-beating record, its shooting par anyway, and we're glad to be able to turn in the card -

'Cross country (M-W hunt) - 500.' "

THE COMING BOMBING TESTS. /

Once more obsolete battleships will be used as targets by Air Service bombardment pilots. The only Bombardment Group in the United States Army, now stationed at Langley Field, Hampton, Va., is at present conducting target practice with various types of aerial bombs against floating targets and against the old battleship ALABAMA, which was sunk by aerial bombardment in shallow water in Chesapeake Bay in the Fall of 1921. Formations consisting of seven, nine and eleven planes are in the air daily, and all teams are practicing accuracy bombing from altitudes of 2,000, 4,000 and 6,000 feet on a floating target in the waters of Chesapeake Bay.

It is the intention of Major General Mason M. Patrick, Chief of Air Service, to culminate these training maneuvers by sinking two obsolete naval craft by aerial bombardment in order to obtain valuable statistical data concerning the accuracy of various types of aerial bombs from various altitudes.

The Army Appropriation Bill, approved March 4, 1923, made available the sum of \$50,000 to be used for the continuation of airplanes' bombing tests against obsolete naval craft, and this amount will be used for the most part in the transportation of personnel and equipment to Langley Field and Cape Hatteras for the bombing maneuvers against these battleships.

It is expected that the bombing of these battleships will take place in the latter part of August or the early part of September. The exact date they will become available is not yet known, but the Navy Department will be prepared to turn over to the Army Air Service about August 20, 1923, the old battleships "Virginia" and "New Jersey", now in Boston Harbor, which must be scrapped under the terms of the Four Power Treaty drawn up by the Limitation of Armaments Conference. The exact date will become known as soon as the Treaty has been ratified, and if these two obsolete ships are made available the maneuvers of the Second Bombardment Group will include the bombing of these vessels.

The airplanes to be used during these exercises are Martin Bombers, equipped with two 400 horsepower Liberty engines, similar to those used in the bombing tests in the Summer of 1921. These airplanes are capable of carrying a load of over 2,000 pounds of bombs, in addition to their regular military load, and will bomb from altitudes above 6,000 feet. For the purpose of bombing at higher altitudes, from 15,000 to 20,000 feet one flight of these airplanes will be equipped with superchargers to enable them to reach higher altitudes with heavy loads.

In order that these battleships may be sunk in compliance with the terms of the Naval Treaty and so that they will not be a menace to navigation, they must be sunk in fifty fathoms of water. The fifty fathom curve lies fifty miles east of Cape Charles, and about eighty miles east of Langley Field. This is in the general vicinity in which the bombardment tests were conducted against the former German battle cruisers in the Summer of 1921, but this location is so far from shore that considerable over water flying would be necessary, which would increase the hazard for the pilots and bombers flying the airplanes. This is considered unnecessary, in view of the fact that the fifty fathom curve lies only 22 miles off shore east of Cape Hatteras, and it is therefore contemplated sinking the battleships in this vicinity, where they will be placed at their final anchorage after being towed from Boston.

As an additional precaution against possible accident and for patrolling and observing purposes, it is expected that five or six small seagoing craft, such as mine planters, or vessels of similar type, will be stationed at intervals between Cape Hatteras and the target. The Army Air Service is also taking action to procure a larger sized vessel, if possible, for use of observers and other officials who may desire to view the exercises. Parachutes and Kapok vests will be worn by the crew of each airplane as an additional precaution in case of forced landings.

The Chief of Air Service has detailed Brigadier-General William Mitchell, Assistant Chief of Air Service, to take charge of these exercises, and it is intended to establish headquarters for this officer at Cape Hatteras. The present plan is to establish a sub-airdrome on Cape Hatteras, from which point the huge bombardment airplanes will operate against the battleships. This airdrome is in the vicinity of the Cape Hatteras Meteorological Station of the Weather Bureau and adjacent to the Durants Coast Guard Station No. 185 (Inactive) on Cape Hatteras. The establishment of an airdrome at this point will give valuable training under simulated war conditions for the protection of vital areas of our coasts from air and sea attack.

The general plan for the sinking of the two obsolete seacraft contemplates action against one of the battleships with 1100-pound bombs by a service flight of airplanes, and it is intended to employ 2,000-pound bombs in the sinking of the second battleship. The Army Ordnance has developed a 4,000-pound aerial bomb containing over a ton of explosives, but this type is still in the experimental stage, and, therefore, will not be used in these tests.

The acute shortage of personnel, particularly flying officers in the Air Service, and the lack of equipment will not permit the Bombardment Group operating at full strength. It is expected, however, that two squadrons of approximately six airplanes each will be available for these maneuvers. Several of the pilots and bombers assigned to this duty have been ordered to Langley Field to augment the small force now at that station, and the majority of those participating are crack pilots and bombers with war time training and experience and who took part in the bombing of the former German battleships in the Summer of 1921.

The actual time during the day at which these battleships will be sunk will be determined later and will depend to a great extent on weather conditions. Prior to the final sinking of these vessels, night maneuvers will be conducted involving the use of pyrotechnics, and possibly phosphorus bombs. In connection with the bombing, it is also intended to employ smoke screens laid by airplanes. Two Martin Bombers are at present equipped with tank and nozzle apparatus for spraying purposes. Recent tests with smoke clouds, conducted at the Aberdeen Proving Grounds, Md., sprayed from an airplane indicates a possible tactical use of smoke screens employed by airplanes in connection with the bombardment of battleships. A sufficient amount of chemicals can be carried by one airplane, so the Chemical Warfare Service states, to lay a smoke screen about 1,000 feet deep and approximately three miles long. A demonstration will, therefore, be conducted during these exercises to determine the feasibility of bombardment airplanes choosing their own altitudes for delivering an attack against naval craft by maneuvering under cover of such a smoke screen. The successful employment of such a smoke cloud to obscure the aerial view from seacraft and allow the maneuvering of airplanes, themselves effectively obscured from the vision of the battleship, although the vision of the airplane is in no way impaired, will give valuable data in connection with the employment of anti-aircraft and indicates the possibility of bombardment airplanes operating at the most effective altitudes under cover of such a smoke cloud.

The employment of such smoke screens would be made on the assumption that the attacking Air Force has control of the air and is, therefore, able to maneuver, hampered only by anti-aircraft fire from naval vessels. The battleships of the naval force under attack will be enveloped by a smoke screen laid by a sufficient number of fighting airplanes and at sufficient intervals to entirely obscure the approach of and attack by a bombardment formation, thus enabling the latter to attack from any altitude they desire since they cannot be seen from the battleships at sufficiently frequent intervals to permit anti-aircraft gunners conducting accurate fire. Recent maneuvers in Panama, in which smoke screens were employed by naval vessels revealed the fact that these smoke screens aided the airplanes in locating the battleships, and photographs taken through the smoke screen from the airplanes demonstrated very clearly that battleships may be seen from the air through the smoke clouds, although the airplanes, being much smaller, were effectively concealed from the view of the battleships. Smoke screens will also be laid by bombs dropped from airplanes.

Personnel and equipment to be used in this target practice have been concentrated at Langley Field, Hampton, Virginia, and will be transferred by air to Cape Hatteras when it is finally determined that the battleships are to be made available. It is not expected that such part of the training program of the Bombardment Group, which involves the sinking of the two battleships, will take more than four or five days.

The purpose of these tests is to train the only Bombardment Group in the United States Army in the aerial bombardment of sea targets. Occasionally obsolete battleships have been turned over to the Coast Artillery for target practice and have been used by the Navy for the same purpose, and now it is intended to conduct target practice from airplanes against such vessels. Misleading statements have been made by the Press, indicating that the bombardment of these two battleships was reopening an old controversy between the Army and the Navy as to the effectiveness of aerial bombs against seacraft. This is not true in any sense of the word. The proposed exercises are simply in the nature of training to increase the efficiency of the bombardment personnel of the Army Air Service. It is seldom possible for such exercises to be conducted against seacraft, but since these two battleships must be scrapped in order to comply with the terms of the Naval Treaty, their sinking by aircraft will obtain this result and will, at the same time, offer a wonderful opportunity for aerial bombing practice under some of the conditions that might obtain in actual warfare.

Upon completion of the maneuvers at Cape Hatteras, the present plan is to send the Bombardment Group by air to Bangor, Maine, and return to Langley Field, to demonstrate the ease with which bombardment airplanes may be moved over considerable distances in the event of a national emergency and concentrated in threatened areas for the defense of our coasts and borders.

BROOKS FIELD CONDUCTS SUCCESSFUL R.O.T.C. CAMP

The 18 R.O.T.C. students of the Texas A. & M. College and the 27 Reserve Officers in the vicinity of San Antonio, Texas, all of whom were flying daily, gave Brooks Field the appearance it has during the regular period of flying training. This rush was relieved, however, by the departure of the 18 R.O.T.C. men for their homes. Our Brooks Field Correspondent states that "Major Russell is to be congratulated on the splendid type of young men he has taken in his Air Service unit at the Texas A. & M. College. All of the young men seemed to enjoy the camp here very much and would have been glad to spend more of the summer here."

The 23 Reserve Officers also completed their allotted period of time and departed for their homes. Nearly all of them were soloing again in fine shape before they left, and several were flying DH's, SE's and Spads. Major Edgar Tobin was the ranking reserve officer attending the camp, and he found little trouble in getting back his flying touch which made him so unpopular with the Hun during the World War. Everything possible was done to make the Reserve Officers enjoy their stay at Brooks Field, and they showed their appreciation of the efforts of the Regular Officers by presenting the Officers' Club with a very beautiful clock, which now occupies a place of honor on the mantel above the fireplace. The clock fulfills a long felt want in the Officers' Club, and the officers are very grateful for this gift from the Reserve Officers.

General J. J. Pershing visited San Antonio, Texas, on Saturday, July 28th, with the result that all of the camps spent a great deal of time in getting properly cleaned up. Brooks Field was no exception to the rule, but the General failed to visit the field. The Reserve Officers at Brooks Field attended his lecture at Camp Travis to the assembled Reserve Officers attending various camps in the vicinity of San Antonio. Most of the students and permanent personnel visited Kelly Field in order to see the review in honor of General Pershing at that field.

AIR SERVICE PARTICIPATES IN FIELD DAYS AT CORONADO, CALIF.

One of the main events of the Coronado Season was held on July 20, 21 and 22, in the form of a Gymkhana, at the Coronado Country Club, by the American Legion of San Diego, and was attended by a record crowd each day. The Army, Navy and Marine Corps were well represented, and the various stunts pulled off by the Rockwell Field and Naval Air Station officers will long be remembered by those who were fortunate enough to attend.

The Army Air Service was represented by both Rockwell and Crissy Field planes, which flew in formation over the vast crowd, demonstrating the pilot's ability to keep perfect formation, and also giving the spectators an idea of what could be done with a large fleet of aircraft under perfect control of the flight commander.

Lieut. Benjamin S. Catlin, A.S. and Sergeant Kelly; Lt. Warren A. Maxwell and Lieut. Lloyd Barnett; Lieut. Robert Self and Sergeant Friedel, flew down from Crissy Field in three DeHaviland planes to take part in the show.

Lieuts. Lowell H. Smith and J.P. Richter, assisted by Lieut. Virgil Hine and F. W. Seifert, gave a demonstration of refueling a ship in mid-air, which was received by the spectators as one of the stepping stones to the greater things to be accomplished along this line in the near future.

The Navy laid a smoke screen over the course during the afternoons and participated in various stunt maneuvers, giving the crowd plenty of thrills.

Troop "G", 11th Cavalry gave some fine exhibitions of horsemanship and fancy riding, which also received much favorable comment.

Pretty girls, fine horses and something doing every minute kept the crowd in fine spirits, and it is hoped that the Legion will make this an annual affair, as it was a great success both from a social and financial standpoint.

RESERVE OFFICERS TRAINING CAMP ON BORDER.

The Training Camp for Air Service Reserve officers opened at Fort Bliss, El Paso, Texas, on July 15th, a total of fifteen reserve officers being in attendance. These officers were given dual flying instruction, also instruction in aerial gunnery, artillery adjustment, and other subjects. Lectures were given daily on all subjects pertaining to Air Service.

LIGHT AIRPLANE ENGINE DEVELOPED IN ENGLAND.

One of the greatest obstacles to the rapid development of light aircraft has been the lack of suitable designed, low-power, light-weight engines. A design known as the "Cherub", manufactured by the Bristol Aeroplane Co. (Ltd.) of Bristol, Eng., recently underwent trials before the British Air Ministry and apparently proved to the officials that it is a satisfactory and airworthy power unit.

Although the schedule called for only 5 nonstop runs of 10 hours each, under 90 percent full power, this engine performed a continuous run of 50 hours and developed an average of 15.4 horsepower at 2,200 revolutions per minute, under 90 percent full power. The average fuel consumption per hour for the entire time was 9.7 pints of petrol and 0.63 pints of oil.

At the conclusion of the long run, the manufacturers made a further demonstration of the reliability of the engine by running it for an additional hour with wide-open throttle, when a development of 18.5 horsepower was noted. At the completion of the tests the engine was entirely dismantled, measured and found to be in a generally perfect condition. The engine is a flat twin type and air-cooled through the medium of a belt-driven fan connected directly to the crankshaft. The Bristol engines are the only air-cooled makes that have recorded such performances under official tests. - Commerce Reports.

R.O.T.C. STIRS UP CRISSY FIELD.

We hadn't heard from Crissy Field for quite a while and it gave us some concern, for we're always interested in the "doings" of the Air Service contingent at Frisco, especially so since they were written up in such a breezy and interesting style - not forgetting the letters from our Literary Friend "Ed", whose contributions were eagerly looked for by those of us in this neck of the woods. Almost in despair, we were on the verge of sending a dunning letter, asking, in the words of the banana vendor, "Whatta da mat'?", when, all of a sudden, we receive two contributions at once, one of them a dissertation from "Ed" on the R.O.T.C., which appears elsewhere in this issue.

The R.O.T.C. Camp must have kicked up quite a fuss at Crissy, for here we have another story on it from another slant. We give it below in full, as follows:

"The R.O.T.C. Camp, Air Service is drawing to a close, and if all the assorted aeronautical information that has been showered upon and worked into these 16 young men during the past month sticks by them they should be immediately tendered Commissions as Majors, Air Service, at least. However, they aren't the only ones that have had to study. Lt. Patrick, before he went away to Camp Bragg, thoughtfully slipped us all jobs as instructors, making it necessary for us to do a lot of boning on subjects over which, even when in the pink of war time condition, we never really did get more than a close decision. But now we're all "Directors of this or that branch of instruction". Lt. Barnett is Director of Instruction in Instruments and thinks entirely in three dimensions, and if you were to approach his class room when he is really going good you would hear such red hot stuff as the following: " - - varies as the square of the density and not under any circumstances, gentlemen, to be confused with any quantity or function of linear dimensions". The class is a little groggy and breathing hard but you can see that they are sticking with it.

And then there are the questions asked by the students, and the beauty of questions asked by Air Service students is that usually the sky is the limit. The answers haven't already been worked out in masterly fashion by that tactical wizard Sgt. Hill. The instructor is not hampered by precedent. As Napoleon says "Who cares what the weather was ^{day before} yesterday", and so when some R.O.T.C. student stands up in class and asks: "Captain Signer, what is the best spot in which to shoot an enemy observer?" or "Lieutenant Post, in bombing an enemy war vessel, do you drop the bombs down the smoke stacks or wait until the ship rolls and drop them through a port hole?" what's to prevent us giving the boys their money's worth? Didn't some of them come all the way from Washington? And if they should ask Lt. Catlin to tell them all about fighting the Hun and how to peer, do it, shouldn't he give them a full and free account? Certainly, the fuller the

But maybe we didn't make it strong enough after all, because, since writing the above, we have read over some examination papers turned in by the members of the R.O.T.C. on the general subject of aerial warfare. One student speaks up as

follows: " - -an airplane carrying a load of bombs can make it very disagreeable for an enemy battleship". Oh, well, let it go at that, maybe after all it is better to be polite and diplomatic. It would certainly be an improvement, for example, for the press agent of a heavy-weight champion to show such restraint and conservatism, viz: "The Champion partook of a light breakfast and stated that he did not care to make any predictions but believed he could make it very disagreeable for the challenger". Now isn't that better than to say "Hastily inhaling a saucer of coffee the Champ answered the interviewers as follows: 'That big stiff! Say! I'll knock him for a row of ship yards!'".

RADIO APPARATUS AIDS IN WINNING BALLOON RACE. ✓

In the official report covering his victorious free balloon flight as a contestant in the National Balloon Race, Lieut. Robert S. Olmstead, Army Air Service, attributes his success in a measure to the valuable and efficient service rendered by the radio apparatus with which his balloon was equipped. The instrument, a Radiola II, was loaned to the Army Air Service by the General Electric Company. A standard airplane antenna of about 300 feet of copper wire was used, and 25 feet of three-foot copper screening served as a ground. Lieut. Olmstead's report reads as follows:

"The radio installation complete with antennae and counterpoise weighed around thirty pounds. In weight therefore it represented roughly one bag of sand ballast. Both Lt. Shoptaw and myself agreed many times, upon receiving a particularly enlightening bit of information, that it was worth several times over its weight in sand. It should always be remembered furthermore that the set could be used as ballast quite efficiently by the simple process of disassembly, therefore, I do not believe that any parasite weight whatever should be charged against it.

Immediately upon taking off we dropped our antennae and (copper screen) ground and wired up to receive. The results were uniformly good from the first. Musical program after musical program with great clearness came in, and incidentally the Dempsey-Gibbons fight returns came from Detroit by rounds, we were as intent on the fight as on the Race. There seemed always to be music in the air, and to anyone who has experienced the monotony, when everything is going well, of the hours of darkness in a balloon race flight, the value of such restful relief therefrom is very evident. It materially added to our efficiency thru assuring rested nerves; at times when good judgment was required in forming decisions as to what course to pursue as problem after problem arose; at times the audibility of the set was sufficient to allow of leaving the head-set hanging in the rigging. There should, however, always be two head-sets provided to a basket, - we had but one. They do not interfere in the least with the work of the pilots, and the tendency is to wear them at all times. So much for the amusement phase of the radio in a Balloon Race.

Now for the more primely important feature of having such an instrument along. From Detroit, Chicago and Schenectady, particularly from the latter city, we received quite definitely the weather reports consisting of general flying conditions, wind directions and velocities, cloud conditions, and of great importance the pressures recorded at various important cities. This information was quite conclusive in influencing our tactics to obtain a suitable direction of flight in order to obtain maximum endurance and distance. A feature which should be added and which we keenly felt the need of for several hours while out of sight of any land marks or other means of locating our position or rate and direction of progress over Lake Erie (we were over Lake Erie from 8:15 a.m. to 5:50 p.m. July 5th) is a direction finding attachment. A loop hung above the Load Ring with compass attached thereto it is believed would solve this problem.

A point of vital importance in a race, and which had considerable bearing on our decision to land at the time we did, was the advice received by Radio of the location of our various competitors from time to time. At the time of landing we knew that all but three of our competitors had been accounted for, and we were quite certain thru deductions from the information previously received of the progress of the others that we were at least in one of the three winning positions and eligible for the team to go to Belgium. Had we not had this information, we might have tried to cross Lake Ontario without sufficient ballast, and if failing in the attempt, would have disqualified ourselves.

My recommendations are that

- (a) Most emphatically a Radio set should be installed in every Racing Balloon.
- (b) Directional attachment should be added.
- (c) Two head-sets should always be provided.

PROPERTY MAINTENANCE AND COST COMPILATIONS NOTES.

Activities of Property Maintenance and Cost Compilation, ✓
Fairfield, Ohio.

Believing that the work carried on by the Property Maintenance and Cost Compilation is not fully understood throughout the Air Service, the following statement will, it is hoped, prove of interest. Visiting officers have often said, in effect, "I wish that you people would explain just what you are doing, as I have a rather hazy idea of what it is all about".

The name "Property Maintenance and Cost Compilation" does not accurately describe the function of this office, and it is hoped that the name will be changed in the near future.

The office of the Property Maintenance and Cost Compilation is located at Fairfield, Ohio. It is not a part of the Fairfield Depot, but a branch of the Supply Division, Air Service, Washington, D.C. Its function, briefly stated, is to regulate the flow of supplies, to supervise the maintenance of aircraft, engines and all other Air Service equipment, and to keep records of the cost of such work. It comprises the following sections, - Materiel, Maintenance, Cost, Requirements, War Plans, Coordination and Production follow-up.

Materiel. The Materiel Section maintains consolidated stores ledgers for about 200,000 separate items which are carried in stock at the several depots, these ledgers being kept up to date by means of reports submitted at stated intervals from each of the 47 reporting stations of the Air Service. All requisitions for supplies from all Stations which cannot be filled by the Intermediate Depot for that Area are here received, this office acting as a general clearinghouse. It directs the distribution of all supplies, and prepares requests for the purchase of such supplies as need replenishment.

All requests for purchase of supplies are sent to the Procurement Section at Washington, where the purchase orders are prepared. Periodic reports of supplies on hand are sent to the Chief of Air Service. All the records of property on hand are based on information furnished by the various Air Service Fields and Stations, the accuracy of our records, therefore, depending entirely upon the accuracy of such reports as are submitted on Form #1.

It is of equal importance that requisitions be prepared with special care. While nearly all requisitions are well prepared, it has occasionally happened that requisitions have been received for engines, parts containing part numbers that do not exist; for airplane parts that cannot be identified; for brass, aluminum, etc., in sizes which it is believed could not be used economically and in amounts which are apparently in excess of current requirements. An impression prevails that the Air Intermediate Depots contain an inexhaustible supply of everything under the sun; but such is far from being the case, and it is hoped that all Supply Officers will bear in mind that if requisition is made for an item that is not on hand, it must be purchased. As our funds for purchase of supplies is limited, it follows that we must all cooperate in the careful use of supplies now on hand. Property Maintenance and Cost Compilation will render all assistance possible to every Supply Officer, and will endeavor to obtain, as promptly as possible, all supplies that are requisitioned.

Requirements. Not only the present needs, but also the anticipated requirements are taken care of. Property requirements are computed from past consumption and future needs of the Air Service.

Catalogs are being prepared, showing complete lists of all spare parts for every type of airplane and engine now used by the Air Service. These catalogs show, in full detail, every part (by name and part number) that is needed, from the complete assembly down through the subassemblies to the smallest bolt or cotter key.

Since the first edition of the catalog, in Nov. 1921, which covered all Air Service material, the following revised and new sections have been compiled:

Classification

<u>Number</u>	<u>Catalog Name</u>	<u>Date of Issue</u>
01D	DH-4B Airplane (2nd edition)	March 1923
02C	Liberty 12 Engine (3rd edition)	March 1923
02D	Wright Engine (2nd edition)	March 1923
02F	Curtiss OX-5 Engine	Nov. 1922
02F	LeRhone 80 Engine	Sept. 1922
02G	Dixie 800 Magneto (2nd edition)	June 1922
02G	Bijur Rear End Starter	Sept. 1922
02G	Stromberg Carburetor (2nd edition)	May 1923
06	Lubricants and Fuel Oils (2nd edition)	March 1923
07	Paints, Oils & Dopes (2nd edition)	March 1923
16B	Type R Balloon	Sept. 1922
16E	Gas Generator	Sept. 1922
17C	Small & Hand Tools (2nd edition)	March 1923
23	Metals (3rd edition)	May 1923
24	Chemicals (2nd edition)	March 1923

Cost Price lists, showing prices of all spare parts and materials used in the Air Service, are being prepared. The following price lists are completed, and have been distributed throughout the Air Service:

Liberty Engine	Dolco (being revised)	Hardware
Wright engine (all models)	Bijur Starter	Metals
Curtiss OX-5	Dixie Magneto (model 800)	Small hand tools
Stromberg Carburetor (NAD 4 and NAD 6) - being revised		
Vulcanizing and Tire Repair Supplies		

Circular No. 15, known as the "Air Service Accounting System" has also been issued. It was prepared for the use of all Air Service organizations and establishments, and it provides a means by which detailed costs may be obtained for all activities. For the present it is being installed at the San Antonio and Rockwell Repair Depots and has been in operation at the Fairfield Depot and at Mitchel Field for a considerable period.

Maintenance. A standard System of Operations for Repair Depots has been devised by the Maintenance Section, and has been issued as Circular No. 16 (1923). This is a complete manual covering all phases of Repair Depot Operation.

As used in the Air Service, "maintenance" means "the repair and upkeep of all Air Service equipment" - equipment meaning airplanes, airships, balloons, engines and all spare parts and accessories. The Maintenance Section supervises the operation of the three Repair Depots of the Air Service and has charge of the maintenance of equipment at all Air Services Fields and Stations. All reports of the work of Engineering Departments of Fields and Stations, and all letters relating thereto, are sent to Compilation. It is intended to give all possible assistance to Engineer Officers, and to help them in their work, in order that all flying equipment may be kept in the best possible condition. While this assistance in the past has been mostly thru correspondence, it is hoped to supplement this by actual inspection of Engineering Departments at all Stations in order to standardize the repair work throughout the Service.

The Maintenance Section is the authorized adviser on engineering matters to all Fields and Stations. It acts as a means of liaison between the Engineering Division (McCook Field) and the Service at large.

War Plans. A representative of the War Plans Division is stationed at this office, for the purpose of coordinating matters of supply with the other work of that Division.

Liaison with McCook Field. For the purpose of coordinating Engineering and Maintenance matters, an office is maintained at McCook Field, in charge of Lieut. Eric Nelson.

Coordination. The Coordination Section handles all matters pertaining to personnel, coordination of all National Guard requisitions, handling of allotments of transportation funds and the filing of records.

In short, the Office of Property, Maintenance and Cost Compilation was established for the purpose of helping all of you to get supplies, and to assist you in your maintenance problems. We don't know what you want unless you ask for it. We are not running a guessing contest; we don't know what you mean unless you use the names given in the Air Service Catalogs. Tell us all your troubles, and we will try to straighten you out.

OUR FRIEND "ED" PUTS US WISE ABOUT THE R.O.T.C.

Hqrs. 91st Observation Sqdrn.
Crissy Field, July 24th inst.

To the editor
Air Service news letter
Washington BC

Friend Ed

Well events has been plentiful during the past few wks as has like-wise been the work & what with 1st 1 thing & then another nobody but the adjutant lt Maxwell has a chance to take his typewriter on his lap so to speak.

During the past 5 wks there has been a ROTC camp here & for the benefits of our readers who havent had the advantage of observing a ROTC camp I will set fourth briefly how it is pulled off.

1st the students is signed up boys from the univercity of California and other institutions of correction & then Major Brett picks out a staff of officers to run the school. These staff officers has to be practically hand picked on acct they half to get everybody on the post to do a lot of extra work alike it. So the CO selects capt Peabody Capt Signer & lt Patrick & right away this staff gets together & selects the various instructors; backward instructors for backward students & the etc. After careful consideration of 3 or 4 minutes it is moved by capt Peabody & carried anonymously that all the rest of the officers at Crissy Field is hereby elected to learn the ROTC students the dutys of a air service officer. Meeting adjourned to the golf link. Then lt Patrick borrows a typewriter from somebody that isont looking & writes to all the officers telling them that in addition to their other dutys their elected Director of this in that training & all Wed afternoon golf quarrolls is hereby called off. Nothing now remains but to await the arrival of the eager students and for the directors of this in that training to run down experienced non-commissioned officers who will be assistant directors & attend to 1 or 2 of the more technickle details of the instruction to the viz furnish the information.

Well Ed the results is that in the past 5 wks Crissy Field has become the Alta meter of as fine a body of aluminum as ever blew up a dormitory. Three days after they come here they had a full line of college songs about "The ivy covered walls of old Crissy" & "Heres to good old doctor Peabody drink him down" & lt Marriner had to throw a couple of them out of the post exchange on acct they got full of coca cola & wanted to carve their initials in the counter so that when their sons come to the old hauls of learning in 15 or 20 years they could see the old mans initials carved in the historic root beer stained wood-work along with the other members of the class of 23. But lt Marriner dont know nothing about college customs on acct he come from the univercity of Illinois & as lt Greene says who & the h--l at Illinois ever owned a knife anyway. Another thing that must be gaurded vs is the mania all ROTC students has for asking questions as for inst in the airplane class 1 fresh guy up & asks lt Miller how should the moments of inertia of a airplane be computed & if lt Miller hadnt put his foot down rt then & there & announced that there wouldnt be no moments of inertia or any other kind of bunk fatigue in his classes they might have went hog wild you might say & even asked lt Goldsborough pt blank did he or did he not agree with the theoris of Dr Einstein & lt Goldsborough being a good natured fello & not wanting to make a bum out of a stranger & a civilian would have been force to state that the doc was a good egg but shouldnt ought to take off ^{with} his altitude adjustment open & leave it go at that.

So it was seen that the ROTC students had got to be prevented at all costs from entering in on a debauch of questioning & ways & means was suggested. Finely lt Post come out with the idear that they should ought to be given a awful lesson to learn them a thing or 2 & it was decided the best way to do that was to have some innocent member of the class get up & ask lt Barnett what he thought of the idear of disqualifying air service pilotes from the full benefits of Army Mutual insurance & if any of these students was still alive when the lieut got through throwing around the furniture & the etc they would know better than to ask foolish questions & as lt Dallas says the vice of asking questions might lead to serious consequences as for inst some bird might become a casualty by asking the CO did he ever do the Presidio golf course in undor 90.

Well Ed I must get busy and massage the grass in front of hdqrs with a raikie on acct gen Pershing will be in our mist next wk & of which more later.

Yr friend

Ed

NOTES FROM AIR SERVICE FIELDS

Scott Field, Belleville, Ill., July 27, 1923.

The Airship, AC-1 flew over Jefferson Barracks and the west end of Saint Louis, around Forrest Park, Wednesday morning, July 25th, on an all morning training flight, taking off at Scott Field at 6:45 and returning at 11:00 a.m. The ship was under the command of Lieut. W.C. Farnum. The AC-1 is the ship with the closed car, which was flown from Langley Field by Lieut. W.C. Farnum and Geo. W. McIntyre, last May, in a non-stop flight.

Lieuts. H.R. Rivers and H.R. Wells left Scott Field, Thursday, July 19th, at 7:15 a.m. for McCook Field, Dayton, Ohio, in a DH4B airplane, where Lieut. Rivers received and flew back the Photographic plane of this place taken there by him several weeks ago for repairs.

Lieut. Rivers returned late in the evening of the same day while Lieut. Wells remained over at McCook Field while a new pair of wings were put on his plane.

Capt. L.F. Stone, left Scott Field Wednesday morning at 7:15 o'clock in a DH4B airplane with Lieut. H.R. Wells as pilot, for Bolling Field, Washington, D.C. for the purpose of collecting data and information for the next course of the Balloon and Airship School at Scott Field.

Enroute to Washington, they made stops at the Air Service Technical School, Chanute Field, Rantoul, Ill., and the Air Service Engineering School, McCook Field, Dayton, Ohio.

Captain Stone will remain at Washington for several days and will then return to Scott Field by the way of the Air Service Technical School, Langley Field, Va., and the Bombing Paro-Technic School, Aberdeen Proving Grounds, Aberdeen, Md. Captain Stone and Lieut. Wells expect to return to Scott Field by August 10th.

Major General Mason M. Patrick, Chief of Air Service, arrived at Scott Field Saturday morning, July 21st, from Saint Louis, Mo. The General made a complete inspection of the Post, including the barracks and the large airship hangar.

Rockwell Air Intermediate Depot, Coronado, Calif., July 20, 1923.

After an absence of two weeks, Lieut. Lowell H. Smith, Chief Engineer Officer, has returned from Fairfield, Ohio, where he has been observing the methods of operation of the Engineering Department, under the provisions of Circular No. 16. Lieut. Smith, like all other Air Service officers, is very glad to get back to San Diego, after trying for a fortnight to get a night's sleep under the sweltering heat of the Ohio city.

Lieuts. Kenneth Wolfe, Dudley Watkins, Julian Haddon, and Sergeant Long, A.S. returned to Brooks Field after spending a few days in and about San Diego.

First Lieut. Warran A. Maxwell, accompanied by Lieut. E.L. Brown, came down from Crissy Field Saturday afternoon for the purpose of ferrying a DeHaviland back to San Francisco. They left Sunday, July 15th in DeHaviland #63398.

First Lieut. Charles Forrest, A.S. dropped in from Scott Field, Belleville, Ill., last Thursday to renew old acquaintances among the old-timers at this Depot. Lieut. Forrest was an enlisted man during the early days of Aviation on North Island and at one time was Skipper, 1st Mate, Engineer, and Deck Hand on the speed-boat "Promto," the pride of the school, but Charlie, like many of the early birds, has given up the fast pace of "Heavier-than-Air" and has gone into the "Elevator" class, where we all wish him success.

Pigeon Loft #209, A.S., has been transferred from March Field to this Depot. Lieut. Frank W. Seifert, in addition to his other duties, has been appointed Pigeon Officer, and has taken up the duty of trying to teach the birds that Rockwell Field is a better home for them than March, and we all look for Frankie to make several trips back and forth before he really convinces them that this is home.

Rockwell Field, Coronado, Calif., July 27, 1923.

Upon the receipt of a communication from the Office of the Chief of Air Service, stating that souvenir Masonic Aprons made from cotton shipped from Augusta, Georgia to New Bedford, Mass., made into Masonic aprons and delivered next day to the Shriners in convention at Washington, D.C., were being forwarded this station for distribution to the various Masonic Lodges in San Diego and vicinity, Major

H. H. Arnold took the proper steps to give this the publicity expected by the Air Service and, through the co-ordination of the Masonic Orders, a meeting was called by the Masters of the San Diego Lodges on the evening of July 24th, which was largely attended by an enthusiastic gathering of Masonic Air Service boosters, and an elaborate program was drafted and committees appointed to make the final arrangements. The San Diego Union of this date published an illustrated article under the heading: "Masonic Aprons Made From First Cotton Shipped by Airplane to be Presented Here," which states in part:

"Ten Masonic aprons, manufactured from a bale of cotton transported from Augusta, Ga., by military airplane to the Wamsutta mills of New Bedford, Mass., have been sent to Rockwell Field by Maj. Gen. Mason Patrick, chief of the army air service and at 9:30 o'clock next Tuesday morning will be presented by Gen. John J. Pershing to the masters of the several Masonic lodges in the 80th and 81st Masonic districts.

The presentation ceremonies, which bid fair to become one of the most historic events in the history of local Masonry, will take place in the officers' club at the transbay military aeronautical post.

Gen. Pershing, who has been a member of the Masonic fraternity for many years, readily agreed to present the aprons to the masters of the San Diego city and county lodges, when the matter was brought to his mind by telegraph.

Many distinguished Masons, including Brig. Gen. Joseph H. Pendleton, Rear Admiral Roger Welles, and possibly William Sherman, grand master of Masons of California, will attend the presentation ceremonies at Rockwell field, according to plans announced yesterday.

Winford Metz, master of Silver Gate Lodge No. 296, F. & A.M., and Postmaster Ernest Dort, are members of the local Masonic committee handling the details of the apron presentation at Rockwell Field."

John Linton Arnold, the infant son of Major and Mrs. H.H. Arnold, Commanding Officer of Rockwell Air Intermediate Depot, died very suddenly July 26th of appendicitis. Baby John was sick only a short time, and his sudden death came as a blow to the entire personnel at this Depot. The funeral services were held Friday afternoon and all work ceased throughout the Depot for two minutes in sympathy for the Commanding Officer and family.

Brooks Field, San Antonio, Texas, July 31, 1923.

The past week has seen the return of most of the officers who have been away from this station. Lieut. Williams, McClellan, Corkille and Patrick returned from New York and Langley Field bringing with them two Martin bombers. They reported no trouble on the way. Lieut. Haddon, accompanied by Sergeant Long, and Lieut. Wolfe, accompanied by Lieut. Watkins, returned from their cross-country trip to San Diego. Stops were made at Marfa, El Paso and Tucson, both going and returning, the trip being made in twelve hours and fifteen minutes traveling westward, and thirteen hours and five minutes, traveling eastward. Major Royce and Lieut. Chauncey returned from their cross-country trips in the East with a total of forty-four hours in the air. On the first day they made Scott Field, Belleville, Ill., after a nine-hour flight, a stop of one hour being made at Muskogee for refueling. They stopped at Schoen Field, Fort Benjamin Harrison, Indiana, and saw the start of the National Balloon-race, and then proceeded to Washington, stopping at Dayton and Moundsville. Five days were spent in Washington, broken by a trip to Aberdeen and Baltimore. On the return trip the stop at Moundsville was eliminated and landing made at Dayton after five hours and twenty minutes in the air. Selfridge was next visited, and from there the plane returned to Brooks, via Rantoul, Kansas City, Muskogee and Fort Sill. While in Washington it was learned that the next class would contain about 260 students. It was necessary that something be done in order to relieve the congestion that would occur in September when that number of students would report with only 18 dual instructors to train them. Several Officers and Cadets had already reported, however, and authority was obtained to immediately start the instruction, so instead of a rest until September the Primary School now has 37 men under flying instruction and new ones reporting nearly every day.

great deal

A ~~base~~ of interest has been shown by both officers and men in the Squadron ~~base~~-ball league that has now started. The three major organizations namely, the 46th, 47th School Squadrons and the 62nd Service Squadron, each have one team; also Headquarters has entered a team to be picked from all the men on the field not assigned to these three organizations. Wednesday, August 1st, sees the start of this league and the play is to continue three weeks.

Sunday, July 29th, Lieut. Corkille and Sergeant Long flew to Smithville, about 100 miles northeast of here, in a DH. While cranking the ship at that place Sergeant Long's left arm was badly broken. After having the arm placed temporarily in splints he was flown home by Lieut. Corkille and rushed to the station hospital, Fort Sam Houston, where he is getting along nicely as can be expected. Everyone hopes that no complications will set in and that the popular sergeant will soon be back on duty.

Authority has been received for the arranging of a White truck so that it can be used as a wrecking truck for this field. The wheels are being cut down and large sized pneumatic tires installed. The truck will also be fitted with a hoist in the rear. The work of remodelling the truck is now being done by the Quartermaster of the Intermediate Depot at Camp Normoyle.

Lieut. Taylor returned from a month's leave which he spent at Moran, Kansas. Orders have been received directing Captain Ernest F. Harrison, M.C. to report to the Army Medical School at Carlisle, Penna.

The student-officers who have reported to date are: Second Lieuts., A.S., Walter F. McGinty, Robert B. Williams, Howard M. Fey, Walter S. Smith, Glen T. Lampton, Walter H. Delange, Milton J. Smith, Thomas R. Howard.

Staff Sergeant John Tassock, 6208495, who has been First Sergeant of the 24th Photo Section, elected Hawaiian Service, and left for that duty on Sunday, July 29th.

TROPICAL TOPICS FROM FRANCE FIELD, CANAL ZONE. ✓

Having always claimed that we have the best looking Air Service station in the entire Army, we now claim the honor of having the "sportiest" one. This is since the construction of the golf course on our post, when this sport was added to the many other forms possible to be enjoyed without passing through the main gate, except for the horse-back ride over the jungle trails nearby. With the construction of the golf course there was formed the France Field Golf Club, separate and distinct from the Officers' Club, and having as members officers from nearby Army posts and from the Naval Base at Coco Solo. Under the encouragement of a substantial gift of money from the Officers' Club the golf playing members in our midst pushed the construction of the course, being enabled to hire expert civilian help, and within a few weeks it will be possible to play a nine hole game around the edge of the airdrome with a par of 34.

At about the same time as this occurs, our Commanding Officer, Major Raycroft Walsh, will leave us for a station at Department Headquarters on the Pacific side, he being the Department Air Officer, and being relieved of command of France Field by Major Follett Bradley, who is soon to arrive here. Fortunately there is a field, the Balboa fill, already ^{available} near Quarry Heights, so there will be no trouble in flying over here either for him or for any other officer stationed there with him.

Many of the new officers recently arrived here have been doing valiant desk duty for the last few years in the States, and for these there has been inaugurated what is facetiously termed the France Field Flying College, wherein is being given a refresher course in ground work, principally trouble shooting, and in air work on DeH's. The 7th Squadron is charged with this duty and is being kept busy of mornings serviceing ships on the "college" line.

What should be of great interest to those of us who go in for masquerades was recently discovered on a cross-country trip to Penonome, a little town up under the mountains in the Interior. They are the costumes worn by the neighboring Indians during their dances and fiestas, and consist of grotesque face masks made up of deer antlers and peccary teeth bound with wood fibre cloth, and capes, shirts and breeches made up of this same fibre cloth obtained from the bark of native trees, all of which are artistically, in a primitive way, patterned and dyed. We are sure that one of these costumes would take first prize against any King Tut regalia ever devised. Should a masque dance be given hereabouts, we expect to see all available planes take off for Penonome for costumes.

Work is about to start on the two new gun butts used for testing out forward synchronized guns on planes. These will be placed at different parts of the air-drome, and this will save much taxying back and forth as would be the case if only a single butt were available.

With the finish of the target season at this station, it is expected by all here that a compilation of the scores made will show France Field in the lead --- as usual.

Kindley Field, Fort Mills, P.I., June 18, 1923.

There was no flying at Kindley Field during the past week, due to heavy rains and a rough sea, and from the looks of things there won't be any more flying this month.

Captain I. H. Edwards, 1st Lieut. Neal Creighton and about fifteen enlisted men are leaving for the States on the July transport. About all we hear is "Short-timers sound off".

Captain Burge and 1st Lieut. Camblin have been assigned to the 2nd Observation Squadron upon arrival in Manila about June 26. Lieuts. Bartless, Evans, Woodward and Barrett have been ordered to report for duty from Clark Field.

Mrs. Neal Creighton gave a blow-out at Nipa Club Friday night. The usual downpour of rain accompanied the ceremony, but all arrived safely in the cargo truck and enjoyed the chow and dancing.

Kindley Field, Fort Mills, P.I., June 27, 1923.

The Second Observation Squadron is busily engaged in singing "Farewell Forever" to a goodly number of its old standbys. Into the even course of our lives, like the proverbial rock in the proverbial mill pond, came the bulletin ordering all men, whose Foreign Service tour expired before September 15, back to the States. Such an undignified scurrying about of heretofore sedate non-com's -- with glassy eyes/^{and} trembling hands they go tearing about shouting "Clearance, Clearance, my rating for a Clearance!". They stare in pitiful uncertainty at the bundles of papers the Sergeant-Major thrusts into their hands and try to figure out how a man who gets paid on Saturday can pay his debts on Friday, thereby obtaining a "clean slate" from such ruthless agencies as the Post Exchange, etc. Indeed, one Sergeant was heard to sadly wail: "It couldn't be figured out, even by Mr. Einstein."

It will seem a little strange on the old Field, for with the influx a fortnight ago of new men and the departure of so many of the old, a familiar face will be as scarce as a Filipino who can really understand English. But then the men from Camp Nichols are becoming thoroughly Second Squadronized -- They can boast with the best of us as to the Kindley Field Mess - par excellence, and have even learned the sacred haunts of the initiated, where one seeks peace and seclusion when the First Sergeant comes in search of volunteers for Extra Duty -- Volunteers? Was ever a word so badly mis-used -- Say conscripts, rather, for who but a "Fish-eye" rushes in where "old-timers" fear (or know better than) to tread?

The Transport Thomas brought this bally old Rock two new recruits, Captain Burge, who is assuming command, and Lieut. Camblin. No, we were wrong in saying that Capt. Burge is a newcomer, for he was here before, in the old days when the hangars were down in the barrio. Mrs. Burge and young daughter accompany Capt. Burge.

After three weeks of inclement weather, the sad sea waves quieted down enough to get a seaplane into the water without the risk of smashing it up. We used to climb out of bed when aroused by the bugle, and look down/^{upon} the dashing surge of the beach, and wistfully remark, one to another, "What are the wild waves saying?" The answer is "No flying pay."

However, we dragged a couple of ships into the water. Lieuts. McKinnon, Laughinghouse, and McGraw took off in one plane for Paranaque, and while they were at Camp Nichols sampling the celebrated "spiff" and unraveling some of the old Provisional chit books, the tide came in strong and put the ship ashore. Unable to push her off with a gang of D.H. mechanics, they returned to their former occupation and came back, none the worse, the next day.

Lieuts. Woodward and Evans, with their families, came over from Stotsenberg and found jobs awaiting them. Lieut. Barrett was not yet able to escape the Medicos at Sternberg, but sent over Mrs. Barrett to represent him, and she set out immediately to show up the equestriennes of Kindley Field, starting out with

Creighton's pet "Ike". Lieut. and Mrs. Bartlett are expected over soon, which will complete Kindley Field's quota.

Clark Field, Pampanga, P.I., June 16, 1923.

Advice has been received that a number of M.B.3's, Pursuit planes, are en route to the Philippine Islands for use in the Third Pursuit Squadron. The arrival of these planes is a subject for lively discussion and a cause for much indoor flying. With the exception of a few Spads in 1921, the Squadron has been equipped with the DH-4 since arrival in the Philippine Islands.

A recent transfer of a number of Air Service officers has necessitated a change of station for four former members of the Third Squadron. 1st Lieuts. Frank M. Bartlett, H.G. Woodward, Charles R. Evans and 2nd Lieut. Carl H. Barrett are to move to Corregidor as members of the Second Observation Squadron. Captain David W. Bedinger, Medical Corps, Flight Surgeon, Clark Field, has also been transferred to Corregidor. They will join their new organization during the following week.

Air Service officers of Clark Field, especially the married officers, are again "up in the air" over the quarters situation. The arrival of new officers for the Philippine Scouts and those due to arrive on the next transport will bring on an acute shortage of quarters. No solution of the situation has as yet been reached. Air Service officers occupying quarters on the post are packed up and hopefully waiting.

Eighty-eight (88) man-hours of ground training was given all officers during the week. This included Artillery Observation, ground gunnery (Lewis guns, single and twin) and radio sending and receiving. Due to inclement weather the schedule of aerial training could not be fully completed. However, one hundred five (105) man-hours were edged in, between showers.

Clark Field, Pampanga, P.I., June 26, 1923.

Due to the inclemency of the weather the training schedule has been restricted mostly to ground instruction. Study in Artillery Observation has consumed the greater amount of time, as that could be held under cover and at the same time give valuable instruction in radio transmission and panel reading. Since weather uncertainty will undoubtedly frequently break up that part of the training schedule that provides for air work, during the ensuing months, a rainy day schedule has been instituted in addition to regular ground work. This feature of the program includes radio installation, actual work being performed on old ships, and parachute folding. Lieuts. B.S. Thompson and E.C. Batten are instructors in these particular classes. One hundred four man-hours were spent in class room and air instruction during the week.

A dinner dance in honor of departing friends, Captain and Mrs. L.N. Keesling and R. Baez, Jr. was given by officers of Clark Field on Saturday evening. 1st Lieuts John S. Gullet, of Corregidor, and Edwin R. McReynolds, of Camp Nichols, were guests of the evening. Captain Keesling and wife departed for the States on July 2nd. Lieut. Baez has been granted three months' leave of absence and will return via the Suez Canal and Europe, reporting upon his arrival in the States to Kelly Field for duty.

The quarters situation has been settled? Some of the married officers have ranked the bachelors out of their luxurious seclusion and are now converting the bachelor building into "bed room and bath apartments". The unmarried officers are now occupying a smaller set of quarters in the garrison.

There is no rest for the weary, even now. The Cavalry have a machine gun range immediately in rear of the officers quarters, and they commence firing about 5:30 A.M. daily, Sundays and holidays sometimes included.

Aerial activities for the week totalled thirty-eight man-hours. This figure includes both the routine airdrome flying and cross-country flights necessary, and such part of the training schedule as could be worked in.

Langley Field, Hampton, Va., July 28th.

A number of pursuit planes on the field are being fitted up with machine guns and bomb racks in preparation for the various demonstrations to be given for the

Reserve Officers schedule to arrive here for their annual two weeks' encampment on Sunday, July 29th. Major W.C. Sherman, Air Service, is in charge of the training of the Reserve Officers at this station and has prepared an intensive course of training, covering flying both dual and solo on training types of planes and flying on service types for those who are qualified, a series of daily lectures on the tactical employment of aviation, and practical work in the aero repair and machine shop. A dance took place at the Officers' Club on Wednesday evening, August 1st, in honor of the reserve officers.

Captain Earl L. Naiden, Air Service, recently reported for duty at this field and will be assigned as Chief Instructor in the Air Service Tactical School. Captain Naiden has been on duty as instructor in Air Service subjects and tactics at the General Service Schools, Fort Leavenworth, Kansas, and was a student in the last course (1922-23). He is therefore well qualified for the duties he is about to assume.

Lieut. Col. J.E. Fechet, Air Service, Chief of the Training and War Plans Division, Office Chief of Air Service, was a visitor on Thursday. He flew down from Washington in a DeHaviland plane with Lieut. Maitland, Air Service. This visit was in connection with the bombing exercises to be held in the near future.

The Commanding Officer, Lieut.-Colonel Charles H. Danforth, Air Service, was host to the Hampton Rotary Club, Wednesday afternoon, at a luncheon served at the Officers' Club. Fifty-five of the Rotarians were present, and a most sumptuous meal as well as other forms of entertainment were provided. The R.O.T.C. Quartet sang a number of good songs and the Rotary Quartet also sang several numbers and helped to make the musical features most enjoyable.

First Lieut. C.M. Cummings, Air Service, with Major H.S. Burwell, Air Service, the latter of Kelly Field, Texas, ferried a Martin Bomber from Mitchel Field, L.I. to Kelly Field, Texas. Leaving Mitchel Field on the afternoon of July 10th, they went via Bolling Field; Langin Field, McCook Field; Chanute Field; Scott Field; Muskogee, Okla.; and Dallas, Texas, arriving at Kelly Field at 4:35 p.m. July 18th, the trip being made with a total flying time of 24 hours.

Lieut.-Commander Griffin, U.S. Navy, who is now stationed at the Naval Base, Norfolk, Va., flew over in a Douglas-Davis Torpedo plane from that place for a short visit last Monday. This officer is carrying out tests as to the feasibility of landing and taking off this type of plane when fully loaded from the airplane carrier "Langley".

The National Advisory Committee for Aeronautics are carrying out some tests on the Naval Bee Line Racer (Monoplane) with retractible landing gear. Several of the pilots of this field have had the opportunity to fly it and get the feel of this plane.

First Lieut. I. Davies, Air Service, has been ordered to Chanute Field to take a two weeks' course in the parachute school at that place. He will report there via the air route.

Major T.D. Milling, Air Service, Commandant of the Air Service Tactical School, who reported back to the field for duty from leave, is preparing the schedule of training for the 1923-24 course.

San Antonio Air Intermediate Depot, Kelly Field, Texas, July 30, 1923.

The Repair Department during the first half of July overhauled and reconditioned 8 DH4B's, 2 SE5's, 2 Spads, 11 Liberty Motors and two Wright engines despite the fact that there were but ten working days during this period and that 15 percent of the repair personnel were on their annual leave.

Lieuts. Charles E. Branshaw and Ivan G. Moorman were hosts at a delightful picnic party at Landa Park, New Braunfels, the twelfth. All the officers and ladies of the post attended and had an enjoyable time swimming in the cool waters of the Comal.

Captain Edward Laughlin and his family have returned from a few weeks' leave which they spent on their citrus farm near Brownsville, Texas, and at Corpus Christi. Captain Laughlin will attend the Engineer Officers' School at McCook Field during the coming year.

First Lieut. Kenneth C. McGregor, formerly stationed at Brooks Field, joined this station after a three months' leave.

Major Lackland and his mother, Mrs. Dorwin Lackland, entertained Wednesday evening with a swimming party and an al fresco supper on the beautiful lawn surrounding their quarters. Bridge was also played. Among those present were: Colonel and Mrs. Ralph Harrison, Colonel and Mrs. Nobel, Mrs. Nobel's mother and sister (Mrs. Finley and Miss Finley), Lieut. Col. and Mrs. George Chase Lewis and Mrs. C.J. Browne.

On Tuesday evening Major Lackland and his mother entertained General and Mrs. Benjamin A. Poore at a dinner.

Lieut. Barney M. Giles spent his six days' leave visiting in Dallas.

The matter of paying employees has been simplified to a great extent by the installation of a "pay window" at Headquarters, where the employees will be paid without loss of time.

The S.A.A.I.D. pill-busters of the Saturday Baseball League knocked the chesty B.P.O. Elks for a row of tombstones on Saturday, the 14th, when they slugged out 14 runs to the 6 counters of the "horned tribe". The highly touted winners of the first half of the League were no match for the Airmen, who gave them the worst licking they have suffered in two seasons. The veteran Elks were conceded to have the edge on the "AID" crew, but the only thing remaining of this edge after the game was their age and weight. A good bit of their huskiness was run-off, however, in chasing the 17 wallops of the winners. This win gives the S.A.A.I.D. club a chance for a triple tie at first place for the second half of the league, as a win over the Convoy team on Wednesday means that they compete in the play-off for the flag.

Selfridge Field, Mt. Clements, Mich., July 24, 1923.

Tuesday evening an informal dance was given to welcome the following class of Reserve Officers who arrived for summer training: 1st Lieuts. Carl N. Gess, John B. Copeland, Francis G. Barlow, and Wm. A. Munn, and 2nd Lieuts. John E. Runchey, Jr., Bartholow Park, Theodore S.K. Reid, Carl N. Olson, and Geo. H. Helwig. Quite a number of people came out from town and apparently everyone had a good time.

The decorations deserve mention, especially the heating stove. Lieut. Stace has adopted the novel idea of wrapping it up in a disguise of bull rushes. (We have lots of bull rushes.) These give the stove the appearance of an overly plump maiden in Hawaiian grass costume and evoked various moth eaten remarks anent mosses, etc.

Over the week end a number of the Group, including one bachelor, drove up to Oscoda on a fishing trip. Major Spatz, it is said, drove fifty miles and walked ten to catch eight or nine smallest fish resembling sardines, but assuredly brook trout. Lieut. Frierson drove ninety miles from the base for the same purpose and caught about half as many. Lieut. Hunter, whose return to the Group we now herald, stayed within a hundred yards of camp and caught the largest fish. Draw your own conclusions.

Camp Nichols, Rizal, P.I., June 9, 1923.

The 28th Bombardment Squadron arrived at Camp Nichols, in the midst of a baby typhoon, Monday, June 4th. The Organization is complete at one post for the first time since its arrival in the Philippine Islands. Captain Thomas J. Hanley, Jr., A.S., assumed command of the Organization, with the following staff:

Adjutant,	Samuel Carter, 1st Lieut., A.S.
Supply,	A.J. Clayton, 1st Lieut., A.S.
Transportation,	C.C. Nutt, 1st Lieut., A.S.
Engineering,	E.E. Aldrin, 1st Lieut., A.S.
Operations,	C.M. Parmer, 1st Lieut., A.S.
Flight "A",	G.M. Palmer, 1st Lieut., A.S.
Flight "B",	F.E. White, 1st Lieut., A.S.
Armament,	J.Y. York, Jr., 1st Lieut., A.S.
Communications,	G.H. Burgess, 1st Lieut., A.S.

First Lieut. E.E. Aldrin, A.S., returned from hospital to duty but was again hospitalized the following day. Lieut. Aldrin is having a rather tough siege of it, but it is hoped that he will be able to be back for duty in the very near future.

Camp Nichols, Rizal, P.I., June 16, 1923.

Captain Gilbert T. Collar, Pilot, and 1st Lieut. C.R. Evans, Observer, furnished considerable excitement at this Post this week by taking off from Camp Nichols about 2:30 P.M., in very bad weather, and failing to show up at Clark Field, their destination. Captain Thomas J. Hanley, Jr. and 1st Lieut. H. Weddington left in two planes from Camp Nichols to search for the missing officers, but were forced to turn back after a half-hour flight, due to encountering a heavy rain storm. Planes were also sent out from Clark Field but no trace was found of the missing officers and plane. Planes were also sent out from both fields early the next morning. At 8:00 A.M., after having been out all night, Captain Collar and Lieut. Evans reported at Clark Field, via motor transportation, stating that they had been forced down at the little town of Lopaz, almost on a direct route to Camp Nichols, but four or five miles off the railroad. The plane was not damaged.

Today witnessed the wind-up of various trips throughout the Island of Luzon, for the purpose of taking oblique photographs of towns of historical importance. The photographs were gathered for the Air Officer, who is compiling data and collecting photographs of towns where battles were fought during the occupation of the American troops.

Information Division
Air Service

September 14, 1923.

Munitions Building
Washington, D. C.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE Sept. 17, 1923.

TECHNICAL DEVELOPMENTS IN AVIATION

By Lester D. Seymour

With the acquisition of practically all the world's airplane records within the past ten months, there has been a coincident and similar improvement and development in aircraft by the Army Air Service along technical lines. The Air Service Engineering Division, at McCook Field, Dayton, Ohio, assisted by the Bureau of Standards and the National Advisory Committee for Aeronautics, have made great strides in the improvement of existing equipment in the year just passed, in addition to the development of entirely new craft.

The records set up by Army pilots have been possible largely from the increased efficiency in new airplanes and engines. This increased efficiency is the result of the combined efforts of private manufacturers and the Engineering Division in research work and experiment. Countless tests are made of each and every part of the complete airplane and engine, from which reports are made and conclusions drawn as how to best remedy faults and so improve design that greater loads may be carried, greater speeds attained, greater economy realized and, at the same time, greater safety afforded the aviator.

In airplane design, great progress has been made along the line of producing more efficient wings as well as greater structural strength for the same weight. The study of the substitution of various metals and alloys to accomplish the foregoing is continually under way. As a result, it is probably true that at the present time a better grade of duralumin is produced in America than in any other place in the world. This metal is an alloy of steel and aluminum and is used very largely in the construction of metal aircraft, both of the heavier and lighter-than-air types. Similar work has been accomplished in the manufacture and use of other metals and alloys.

The improvement of the war-time Liberty engine was largely responsible for the success of the transcontinental flight. Such a performance reflects to the credit of the engine with which the airplane was equipped, because a more severe and grueling test can hardly be imposed. A powerplant weighing only 800 pounds but delivering 400 h.p. continuously for such a length of time is truly a work of art. In the Pulitzer Trophy Race there is again evidenced improvement in airplane engine design when the tremendous horsepower of the engine is compared with the fragile craft which it was required to drive through the air at nearly 250 miles per hour. It is obvious that such an engine must be operated without vibration and with a smoothness hitherto unknown in internal combustion engines. Such performance requires that extremely careful balance of moving parts and design be carried to an infinite nicety.

In the design of the Army's entry in the last Pulitzer Race we find incorporated a new "wing radiator". This development in radiators, although functioning with even greater efficiency than the old type, offers almost no head resistance, or, in other words, no hindrance to the forward motion of the craft. In addition, it assists greatly in reducing the total weight of the airplane. The problem of "head resistance" or the resistance of the air to parts of the airplane in moving through it, is very little known to the public. Nevertheless, it does play a very important part in the attainment of excessive speed. For example, the simple procedure of entirely covering the wheels so that they produce the smallest disturbance in moving through the air, added several miles to the speed of the machine. In a similar manner, fittings usually exposed were enclosed within the wings and all outside bracings were made in a streamline form, which altogether not only produced a very pretty design but added unbelievably to the speed of the airplane.

Keeping abreast with the world's efforts to develop a flying machine which could ascend and descend vertically, the Army Air Service produced during the year

the deBothezat Helicopter. This machine, built entirely within the Service, is among the first successful machines of its type. Several flights of an experimental nature have already been made, which will form at least a basis and point the way to future development, both military and commercial.

That the problem of night flying has become of importance may be gathered from the efforts expended along that line by experimental engineers. Successful lighting apparatus have been developed both for attachment to airplanes and for fixed illumination on the ground at the various landing fields. Along the same line, beacon lights and aerial lighthouses have been perfected for the guidance of the aviator at night. The pilots who flew through the long night in crossing the continent in their non-stop flight can testify to the value of this equipment.

Mobile machine shops and radio and photographic units have been so far developed that it is now possible for field organizations to "carry on" in these various lines with great efficiency. These units are mounted on standard truck chassis which are able to move with troops and operate nearly as well under field conditions as in the laboratory or in permanent quarters.

In bombardment and aerial warfare, progress has been made in the improvement of devices for the direction and more accurate dropping of bombs and the employment of machine guns for fighting in the air. Something of the success which had been attained in bombardment even two years ago is evidenced in the results of the bombardment of ex-German warships off the Virginia Capes. In addition to machine guns, light cannon have been built capable of being used from aircraft. This, of course, has made necessary such a design as would permit of these guns being fired without the usual recoil shock. While the extent to which weapons of this nature may be used in actual warfare has not as yet been actually determined, the fact remains that they have been so far developed that there will be no difficulty in their use should occasion demand.

Referring again to photographic and wireless communication, we find that there has been developed automatic cameras which are capable of taking large numbers of vertical photographs automatically and continuously. When used for the purpose of map making or surveying, it is now possible to accomplish in a few days the work of months by old ground methods. Radio communication has been developed to the point where it is now possible to communicate for considerable distances between airplanes in the air and airplanes in flight with ground stations. For training purposes the value of such communication is obvious. Likewise, the adaptation of such a means of communication to airplanes operating commercially cannot be over-estimated.

With increased use of aircraft and aerial activities, better instruments for the accomplishment of aerial navigation have become imperative. Due to the peculiar conditions under which such instruments must operate, designs entirely different from those used in marine practice have been required. The Bureau of Standards has assisted greatly in the development of these accessories for every aerial purpose. As a result, it is now possible for a pilot to guide his craft as accurately through the air, even though the ground is invisible and he is flying in a cloud bank, as if he were flying in full view of all land marks. The modern pilot is able to read at a glance from his instrument board not only such things as time, air speed, engine speed, oil and gasoline pressure and capacity, but whether or not he is flying straight - whether he is flying on an even keel, how great his deflection from any set line may be, and the amount of drift which he is encountering from his predetermined course.

In the field of instruments the National Advisory Committee for Aeronautics assisted in the design of airplanes very greatly by the development of an apparatus which, when mounted in an airplane, will register and make a record of the various pressures over the surface of the wings, their variation and relation to each other. From such information, builders are guided in the strengthening of certain parts and the lightening of others, so that when complete the craft may be strong enough to withstand any strain that it may encounter and at the same time be as light as is consistent with safety.

The foregoing, even though only a few of the "high spots" in the technical development of aircraft, will serve to point out how such progress goes hand in hand with the new records and performances which are continually being set up throughout the country. Again, it is seen, as mentioned before, that while it may be true that the United States, on account of restricted appropriations, cannot compete with some other nations from a standpoint of quantity, the quality and success of our scientific and technical development is second to none.

RESERVE OFFICERS COMPLETE TRAINING AT SCOTT FIELD

Four reserve officers completed their 15-day tour of active duty at Scott Field on July 31st, viz: First Lieut. Guy R. Oatman and 2nd Lieuts. Joseph L. Adams, John L. Rogers and Harry C. Schall. Lectures in aerostatics, aerodynamic aerial navigation and organization of the Air Service and Organized Reserves were given daily. The students made numerous free balloon flights and were also given instruction in airships.

GENERAL PERSHING VISITS KELLY FIELD

General J. J. Pershing reached San Antonio on an inspection tour on July 28th, and proceeded to Kelly Field at 10:35 A.M. Upon arrival at the field he immediately proceeded to the center of the field where the entire wing was assembled for a dismounted review. Immediately following the ground work, an aerial review was held, practically every pilot on the field participating in same, including about 25 or more students from the School Group. The review was led by a 3-plane formation from Wing Headquarters, followed by Spads, MB3A's, DH's, Martin Bombers, more DH's, and last of all the Armored Triplane G.A.I.

The grandstand and dead line was completely occupied by visitors, who expressed amazement that so many planes could be in such a small space and no one hurt. As a matter of interest, there were over 60 planes warming up and in the air 15 minutes after the signal for starting the engines was flashed from the control hangars. Approximately 30,000 horsepower (this including alert planes) was "turning" over in less than three minutes immediately following the signal to start warming up. The review was a complete success and was highly complimented by the General.

NEW AIRSHIP TO BE PLACED IN COMMISSION

The TC3, a non-rigid airship, will shortly be placed in commission at Scott Field, Ill. The work of setting up the car and motor has already begun and it is expected that the bag will shortly arrive from the manufacturer. The TC-3 will be inflated with helium gas and will be used at the Balloon and Airship School in the training of student officers and cadets.

ARMY WAR COLLEGE PERSONNEL VISIT ABERDEEN

Students of the War College recently visited the Aberdeen Proving Grounds, Md., for the purpose of observing the proof work being carried on. Four demonstrations were given by the 49th Squadron, entailing the dropping of two 600-pound bombs, one instantaneous and one delay detonation on water. Demonstration of aerial gunnery by the shooting down of small meteorological balloons by machine gun from the rear seat of a DH4B and the dropping of six 600-pound bombs in salvo from a formation of three NBS-1 airplanes was also given. As a concluding demonstration a night flight was made for the discharge of flares from a DH4B at an altitude of 6,000 feet.

SIGNAL MAST INSTALLED AT SCOTT FIELD

A new signal mast for flag and light signals was received by the Air Intermediate Depot at Scott Field, Ill., and is now ready for installation on top of the airship hangar. It will be put up at the north end and will be used for communication purposes between landing parties and airships in flight. Flags will be used in the day time and the lights at night.

KELLY FIELD PILOTS GIVE AERIAL DEMONSTRATION.

An aerial demonstration, consisting of practically every phase of aerial attack, demolition, etc., was given before the Regular Army, National Guard, reserve officers and a large gathering of San Antonians at Camp Bullis, July 18th, by members of the 3rd Attack and the 10th School Group, of Kelly Field.

The maneuver consisted of an offensive movement against outlined enemy positions, and was participated in by practically every type of modern arms. "H" hour found the attacking planes from the 3rd Group "on the job", and after their

first attack the target, consisting of a strip of white cloth, was completely blown to bits. Fifty-pound demolition bombs, as well as front and turrell guns were used, and the nine planes constituting the formation completely obliterated the target in less than ten minutes. The ground troops immediately started their advance, and by 3:27 the "enemy" had been thoroughly demoralized, driven from their positions and the battle won.

All types of problems were flown, including Infantry contact, Artillery adjustment, surveillance, bombing, attack, etc., the problem being directed and handled by Brig. General Paul B. Malone, Commanding the 2nd Field Artillery Brigade at Camp Travis, Texas.

L.W.F. "OWL" UNDERGOES SEVERAL CHANGES

The tests being conducted at the Aberdeen Proving Grounds, Md., to determine the carrying capacity of the "OWL" have been held up. Evidence of weakness of the axles was observed after carrying a dummy bomb weighing 3,000 pounds. The axles were removed and sent to McCook Field, where they were strengthened, returned to Aberdeen and re-installed. It is now proposed to have made up at McCook Field an extra pair of axles with a higher factor of safety, which will be kept on hand for installation in the event the strengthened axles give evidence of weakness. Upon completion of the re-installation of the axles, instructions were received from McCook Field to make certain changes in the H-2 bomb rack, installed on the "Owl", and designed to carry the 4,000-pound bomb.

NEW RUSSIAN AIR LINES

Two air lines have been inaugurated in Russia recently, one from Batum to Baku via Tiflis, the other from Batum to Novorossisk, according to an apparently reliable source. The Batum-Baku service operates two German airplanes with German aviators, each plane carrying six passengers twice a week, with a two-hour stop at Tiflis. There is as yet only one plane on the Batum-Rostoff service, but the trip is made twice weekly, and enlargement of the facilities is planned. It is stated that the Russian Government has become interested in these experiments and that the Chief of the Soviet Air Service flew from Moscow to Batum (17 hours) to inspect the hangar at the latter point.- Commerce Reports.

AN EXCITING EXPERIENCE IN THE AIR

Several weeks ago one of the Army Air Service pilots stationed at Kelly Field, San Antonio, Texas, while piloting one of the Fokker Monoplanes assigned to the 43rd Squadron at that field, found himself in a nerve-trying situation when he tried to make a landing, as he found his aileron control completely gone and the wings fluttering badly. That this airman, Lieut. Dale V. Gaffney, retained his coolness and presence of mind and refused to become rattled is shown by the fact that he managed to maneuver his plane to the ground and lives to tell the tale.

On his first experience with this plane he flew it for a period of one hour and fifteen minutes, during which time he did practically all the common maneuvers. The plane handled and maneuvered very satisfactorily, so much so, that he commented upon it after landing.

The next day he again requested permission to fly this type of plane, and was assigned the same machine - No. 9. Lieut. Gaffney's story of his exciting air experience is as follows:

"After flying for a period of approximately one hour, during which the plane was stunted a little, I decided to join a formation of DH's which I saw at a lower altitude. I was at this time about 5,000 feet in the air. I pulled the plane up in a steep climbing turn, intending to lose my altitude in a series of wing-overs. After the plane came out of this turn I nosed over into a moderate dive, and throttled my motor, intending to gain speed in this dive for my next wing-over. Glancing at the air speed meter I noticed that the plane had gained 135 miles air speed, and was pulling back on the stick to start my climb when both wing tips began to flutter badly. The stick struck my left leg, knocking my foot off the rudder, and then proceeded to whip across the cockpit and struck my right leg, knocking my right foot off the rudder, and then vibrated rapidly for possibly one or two seconds, when it fell over against the left side of the cockpit.

In the meantime I had throttled the motor and when I again took hold of the

stick I found that my aileron control was completely gone. I tried my elevators and found that the response was normal. I then tried to eliminate the flutter, which was rapidly becoming worse, by climbing and skidding, but this seemed to have no effect, and as pieces of the aileron started to fly off at this time I decided to kill the motor and make a parachute jump. I stood up in the cockpit, preparatory to going over the side, and reached down, pulled the stick back against the seat, pulling the plane up into a stall. As I was about to leave the plane, the fluttering ceased and I thought that possibly I could get back down without crashing, so got back into the seat and tried to turn toward Kelly Field.

As soon as I started to turn to the right the plane pitched over into a spin and failed to respond to the usual handling of controls in bringing a plane out of a spin. After trying two or three times to stop the spin with the motor throttled, I opened the motor wide which immediately started the wings fluttering again. This, however, gave me enough pressure on my rudder so that I was able to force the plane out of the spin. As it came out of the spin I throttled the motor, pulled the plane up into a stall again to stop the fluttering of the wings. As the speed slackened the fluttering ceased and the plane immediately went into another right hand spin. I was at this time at an altitude of approximately 3,000 feet. I then determined to try and regain control before I reached the altitude of 1,000 feet, and if this were not possible, to use my parachute and let the plane go. At approximately 2,000 feet I succeeded, by use of full motor, to force the plane out of the spin, and after throttling my motor, instead of stalling, to stop the fluttering which had recurred as soon as the motor was opened, I allowed the plane to float level. I found that there was a tendency for the right wing to drop as the speed slackened but found that I could control same by using full left rudder and manipulating my throttle. I also found that as soon as my air speed approached fifty miles an hour the wings began to flutter again and it was, therefore, necessary to hold the speed below this point.

I gave up all idea of getting back to Kelly Field and tried to make a landing in a big field about three miles south of Kelly Field. I could not reach this field because it was necessary to keep the plane constantly turning to the left to avoid a repetition of the spin. I picked out a cane field off to my left, and by slipping into my turn made a normal landing there. The cane in this field was about thirty inches high and very thick, and after rolling about twenty yards the plane banked so much of the cane in front of the landing gear that it nosed over and landed on its back.

It appeared to me that the wing tips vibrated through an area of approximately thirty inches and this vibration was carried back as far as the wing fittings, to which the struts were attached. The aileron control cables were whipped out of the pulleys and jammed between the pulley and its support in such a manner as to lock same. The balance and the first two sections of the right hand aileron were completely carried away, this including the metal framework of same. The balance of the left hand aileron was completely carried away and the fabric stripped off one section of this aileron. It is my belief that this is due to wing flutter which induced the whipping action on the ailerons, and not to aileron flutter inducing fluttering of the wings. I base my belief upon the fact that I had flown this plane for more than two hours, during which the ailerons were perfectly normal and satisfactory, and there was no indication that the balance of same would in any way cause the ailerons to flutter. Regarding the elevators, there was a tendency for the balance to carry over the critical point, this being due, I believe, to the fact that the balance was a trifle large."

CHANUTE FIELD RECEIVES PONY BLIMP

The Pony Blimp OA-1 was recently flown from Scott Field, Ill., to its new home at Chanute Field, Rantoul, Ill. Lieut. John W. Shoptaw and Pvt. Gerald Adams, engineer, comprised the crew. The OA-1 was the smallest airship at Scott Field, and it will be used for training purposes at the Air Service Technical School at Chanute Field. It carried 43 gallons of gasoline on the trip, which required about five hours. The motor is a 3-cylinder Lawrence, of 60 h.p., which consumes 2½ gallons per hour.

SCOTT FIELD PILOTS INSPECT AIRPORTS

Capt. L. F. Stone and Lieut. H. R. Wells, Air Service, returned to Scott

Field on August 23rd after completing a long tour of inspection of eastern airports which involved 42 hours of flying and a mileage of 4200 miles. These officers left Scott Field on July 18th, flying east and stopping at all Army flying fields for the purpose of gathering data and information for the Air Service Balloon and Airship School at Scott Field.

Capt. Stone stated that the trip by air had been very pleasant, having been forced to land but twice on account of bad weather.

MITCHEL FIELD NOTES

July and August proved to be two of the most interesting months in the history of Mitchel Field, N.Y. Perhaps first in importance was Lieut. Maughan's two gallant attempts to cross the continent between sunrise and sunset. When the next attempt was finally postponed until 1924 the press of the country united in expressing the editorial opinion that "Failure had been Success". While the trip had a military significance to the Air Service, to the public and the press it was a sporting event that eclipsed Kentucky Derbies and heavyweight championship prize fights. That after two heartbreaking attempts the pilot was undaunted added to the sporting aspect of the venture.

Among distinguished visitors to the field, other than the executives of the Air Service, was Major General Robert L. Bullard, Commanding the 2nd Corps Area, who, accompanied by his Chief of Staff, Colonel Peter Murray, inspected the Field on July 18th and expressed himself as pleased with its condition and the progress being made in the summer training. The Honorable Homer B. Snyder, Representative from New York, and Brig. Gen. Wm. Weigel, in charge of Reserve activities in the 2nd Corps Area, visited the station on July 26th with a view to determining what results were being accomplished in the training of Reserve Officers and the R.O.T.C. After witnessing the Reserve Officers fly a formation and observing them while attending classes, the Reserve Officers themselves were asked for an expression of opinion. They spoke well of the Field and the training they were receiving, several expressing a desire to remain an additional fifteen days at their own expense. A few of the Reserve Officers called the attention of Representative Snyder to the obsolete equipment they were required to use, and he stated he believed that Congress would remedy this at its next session by increased appropriations for the Air Service. He appeared very friendly towards the Air Service and very much interested in its activities. Gen. Weigel appeared to be well satisfied with the progress of the training.

The latter part of the month of August concluded the six weeks' stay of 42 R.O.T.C. students from the Massachusetts Institute of Technology. Their visit passed without incident, and it is believed that they profited by the training they received. Never having had any actual military service, they lack the ready adaptability of those that have. During a portion of their stay 480 cadets of the U.S. Military Academy, Class of 1924, were given one week's training. The conduct, bearing and industry of the Cadets should prove an example for all troops that came in contact with them, either regular or reserve.

An interesting event occurred on August 19th, when nine members of the Egyptian Government's Educational Mission, accompanied by Capt. L. E. Warford of the Department of Commerce, visited the field. After being shown around, each was given a short hop. Although the members of the mission have been in this country less than a year, they have mastered the language. They took an intelligent interest in everything that they saw at the field and were enthusiastic over their first airplane ride.

THE FLIGHT OF MARTIN BOMBERS TO BANGOR, MAINE

Another chapter was added to the history of American aviation when the group of Martin Bombers arrived at Langley Field on August 24th after having flown to Bangor, Me., and other points in New England without mishap. While good luck attended the venture, the real reason for its success was the progress that has been made in aviation. The arrival of the planes on August 20th at Mitchel Field was a good example of the efficiency for which the Air Service is striving. Had occasion required it, the planes could have been refueled, the personnel fed and the group been on its way within an hour. The return stop at Mitchel Field was a repetition with the exception that the planes remained over night. The maneuver was a clean-cut demonstration of the mobility of the Air Service.

With Langley Field as the geographical center of the Atlantic Seaboard, the maneuver need not be repeated to prove its adaptability as to Florida or on the Pacific coast, San Francisco to Portland or Los Angeles. When it is possible to move a powerful defense unit to any point on either seaboard between sunrise and sunset and on very short initial notice, it is a closing argument on the value of air defense.

A DURATION RECORD FOR THE HAWAIIAN ISLANDS

Lieut. Ned Schram, stationed at Luke Field, recently set up a new duration record for a Martin Bomber in the Hawaiian Islands, when he remained in the air nine hours. He took off at 8:15 a.m. and landed at 5:15 p.m., the last two hours being flown at reduced throttle (1100 r.p.m.).

Martin Bombers are used quite frequently on regular inter-island flights to Maui and Molekai, 65 and 110 miles distant, respectively, from Luke Field. These trips involve a flight across channel of 42 miles.

ORDNANCE RESERVE OFFICERS MAKE FLIGHTS

An Ordnance Reserve Officers' Training Corps Unit was encamped at the Aberdeen Proving Grounds, Md., for six weeks, from the middle of June until the end of July. Most of these who desired were taken on airplane flights about the post. Some of the officers seemed to take a special liking to flying and came back for a second and even a third flight, and some expressed a desire to be transferred to an Air Service R.O.T.C. unit for next year's training.

ANOTHER FISHING STORY

We knew from past experience on fishing trips that crabs come high, but the idea of paying \$10.00 for one of the species is quite beyond our imagination. And yet this was the sum and substance of a fishing trip indulged in by two officers from the Aberdeen Proving Grounds, Md. Fishing has its disappointments like many other things, but we doubt whether a more disappointing fishing experience can be pictured than the one here given by our Aberdeen Correspondent, viz:

It has come to the ears of certain persons on the field that quite recently Captains Hough and Mileau, especially desirous of landing the prize catch of fish for the season, drove about ten miles up the river to Havre De Grace, where they employed a so called "fisherman" to take them where they could make this prize catch. The man, employed at what is reported to have been a fee of ten dollars, brought them down the river and anchored to fish, but upon looking about the Captains discovered that they were about a hundred yards directly off the shore of the Aviation Field. It is further understood that the catch for the day consisted of "ONE CRAB, AEROMARINE TYPE", weight about ten ounces. They traveled about 35 miles by land and water to catch one crab one hundred yards off the Aviation Field. Even at that it is understood that Captain Mileau has not given up, but is still trying to locate the haunts of the largest fish in the bay. The source of the above information refused to divulge anything whatever about the humor of the Captains upon their return.

AIR SERVICE ENLISTED MEN PERFORM HEROIC FEAT.

The prompt initiative, exceptional courage and personal disregard of self which three enlisted men of the Air Service exhibited in removing a burning airplane from the 5th Observation Squadron hangar at Mitchel Field, L.I., N.Y., recently, was the occasion of the issuance of General Orders by Major Robert L. Bullard, commanding the 2nd Corps Area, commending Master Sergeant Cecil L. Kilheffer, Technical Sgt. Hawkins Crowder and Private, 1st Class, William Kiene, for their conduct in resolutely meeting such a hazardous situation and in preventing heavy loss in government property and equipment. The order states that the conduct of these men reflects great credit not only upon themselves but upon the entire army and indicates a spirit of self-sacrifice that deserves the highest commendation and is worthy of emulation by the entire personnel of the Army.

It appears that at about 6:00 p.m. of that day an airplane in the 5th Observation Squadron hangar caught fire when the mechanics working on the engine accidentally broke a drop light. In spite of the grave danger of the gas tanks ex-

ploding and the strong resultant possibility that the other six airplanes, the hangar and the nearby portion of the camp might be partially or wholly destroyed, these three soldiers in jeopardy of their lives and health quickly and courageously removed the flaming airplane from the hangar, closed the hangar door and continued to work upon the burning airplane until the flames were extinguished.

AIR INTELLIGENCE WORK IN THE PHILIPPINES

Here is a story from Camp Nichols, Rizal, P.I., telling of the functions of the only Air Intelligence Section in the Philippines. It was contributed to the NEWS LETTER by the Intelligence Officer of the 42nd Air Intelligence Section, and all we can say in the way of comment is that if said officer is as good a sleuth as he is a humorist he must have Curlock Bones backed off the boards. We take it, however, that campaigning with an Air Intelligence Section in the Islands is not a sinecure, after noting the wide and varied assortment of jobs that fall to this outfit. The "Official Report" on the duties of this Section is given below, and we leave it to our readers to draw whatever conclusion they may:

"On our right the 42nd, Air Intelligence Section, introducing Lieutenant R. A. Hicks as chief sleuth, Sergeant John F. Haberlin, chief of defectives, Privates Mortenson, Wilkins and Epperson, chiefs of Assignment, detection and mutilation divisions, respectively.

The 42nd is an outgrowth of the War and we all hope there won't be another War. But then here we are properly introduced. The 42nd is quite the best Intelligence Section at Camp Nichols. At least the members assert that it is, and since there isn't another section of the kind in the Philippines, they generally get away with it.

This aggregation of sleuths will uncover anything, in an er,-technical sense. You do not sleep well at night? Call the 42nd. Your cook has the itch? Ditto. We handle anything, still speaking technically of course. Rates reasonable.

When the 42nd raids a hock shop or a snow factory, every peaceable inhabitant takes to the woods. Sometimes the raiding party takes to the woods also, but this is decidedly irregular. These parties are, in their drastic fashion, works of theatrical art. Do you conceive a vulgar affair of pistol shots, detectives and patrol wagons? Not at all. Instead, the rythmical music of large thick clubs applied to hard heads. It generally works in this fashion: The chief of the assignment division equips himself with a ukelele and a perfectly hard rock (preferably behind a tree) and strums "My Luscious Luzon Lass". This always gets action. If any unauthorized fire arms are in possession of natives this brings them out. Sergeant Haberlin takes a fairly automatic pistol from his pocket and comes through with this: "At 'em gang. Blood is our natural drink and wails of the dead and dying are music to our ears." It is then a case of every man for himself. These raids require picked men. On one occasion a ballerina told Private Mortenson that she considered him quite handsome, just like a certain member of the Constabulary. Since then he has been unfit for inside investigations.

In addition to exercising supervision over the morals of the establishment, we repair plumbing, windows and cracked heads. Business has been brisk and will be better, for we deal in staples."

GENERAL PERSHING GREET'S CALIFORNIA MASONS

Greeted by the Commanding Officers of the units comprising San Diego's military establishments, civic officials, and representatives of various service and civilian organizations, General John J. Pershing, General of the Armies of the United States, stepped from his private car at the Santa Fe Depot at 7:15 A.M. Tuesday, July 31, and began one of the most strenuous days of his entire inspection trip of the various military posts of the United States.

The General, after a few minutes of hand shaking and giving a few words to the press, left for the foot of Broadway where the speed boat "Aviator" was standing by to ferry him to the Rockwell Air Intermediate Depot, Rockwell Field, at which point he was escorted to the Officers' Club by "G" Troop of the 11th Cavalry, where breakfast awaited him. The General inspected the Depot and paid a visit to the Naval Air Station, also located on North Island, after which he returned to the Officers' Club and presented the souvenir Masonic Aprons which were received from the Chief of Air Service.

Major H. H. Arnold, Commanding Officer of Rockwell Field, introduced the General to the gathering, which consisted of the leading Masons of the vicinity and the Masters of the 10 Masonic Lodges which comprise the 80th and 81st Masonic Districts of San Diego County. Ten Worshipful Masters were seated in front of the General, and after a few words in which he expressed himself as being proud of the opportunity of meeting the Masons of San Diego, as he was a member of the Masonic Order of long standing, he spoke briefly of the wonders performed by the Air Service and of the great feat carried out by our airmen in the transporting of raw cotton from the gin in Augusta, Ga., to New Bedford, Mass., in ten hours and delivering the finished aprons in Washington the next afternoon, and stated that he, as a Mason, was proud of the fact that he could personally present the Masters of the various San Diego County Lodges with these aprons.

Congressman Phil Swing acknowledged the receipt of the aprons for the 10 Lodges in pleasing words, emphasizing the fact that these aprons would become a highly prized addition to the mementos of the lodge rooms, and more so because of the fact that they were presented by "You, General Pershing".

The General seemed very much pleased with the reception tendered him and willingly posed for several pictures with high standing Masons of this community. The Rockwell Air Intermediate Depot, Rockwell Field, was well represented at this function, the Commanding Officer excusing all members of this fraternity for the occasion, and as a whole, the affair was a big success. Plenty of publicity was given through the San Diego papers and our brethren from the back country were very open in their appreciation of the thoughtfulness of the Air Service in the distribution of the souvenir aprons.

A letter to the Commanding Officer, from Coronado Lodge #441, E & A M, which reads as follows, expresses the sentiments of all the Masonic Orders of the 80th and 81st Districts:

"1. I am instructed to express to you our deep appreciation for the courtesies extended on the occasion of the presentation of the souvenir masonic aprons by Bro: John J. Pershing, General, U.S.A., on July 31st last.

2. This Lodge has always manifested a keen interest in Rockwell Field and its activities in aviation affairs; our membership includes many men who were a credit to the Air Service, and it has been our pleasure to receive visiting Officers who are members of our great Fraternity.

3. We heartily wish you and your Staff continued success in your branch of the Service.

4. Our Apron will be preserved under glass, and hung in the reception room of our Temple.

By order of the Worshipful Master.

W. D. Rodgers, Secretary."

NATIONAL GUARD SQUADRON DEMONSTRATES PROFICIENCY

The Air Service National Guard of the 38th Division, consisting of the 113th Observation Squadron, together with its Photographic Section and Intelligence Section, recently completed a tour of duty at Wilbur Wright Field, Fairfield, O. This squadron comes from Kokomo, Indiana, and has a commissioned personnel of 24 officers and an enlisted strength of approximately 156, and reported at Wilbur Wright Field nearly at full strength, in command of Major Patton of Kokomo, Capt. Donnelly of the Air Service being the officer assigned to duty with them.

The degree of excellence developed in this organization has been a revelation to the officers of Wilbur Wright Field, demonstrating the care and labor of its commissioned personnel in its development. They arrived for duty with a minimum of disturbance, assumed the quarters assigned to them and opened up for business in a manner equal to that of any veteran organization. They carried on the two weeks of training and instruction under their own officers, accepting assistance

from the regular personnel of Wilbur Wright Field in the way of instruction only in developments of a character so recent as to be furnished only by the Regular Army officers.

When they broke camp, part of them returned to Kokomo by airplane, part by train and the balance by truck, their departure being marked by the same efficiency displayed at their arrival and the general conduct of their affairs while at the field.

In respect to the memory of the late President, all social activities were suspended, with the exception of a luncheon given on the concluding Saturday of the encampment by the officers of Wilbur Wright Field to the Officers of the National Guard Squadron, where mutual expressions of esteem were exchanged, the local officers complimenting the visitors on the excellence of their outfit and the visiting officers complimenting the local officers with their expressions of a keen desire to return to Wilbur Wright Field for duty next year.

AIR SERVICE PROGRESS IN HAWAII

Wheeler Field, Schofield Barracks, H.T., has been greatly improved during the last three months in many respects. The landing field, basically equipped by Mother Nature for the purpose, has been mowed and burnt. Immediately following the burning, nature again generously supplied an unusual amount of rain during the generally dry months of June and July, with the result that the Airdrome is now a beautiful, smooth, green expanse. Wheeler Field is by far the best landing field yet established in the Territory of Hawaii and is second to none in size that our Correspondent has seen on the mainland.

The five Bessonneau Hangars (original equipment of Wheeler Field) having become useless and worn out eye sores, have been removed. All small temporary buildings that were promiscuously spotted about the premises have either been disposed of or re-enforced, painted and replaced in orderly fashion.

Construction on the field has steadily progressed, resulting in many necessary conveniences not heretofore enjoyed. The four small steel hangars now being erected by troop labor are rapidly nearing completion. The large capacity gasoline and oil storage tanks situated along the western extremity of the field have been completed by the contractors and will be ready for use shortly.

Material has been received and plans for the construction of several concrete warming up blocks and an aerial target range have been approved. This work will be undertaken by the personnel of the field upon completion of the rush work now being done on the War Reserve Storage Hangar.

AERIAL MAIL SERVICE IN HAWAII

A daily aerial mail service between Wheeler Field and the several units of the Hawaiian Division encamped around the coast of Oahu has been established with excellent results. Not a day has been missed nor a letter or package lost.

This feature was inaugurated on July 14th last and will be continued as long as the regiments stay in the field. By this system several days' time is saved in the transmission of both official and social correspondence.

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, July 31

THIRD ATTACK GROUP

GROUP HEADQUARTERS: The 24 officers of this group present during the month of June compiled a total of 696 hours flying time, making an average of 29 hours per pilot. Practically all of this time comprised training in developing Attack Aviation and speaks well for the efficiency of the group as a whole.

TWENTY SIXTH SQUADRON: On Saturday Lieut. Duke made a solo cross country flight to Galveston, Texas, returning Sunday with Major Brereton.

Lieut. Robinson with Sergeant Marsh as passenger made a cross country flight to Crystal City, Texas.

On Thursday, July 26th, this organization participated in a dismounted and aerial review. The review was scheduled in preparation of General Pershing's inspection on July 28th.

THIRTEENTH SQUADRON: One more DH4B plane was received from the S.A.A.I.D. last week, which makes a total of four planes of this type in possession of this squadron.

Several formations have been flown with the DH's and Sergeant McDaniel has put in quite a little time with the GAL.

The entire squadron has been busy getting the equipment ready for the inspection and review to be held for General Pershing.

EIGHTH SQUADRON: During the past week the flying operations were composed of practice reviews, formation flying with the group, and individual bombing practice, as well as several cross country flights and the regular test flights of motors and planes.

On July 20th, Lieut. Phillips with a plane of this organization carried on liaison with the troops at Fort Clark, pertinent to radio, making five flights with a total flying time of five hours and ten minutes.

Lieut. Carr with Major Brailsford, Flight Surgeon, as passenger, made a cross-country flight to Crystal City, Texas. Several days later Lieut. Carr made a cross country flight to Fort Ringgold, Texas, carrying Lieut. Barriger of the Cavalry on the return flight.

All available men and time are being used in preparation for the review and inspection for General Pershing.

SIXTIETH SERVICE SQUADRON: Major Burwell, the Wing Operations Officer, with Private Annis of this organization as mechanic, made a cross-country flight to Dallas, Texas. They left this field at 2:30 P.M., July 21st, and landed at Dallas at 5:30 P.M. Leaving there at noon the 24th they landed here at 2:35 P.M. The major used a DH4B-1, which is attached to 1st Wing Headquarters.

NINETEENTH SQUADRON: This organization participated in individual bombing practice for pilots and enlisted observers. Pilots and observers flew in Group three-ship formations.

The ground review followed by the aerial review scheduled for Saturday, July 21st, was called off on account of inclement weather and was held on the following Monday. The Field was inspected by the Post Commander. Following the dismounted review, this squadron supplied a three-ship formation for the Group formation.

During the past week daily practice in bombing was participated in by our pilots and the enlisted observers.

On July 28th this squadron participated in the dismounted and aerial review held for General Pershing. An improvement in the men's appearance was to be seen in their new hats, wool shirts, and Jotten O.D. breeches to match.

TENTH SCHOOL GROUP

FORTIETH SQUADRON: Considerable time was spent on formation work during the past week with the Martin Bombers, in preparation for the review which is to be staged this Saturday for General Pershing.

making.
One more DH4B plane was added to our flock, a total of seven DH's and twelve Martin Bombers.

A big effort is being put forth to make this squadron's ships and hangars the best on the field for the inspection Saturday. The men are putting forth their utmost in getting prepared.

FORTY-FIRST SQUADRON: Every moment of the past week was utilized in preparing for the coming inspection by General Pershing. The students have been diligently pursuing the art of formation flying in order that they may be prepared to conduct an aerial review for the General, unsurpassed by all former exhibitions of flying at this station. The line crews are putting forth every effort in preparing the ships and hangar areas for the inspection.

Although most of our energy has been directed along the lines of preparation for the coming inspection, flying activities did not cease an hour during the week, the total aircraft hours for the squadron's ships amounting to 147 hours and 50 minutes, for the past seven days, five of which were flying days.

FORTY-SECOND SQUADRON: The flying time for the past week totaled 175 hours and 30 minutes. Student officers and cadets have been practicing formation flying daily. Two practice aerial reviews have been staged during the past week in preparation for the inspection by General Pershing. Flying was suspended Thursday noon, July 26th, until the review Saturday morning, in order to enable the men to get the planes in the best possible condition.

Two practice ground reviews have also been staged during the week, and, in addition, all areas around the barracks and hangars will be cleaned. The barracks have been painted and everything is in readiness for the inspection.

FORTY-THIRD SQUADRON: Flying for the week consisted of test and routing training flights in MB3A's, Spad's and DH4B's. Several formation flights were made this week, getting in practice for the review for General Pershing. Two ships were ferried to the S.A.A.T. D. this week for major repairs. Three cross-country flights were made to Lexington, Texas, this week. One MB3A was wrecked while landing at Lexington and had to be hauled back on a truck. Two aerial reviews were held this week, 5 MB3A's and 5 Spad's were in the review. Several instruction flights were given to students in DH4B's.

Kelly Field, San Antonio, Texas, August 4.

THIRD ATTACK GROUP

ATTACK GROUP HEADQUARTERS:- The officers of this Group are at present participating in training flights, pertinent to developing Attack Aviation, composed of instructions and practice in individual bombing, using fifty lb. loaded bombs. A record of the work done by each pilot is retained by the O.C.F. of the Group. Flights involving training in formation and combat signal practice in individual three-plane formations were performed.

EIGHT ATTACK SQUADRON: During the last week flying operations were composed of practice, aerial reviews, formation flights with the Group, individual bombing practice, and the regular test flight of motors and planes.

On Wednesday the 1st, Lieut. Carr proceeded on cross-country, with Lieut. Zettel as passenger, to Columbus, Texas, for the purpose of securing information regarding a landing at that station. A 60th Squadron plane was used for this mission.

Planes of this organization are being repaired and reserviced, as well as the installation of new motors recently received from the Aero Repair of the Group.

Pilots of the squadron during the last week attended class and instructions in individual bombing, under the supervision of Lieut. Moor.

NINETEENTH ATTACK SQUADRON: Formation practice for aerial reviews and individual bombing practice flights constituted the majority of the flying by this organization during the last week.

TWENTY-SIXTH ATTACK SQUADRON: Major Brereton, the Group Commander, with Lieut. Duke, proceeded on cross-country to Waco, Texas, and returned to this station the same day. A plane from the 60th Service Squadron was used for this flight.

Saturday, the 28th, Lieuts. Zettel and Gillispie made a cross country flight to Corpus Christi, returning to this station the following day.

Lieut. D. G. Duke of the Air Office, with a mechanic from this squadron made a cross-country flight to Brownsville and McAllen, Texas, on the 28th, returning the following day.

During the last week Staff Sergeants Williamson and Shaeffer of the squadron re-enlisted for service in the Hawaiian Islands, and left here July 30th, enroute to San Francisco.

THIRTEENTH ATTACK SQUADRON: Three formations were flown with DH4B planes from this organization during the last week, with a total duration of 7 hours and 50 minutes. Another new DH4B plane was received from the A.I.D., which brings our total number of planes of that type up to five.

The following is the flying time of pilots of the group for the month of July 1923:

Total time for all pilots of group:	515 hours, 00 minutes.
Total cross-country time for all pilots:	291 hours, 50 minutes.
Average time per pilot in group:	25 hours, 45 minutes.
Average cross-country time per pilot in group:	14 hours, 35 minutes.

TENTH SCHOOL GROUP

FORTIETH SCHOOL SQUADRON: Four Martin Bombers participated in night flying on the 30th, for the purpose of testing flare racks for parachute flares. The flares made a very pretty and interesting spectacle and the test proved to be a very satisfactory one.

Lieut. Camfield made a cross country trip to Gonzales, Texas on the 30th to aid a ship which was damaged at that place. The trip was duplicated on the following day to bring back the ship.

Lieut. Willis made a cross country flight to Laredo on the 28th, returning the same day.

Two more DH4B airplanes were added to our flock in the past week, making a total of 9 DH's. We now have 12 Martin Bombers and 9 DH's.

Lieut. Biggs, former Operations and Engineering Officer for this squadron, has been relieved from further duty with the 41st and assigned to the 42nd Squadron for duty as Engineering Officer.

The squadron comes to the top again with flying time for a 30-day period. At the close of the last day of July the flying time for the month totaled 751 hours and 56 minutes, an average of 36 hours per day for the 21 flying days of the month.

FORTY-SECOND SCHOOL SQUADRON: Effective August 1st, Captain Cromm was assigned to the organization as Squadron Commander, relieving Captain Davidson, who will take command of the 8th Attack Squadron. Lieut. Biggs was appointed Engineering and Operations Officer, relieving Lieut. Whitten, who has been ordered to report to the Massachusetts Institute of Technology for a course of instruction at that place.

Cross country flights were made the past week by Lieut. Whitten to Dallas, Texas, and return.

FORTY THIRD SCHOOL SQUADRON: Test and routine training flights in Spad's, MB3A's, SE5A's, and DH's, and a review comprised the operations for the last week, with the exception of a cross-country flight to Shawnee, Okla., and one to Houston, Texas.

TWENTY-SECOND PHOTO SECTION: Over 3,000 prints were turned out for the Bombardment Department of the Advanced Flying School in a little over one week. Copies were made from the prints furnished by the Bombardment Department.

Our new K-1 Developing Room, K-1 Printing Room, Plate Room and Copying Room, recently constructed in the old building which was formerly a wash room, has been completed and every convenience, with the exception of being under refrigeration, is to be had. In our copying room a steel track 18 feet long, mounted on 6 concrete pillars, affords an absolute level base for the copying camera,

which is mounted on a moveable base. The easel is absolutely plumb at all times due to the type of construction employed. A 50 centimeter lens has been fitted to the copying camera, and very good results are obtained. We are now constructing a film drying reel to accommodate three rolls of film. This will be a permanent fixture and a unique method of drying will be employed. We expect to dry film in about one half the time that an ordinary revolving reel requires.

Hqrs. 2nd Division, Air Service, Fort Bliss, Texas, August 13th.

The Second Division Air Service has begun the publication of a little monthly paper named THE SANDSTORM, and, while it has gone to press but twice, it is a growing proposition and has stirred up a lot of pep in the organization and is filling a real need.

Now that the Reserve Officers' training is over and things have returned to normal, Lieuts. C. L. Chennault and Paul Evert have resumed their chess games. When Lieut. Jack J. O'Connell first came to this field he went in pretty strong for checkers but after four months had passed and he had won but a single game his interest lagged somewhat. Lieut. O'Connell is at present attending the Parachute School at Chanute Field, Rantoul, Illinois.

Sergeants E. F. Nendell and Lee E. Wilcox flew a DMB to Tucson, Arizona, the 7th, and returned the 10th. The trip was made for the purpose of working with recruiting station in that city in an effort to secure some high grade personnel for the Air Service.

Beginning September 19th, the Second Division Air Service will go into the field for six weeks field maneuvers with the First Cavalry Division. The Air Service will be stationed at Marfa, Texas, during that period.

It is planned to assign the entire Post Schools building to the Air Service Troops. If this plan is carried out all the present temporary shacks now in use as offices, workshops and store rooms will be torn down and the material salvaged. A vast improvement in housing conditions would be accomplished by this change and the appearance of the field greatly improved.

Brooks Field, San Antonio, Texas, August 6th.

The flying training of the class scheduled to commence September 17, 1923, has already started. Several newly appointed officers and several cadets, a total of about thirty eight in all, and the four or five holdovers from the last class have started their training. The new men are now getting to the first solo point and nearly every day sees two or three ships in the air with white flags streaming from the end of the rudder.

The Baseball League started last Wednesday, when the 47th Squadron surprised the Post by defeating the strong team of the 46th Squadron. It is rumored that the officers of the 46th Squadron team materially assisted the 47th in their victory. The second game of the series was played Saturday morning, when the Headquarters team defeated the 62nd Squadron in a closely contested game 10 to 9.

Cross-country trips during the past week consisted of the following:

Lieut. Haddon and mechanic to Waco and return.

Lieut. Corkille and mechanic to Post Field and return.

Lieut. McCormick and Captain Thorne to Waco and return.

Lieuts. Taylor and Wimsatt to Marfa and return.

Sergeant Blizzard and Marsden to Kerrville and return.

At 10:00 o'clock Saturday morning the troops were paraded and the order regarding President Harding's death was read to them.

Major Brantley I. Newson, Dental Corps, reported at this station for six weeks temporary duty. All of the student officers and cadets have been ordered to report to him for a thoro inspection, and all of the command will be looked over by him before he really starts in treatments. It is hoped that in the future every student will have the opportunity to consult the Dental Surgeon before his flying training starts.

Aberdeen Proving Grounds, Md., August 6th.

The Chief of Air Service called on this station to furnish the personnel and equipment for the transportation of two supercompressed bales of cotton from Augusta, Georgia to New Bedford, Mass., to be made into Masonic Aprons, and then transport the aprons to Washington, D. C. for distribution among the Shriners attending the Conclaves in that city.

On May 31st at about 7:30 A.M., under the command of Captain Hough, one Martin and one NBS-1 airplane piloted by Lieut. Graybeal and Lieut. George,

with Captain Hough and Lieut. Bleakley as alternate pilots and Staff Sergeants Ceccato and Hudson as mechanics, took-off for August, Georgia, via Langley Field, Va., and Pope Field, N.C., arriving at Augusta at 5:30 P.M. same day. The party was entertained by the Chamber of Commerce at Augusta, who also furnished the cotton. At about 4:30 A.M. on June 4, the party left Augusta, stopped at Pope Field and again at this station for fuel, at about 1:30 P.M., and from here flew directly to New Bedford, Mass. arriving about 5:00 P.M., where the cotton was delivered to the Wamsutta Mills, who made same into Masonic Aprons. The party was entertained at a banquet at New Bedford on the evening of June 4th. The party took off from New Bedford at 3:30 A.M. on the morning of June 5th, stopped for fuel at Mitchel Field, and flew from there to Washington, arriving on schedule at 12:30 P.M. transporting bales of Masonic Aprons. At Bolling Field the aprons were delivered to Air Service Officials who in turn distributed them among the numerous Shriners then in the city. The flying time consumed by the trip was twenty-six hours and thirty minutes, and it is believed that only personnel and equipment in the best of condition could have endured such a forced flight.

Upon stopping for fuel at this station enroute to New Bedford, peaches sent from the Augusta Chamber of Commerce to the President were unloaded and transported to Washington the same day by another plane.

Considerable work is being done at the present time in conjunction with tests being conducted by the Chemical Warfare Service. Efforts are now being concentrated on the laying of an effective smoke screen, which it is proposed to employ in conjunction with the bombing maneuvers to be conducted off the Virginia Capes during September. There is now at this field an MB-2, recently received from McCook Field, equipped for the laying of smoke screens, and it is proposed to equip an NBS-1 here with like equipment. Several very effective smoke screens have been laid here and the Chemical Warfare Service proposes to continue exhaustive tests with a view to improving the effectiveness of the screens.

During the Shriners' convolve at Washington the "Owl", with two pilots from the 49th Squadron, were sent to Bolling Field to assist in the carrying out of demonstrations at that Field during the week.

Several DH4B planes were sent to Media, Penna., to assist in the carrying out of an Aerial Demonstration at the municipal field at that place.

Lieuts. George and Graybeal and Sgt. Smink recently left for Fort Leavenworth, Kansas, for the purpose of participating in a demonstration for the station. Unfortunately, bombs shipped from Fort Sill were delayed in transit until after the class had graduated, and the high altitude bombing, which this personnel was to conduct, could not be carried out. However, it is hoped to be able to conduct a very instructive demonstration for the benefit of the next class at the school.

Two entrants have been made from the 49th Squadron for participation in the National Airplane Races to be held at St. Louis in October. Lt. George is entered as pilot of an NBS-1 and Lt. Bleakley as pilot of a DH4B plane. It is hoped and expected that these entrants will live up to the records of the Squadron made in previous races.

The Bombing programs have been about exhausted, practically all of the current programs having been completed. It is proposed to immediately enter upon the marking of emergency landing fields along the Model Airways. A quantity of canvas has been obtained and a novel metal staking device made locally.

A limited amount of funds was received for investigating and reporting upon additional airways with a view to the publication of the information in a Series of Aeronautical Information Bulletins by the office of The Chief of Air Service. Captain Hough and Lieut. Shankle have completed investigation of the airway between Pittsburgh and Cleveland and Lieuts. George and Graybeal have completed investigation of the airway from Cape May, N. J., to Langley Field, Va.

Camera Obscura work is being carried on with regularity, and it is proposed to do bombing over the camera from altitudes up to twelve thousand feet in the near future. As extremely heavy loads of bombs will not be carried on camera obscura flights, it is hoped to be able to bomb from twelve thousand feet with NBS-1 planes without super-charges. Ex-Capt. Short, local camera obscura expert, has just completed a lengthy report on Camera Obscura operations and developments to date. Upon circulation of this report it is expected that, by

acquainting Air Service personnel with details pertaining to the work and developments, much more interest in this particular work will be aroused.

There is now much more interest in bombing than has been the case in the past, due primarily to the fact that a definite target has been marked out on the bombing field and a form prepared on which is entered data pertaining to each bomb dropped, that is, type of plane, type of sight, Altitude, air speed, bomb rack, type of bomb and fuses, flight of bomb and number of feet over or short, right or left of target.

A telegraphic request was recently received from Langley Field, requesting that we forward to that Field by air, one hundred B-4 bomb shackles, As there were only enough at this station to equip our planes, Washington was telephoned on the subject and, pursuant to verbal advice from the Office of the Chief of Air Service, the shackles were packed and shipped to Langley the same day. It was necessary to strip most of the G-4 racks, with which the NBS-1 planes are equipped, in order to comply with this request. Requisition has been submitted for shackles with which to equip the racks here, as it is desired to keep our planes fully equipped at all times.

Lieut. D. M. Myers who reported at this station for duty and was appointed Squadron Engineering Officer, recently completed a tour of temporary duty at Fairfield, Ohio.

Lieuts. Melville and Bleakley were on temporary duty at Mitchel Field for about three weeks in June, during which time they were engaged in the instruction of West Point Cadets. Upon completion of this temporary duty they were both granted leave, from which Lieut. Bleakley has returned; Lieut. Melville is still on leave and is now touring Europe, his leave expires on August 22nd, but as he has permission to apply for extension it is expected that he will avail himself of the privilege.

Lieut. Graybeal has been ordered to foreign service, and will sail on or about September 25th for Hawaii. Lieut. Graybeal's loss as an officer and pilot will be keenly felt, for all know him as a clean cut, conscientious, hard-working officer of very pleasing personality, and as one of the best pilots on the Field.

Lieut. Shankle is now on detached service at Langley Field, which it is expected will continue until after the Bombing Maneuvers in September and most likely until very near the time he is scheduled to sail from New York, October 4, 1923, for foreign service in Panama. Lt. Shankle has been the Supply Officer of the Field practically since the time of his arrival at the station, two years ago. His loss, too, will be felt as keenly as that of Lieut. Graybeal's, as he has always been very conscientious and hard working and is well liked by all who have known him.

Major Pirie and Lieut. Graybeal recently made a trip in an NBS-1 to McCook Field, thence to Chanute Field, and returned over the same route. On the way out they took the axles of the "Owl" to McCook Field to be reinforced and then went to Chanute Field to ferry back two men of the 49th Squadron who had completed a course of instruction at the Technical School. On the way back stop was made at McCook for the axles.

Dr. Warren, who came here from McCook Field for the purpose of carrying on research work in connection with cloud dispersion, is being held-up pending the results of certain experimental work now being conducted at Harvard University. He expects to get his work under way very shortly and to explode as well as prove numerous theories. In the mean-time Dr. Warren is improving his already excellent game of golf.

A Post Golf tournament was recently concluded and Major Pirie, Commanding Officer of the Field, finished "out in front."

Lieut. Bleakley seems much pleased at having been relieved from duty as Post Exchange Officer. He has been appointed Supply Officer to succeed Lt. Shankle.

Lt. Bond left on August 2nd for Chanute Field, where he will receive a concentrated course of instruction on parachutes for about two weeks, upon completion of which he will return and conduct a like course for selected personnel here.

It is expected that practically all of our officers will be ordered to temporary duty at Langley Field during the Bombing Maneuvers in September. This will, of course, retard activities at this Field.

Football is new in the wind. The names of about forty candidates have been received to date and with sufficient time for practice it is hoped to be able to carry-off the Post title.

Camp Nichols, Rizal, P. I., June 23rd

Captain Eugen G. Reinartz, M.C., reported at this station from Kindley Field, Corregidor, assuming the duties of Flight Surgeon, vice Captain John E. Stanton, M.C., who left the Department on the June transport, and is assigned to Kelly Field for duty. Before reporting to his new station, Captain Stanton will take advantage of a three months' leave, which will be spent in Michigan.

The 28th Bombardment Squadron has at last found a home. Since its arrival in the Islands, most of its personnel has been on D.S. at various stations and it was not consolidated until June 4, 1935, when the 28th took station at Camp Nichols. Nine officers are present with the organization, and two more will arrive on the "Thomas" on June 26th. Since the 28th is the only service squadron (no discredit to the 66th Service Squadron) at Camp Nichols, all officers at this field are attached for flying. At this time nearly all missions are photographic, since we are attempting to make an historical record of Luzon before the rainy season sets in.

Lieut. Samuel Carter threw a very enjoyable party at the Polo Club for about twenty officers, on June 20th. The party was in celebration of Lieut. Carter's washing out of one of the Photo Ships on the take-off, in spite of Lieut. Palmer's earnest plea from the side lines to "Cut her Nick", for God's sake cut the gun". After Nick's defeat, Lieut. Halverson put the last ace in the center, but before he got a chance to sign the cheat Lieut. C. C. Nutt arrived to join in the festivities. Hall gave Cliff a "horse and three Aces" and after two flops, Cliff signed. The movies, which we attended after the party, were very dull.

The 66th Service Squadron has moved into one of the new barracks. This is great relief as the 'phoon season is here and the tents are just a 'wee bit leaky'.

Cables were received that a large shipment of MB3's were on the way to this Department and one hundred DH's are to be returned to the United States. This is the best news that has been received in this Department, pertaining to the Air Service, for some time, as very few of the DH's are fit for service due to dry rot, etc.

The 6th Photo Section has been unusually busy with aerial photography the past week, in connection with an album containing aerial views of interest, incident to the Spanish American War and the Philippine Insurrection.

Camp Nichols, Rizal, P.I., June 30th.

Work on the Historical Albums ordered by the Air Officer has been completed, and the Albums turned over to Major E. Q. Jones. Weather conditions not permitting, the Section has had a slight relapse in aerial work. Lieut. Edward H. Guilford, A.S., Commanding the Section, is on ten days' special duty with the new Air Officer at Manila.

Lieuts. Jack Greer and Norman D. Brophy, Air Service, who arrived in the Philippine Department on the Transport "Thomas", June 24, were assigned to the 28th Bombardment Squadron. Lieut. Greer was appointed Supply Officer, while Lieut. Brophy was assigned to Flight "A", and as assistant to Lieut. G. M. Palmer, A.S.

Lieut. E. E. Aldrin, A. S., came back home after a small sojourn at the Sternberg General Hospital. He is ready for some fighting now.

Lieut. G. H. Burgess, A. S., returned from a thirty day leave of absence. To compensate his return Lieut. John Y. York, Jr., A. S., was ordered to Sternberg General Hospital for treatment.

The talk for several weeks past has been rain, rain, and the more rain. He (the weather-man) must have become tired of hearing the complaints, for the monohony was changed on Friday, the 29th, when he sent a baby typhoon to visit us for twenty-four hours. The neighborhood looks as tho it were the scene of some warfare, but things will pick (fatigue). The flying field is loaded with enough water to take care of almost any type of seaplane that cares to visit us.

Captain and Mrs. W. C. Royals, of Corregidor, spent the week-end with Captain and Mrs. Benjamin G. Weir at Camp Nichols.

On June 28th, Mrs. Benjamin G. Weir and Mrs. Thomas J. Hanley entertained with a reception and tea, honoring Major and Mrs. G. E. A. Reinburg and Major and Mrs. B. V. Jones.

Major and Mrs. G. E. A. Reinburg and sons, George Jr. and Hunter, spent a few days, upon their arrival in Manila, with Captain and Mrs. Benjamin G. Weir at their quarters at Camp Nichols.

Captain and Mrs. William G. Brey, of Corregidor, were house guests of Captain and Mrs. Frederick I. Eglin at Camp Nichols.

Lieut. A. W. Vanaman, A. S., has a new arrival at his home - an aviator and golfer - Master Arthur William Vanaman, Jr. He arrived the other evening, June 28th, just at Retreat - weighs 84 pounds and announces that he is here to stay.

During the past week, the 42nd Air Intelligence Section has found many local barrier conditions requiring remedial action. Despite the tremendous amount of work on hand in compiling aerial coordinate maps for atmospheric navigation and the making of many ingenious plans for future dwellings at this post, the various listed Chiefs of this organization have found business flourishing. Truculent natives, thievery and the general cussedness of humanity represent the major complaints.

Clark Field, Pampanga, P. I., July 2.

A typhoon has been threatening this locality for the past four days but has just managed to pass us up. However, heavy rain and a high wind kept us uneasy for a few days. The roads thruout Northern and Central Luzon are now impassable and railroads were out of commission for about thirty six hours along with telephone communication between the provinces. It has been impossible to fly, and ground training with the exception of class room work in Artillery Observation has been suspended. During the earlier part of the week ground gunnery (Lewis Guns) was continued and Pistol firing completed, with the exception of two officers who have as yet not had sufficient time on the range to qualify. The results, however, are gratifying, in that six officers qualified as Experts, seven as Sharpshooters and three as Marksmen.

A treacherous little stream near Camp Stotsenburg, which crosses the Stotsenburg-Angelas highway, claimed a toll of two automobiles Saturday evening. Master Sergeant Robert F. Jones, Third Squadron, thinking that his heavy Chandler could buck the current unhesitatingly made the attempt. He and the other occupants of the car, according to their version of the incident, barely escaped with their lives. The car was swept off of the concrete road, built across the bed of the stream, overturned and is now awaiting salvage. A Ford attempting to make the same crossing was rolled off into a deeper part of the stream where the rocks, brush etc. completely submerged it before morning.

Sixty Man-Hours flying time were obtained during the week.

Clark Field Pampanga, P. I., July 9th.

The Training Program progressed rapidly and smoothly during the week. Aerial training, i. e., Aerial gunnery with Marlin machine guns, Simulated Artillery Observation, employing all the methods incident thereto, and operation with the Camera Obscura, prior to bombing schedule going into effect, met with no serious hindrances. Officers firing the specified course for fixed guns are required to score 15 hits from one hundred rounds fired per gun. "I" type targets are pasted on salvaged airplane wings and arranged in three rows of four targets each. These wings present fair targets and add to the interest in aerial gunnery.

The course in Artillery observation, while it does not afford actual observation of Artillery fire at present, provides valuable experience in the procedure necessary for the proper observing, sensing and directing of Battery fire. Communication is maintained between plane and battery by means of radio, drop messages and panel. In conjunction with the air work in Artillery observation, daily classes are held in which black-board shoots are conducted. This has proven to be of great aid in perfection of the procedure.

Gunnery has taken precedence over class room instruction since the erection of a suitable range. Morning and afternoon firing hastens the completion of the prescribed course, giving full opportunity for each officer to qualify. Firing has been conducted on the standard 25, 50, 100, 150 and 200 yard ranges, with Lewis Machine guns.

Major George E. A. Reinberg lately of Belling Field, relieved Major B. Q. Jones as Air Officer, Philippine Department upon the sailing of Major Jones for the United States on July 2, 1923. He is expected to visit Clark Field in the very near future.

Kindley Field, Fort Mills, P. I., July 9th.

For the past week the men on flying status as well as the officers have been wondering whether or not they would have good enough weather to make the necessary time or hops to make their July pay swell by a few ducats and in consequence see the pretty birds do the shimmy in their "Bihies", or at least the way they did, and the next morning inform the fellows that their hat is about three sizes too small and would like to know whether or not they could borrow a hat that would fit their head from somebody.

Capt. V. L. Burge has assumed command and has been getting settled. He has had a very good chance to look over his men when he paid them and to decide just how good each and everyone might be. But the old proverb "Looks are deceiving" might apply.

Capt. I. H. Edwards and Lt. Neal Creighton have already left on the 83rd trip of the Army's old standby "the Transport Thomas". The good wishes of the officers and men went with them and the men felt kind of down in the mouth when at about two thirty they saw that the "Thomas" making knots well out in the bay and were thinking what their former buddies who were leaving them were saying as they passed the Rock.

The weather has turned out fine for the last few days and ships have been making lots of miles and putting in a lot of time going around the island and further, but the pilots have been keeping their weather eye out for an approaching storm and they have even gone so far as to make "Ladies Day" and treat the wives of the officers who wanted to take a ride a good view of the Rock from the Air. After one of these hops one of the fair sex who availed herself of the opportunity to take a trip was heard as follows:

"Oh it was just wonderful and the scenery was great and we even went around the battle ship and I saw the Guns and just as we got there why that ship just went around and I didn't know what was going to happen and so I just closed my eyes and yelled."

The new Chief of Staff has been wanting to visit the Rock via seaplane route and a ship went after him one time but the ship came back and reported that the Chief was unable to make the trip. For several days after that he tried to come over, but weather conditions were so bad that it meant "Suicide" to try and put a ship out or even try and take it off the water. For the last few days while we have been having good weather nothing has been heard from him, and if he would like to come he had better come quick because Winter is at the doorway and is about ready to say "No more flights till I say so".

San Antonio Air Intermediate Depot, San Antonio, Texas, August 20th.

Despite the unusually warm weather which prevailed during the first half of August and the number of employes on their annual leave, the Repair Department of this Depot overhauled and repaired 9 DH4B's, 1 Sperry Messenger, 1 XBIA, 1 MB3A, 3 Spads, 12 Liberty Engines, 3 Wright H's, and one Wright E.

This depot has had four Sperry Messengers in storage for some time. They could not be assembled for flying due to changes being developed at McCook Field. The changes in design were received a short time ago, and one of these little ships was turned out this week. The little Messenger looks pretty in the air and delights the ladies and children. It is understood that these four little ships when assembled and adjusted will be turned over to Kelly Field for extensive experimental work.

A shipment of 25 new SE5's was recently received. One has been set up, tested, and turned over to Kelly Field for the personal use of Lt.-Col. John H. Howard. The remaining 24 were turned over, knocked down, to the School Group at Kelly Field for assembly and to be used for training purposes.

Mr. Felix Parsons, who has been in the Planning Department of the Repair Department since the close of the war, recently took the examination for a commission in the Regular Army and has been selected for appointment in the Air Service. Mr. Parsons served as an officer in the Air Service during the war.

Lieut. and Mrs. Edward M. Powers and Lieut. and Mrs. Lewis A. Dayton were

hosts at a farewell dinner given Capt. Edward Laughlin and his family by the officers and ladies of the post. The following, which strictly follows the Air Service catalog, was the menu:

Air Service
U. S. Army
Specification

No. 7-1-23-609
July 31, 1923
Supersedes No. 1-1-23.609

MAINTENANCE OF PERSONNEL

Tailspins, if conditions are favorable
Olives; Aircraft Gas Hose; Strand Wire
Salvaged parts in varnish
Spad fish plates with sour dope
Rawhide aileron cable guides and code 49 dope with stove bolts
Ballbearings "Spad 220"
Caseine glue mixed
Woodruff keys in containers
Fuselage main-filler with cup-grease
Diced plywood and vulcanizing cement
600-W with re-inforcing blocks
Laquer Spoiled caseine and kiln dried filler blocks
Turnbuckles and fuselage nails

Guests unfamiliar with nomenclature embodied in specifications will please consult catalog. The committee is uninformed.

Lieut. Ivan G. Moorman entertained the officers and ladies of the post with a Mexican dinner in San Antonio on August 9th.

Capt. Edward Laughlin and Mrs. Laughlin gave a dinner in the patio of the Menger Hotel on the evening of July 28th to the officers and ladies of the post. After dinner the hosts and the guests attended the reception given in honor of General Pershing at the Cantonment Pavilion, Ft. Sam Houston, Texas. Capt. Laughlin and his family left for McCook Field where he will take the course in Engineering.

Scott Field, Ill., August 24.

Two Free Balloons of 80,000 cu.ft. capacity each, were shipped from Scott Field, August 16th to Brussels, Belgium, to be used in the International Balloon race on September 23d. The Balloons were shipped by express and are expected to reach their destination in about two weeks.

The bags are those that were used in the recent National Balloon race at Indianapolis by Lieuts Robert Olmstead and John W. Shoptaw, and Captain Lester T. Miller and Lieut. C. M. Brown. One of the balloons is of the Tung oil coating type, which keeps the gas in the bag at an even temperature and lessens the amount of gas waste. Lieuts. Olmstead and Shoptaw will represent the Army during the races in Belgium.

Lieuts. Lee B. Jones and Bernard Thadden, Air Service Reserve Corps, completed on August 16th their 15 day tour of active duty. The course consisted of various ground subjects, Free Ballooning and Airship flights. Another section of Reserve Officers began their training this week.

Major John A. Paegelow, Commanding Officer Scott Field, made a trip to Corps Area Headquarters last week for the purpose of taking the examination for promotion to the rank of Lieut. Colonel. Captain Eugene Lazar acted as the Commanding Officer during the absence of Major Paegelow.

Lieut. Joseph P. Bailey left here August 21st for Brussels, Belgium via Washington, D.C., and New York City. Lieut. Bailey will act as operations Officer for the U. S. Army balloon in the race.

While in Washington, Lieut. Bailey will confer with the Office of Chief of Air Service and will then proceed to New York City in time for the sailing of the S.S. George Washington for Cherbourg, France. From there he will go by rail to Brussels. Mrs. Bailey will accompany her husband on this trip across and the latter will avail himself of a 30 day leave of absence before returning to the United States. After his return Lieut. Bailey will make his report to the Chief of Air Service and will then return to Scott Field.

Air Service R.O.T.C. Unit, Ga. Tech., Atlanta, Ga.

The Air Service Unit at this institution has just completed a very successful year, fifteen men being graduated, seven of whom will receive four months of active duty at Brooks Field. The instructors are greatly pleased with the splen-

did class of reserve officer material being developed at this school.

Our Air Service company was awarded second place in prize drill for the entire school and the cadet company commander, Mr. E. L. Burke was voted the best company commander in the Tech. R.O.T.C. Mr. G. A. Phipps won a first prize for the best military essay and Mr. Burke came in again for first in the individual rifle drill.

Capt. Fraser Hale ran wild on the golf course, winning the trophy offered by the Breckhaven Club here, and two prizes while at summer camp at Montgomery. The trophies won in Montgomery were offered by the Montgomery Country Club.

There were nineteen men in the Summer Camp and both the students and the instructors are agreed that the camp was most successful in every way. The Montgomery Chamber of Commerce and others were active in securing many things for the Tech students, and when not at work all found that hospitality in Montgomery was not to be excelled.

The camp, which was commanded by Major H. B. Clagett, was closed the 25th of July. Capt. Hale and Lt. Davidson returned to Atlanta the 5th of August by automobile. Capt. Hale left for Chicago on thirty days leave. Lt. Davidson will leave on the 16th of August.

Fairfield Air Intermediate Depot, Fairfield, Ohio, August 21st.

The Commissioned Personnel at this Field for the past two months has been reduced almost to the irreducible minimum thru officers being away on leave of absence, or by reason of departure or preparation for departure, of officers assigned to new stations.

Lieut. C. E. Thomas, Post Adjutant, just returned after an absence of approximately 8 weeks. He spent a few days at Montgomery, Ala., with friends, and several weeks amongst friends at various points in Georgia, his home state including two weeks with his father at Atlanta and three weeks on a camp trip in the neighborhood of Jasper, Ga., the latter being the home of Mrs. Thomas.

Major J. H. Rudolph, Engineer Officer in charge of the Repair Depot here left August 5 on a two-months' leave of absence. Traveling by automobile the first stop was to be Milwaukee, where he expected to remain with Mrs. Rudolph's family for about two weeks. From that point, he expected to proceed thru Canada, returning thru New England. He does not intend to break any records for speed, rather travelling at a leisure gate in order to visit and enjoy the points of interest to be found enroute. During his absence, Lieut. E. R. Page formerly of the Property, Maintenance & Cost Compilation is acting as Engineer Officer.

Captain R. W. Horton, M.C. accompanied by Mrs. Horton, Master Horton, and Miss Mary Horton, left the Field August 6, by automobile for a 14 day trip thru the east. Proceeding by way of Cleveland, Buffalo and Albany, they arrived at West Point, to visit with the Captain's son, Thomas, who in September enters his second year term at the Military Academy. After four days spent at West Point, their journey was continued thru New York, Philadelphia, and Baltimore to Washington, continuing after a day's stop-over at that point and returning over the National Highway home, arriving on August 20th after a most enjoyable trip.

Lieut. R. V. Ignico, who has been Chief of the Material Section in the Property, Maintenance & Cost Compilation, for more than a year, is leaving for Kelly Field for a course of instruction in the Observation School, preparatory to foreign duty, presumably in the Phillipines, upon the completion of this course.

Lieut. C. W. Steinmetz, Adjutant of the 88th Squadron and formerly Adjutant of this Field, is leaving at once for Bolling Field, to which he has been ordered. Mrs. Steinmetz precedes him by a few days to pay a short visit with her relatives in Columbus, at which point she will join the Lieutenant as he proceeds to Washington.

Lieut. O. P. Gothlin, Jr. is another of the officers who is hastily preparing his household goods for shipment, having just received orders to proceed to San Francisco in time to take the transport leaving on November 20th, for the Hawaiian Islands.

Due to the death of the President social activities for the last two weeks have naturally been suspended, except such small informal affairs as are incident to the welcoming of new or giving farewells to departing officers and their families, and the complimentary affairs tendered to visitors and guests.

Mrs. Capt. Donnally entertained with a noon-day luncheon on Friday the 17th the wives of officers on duty here with the National Guard, 113th Observation Squadron.

On Friday evening, the 17th, a few friends gathered to assist Mrs. Robins, wife of the Commanding Officer, in celebrating her birthday. The pleasure of the occasion was enhanced by the presence of Mrs. Robin's mother, Mrs. Hyde, and also by the presence of Major McChord.

Saturday, the 18th, Mrs. Hamlin entertained with a luncheon for some of the ladies of the 113th Squadron.

Saturday afternoon, the 18th, Mrs. Page entertained with a tea, presenting Mrs. Hyde, who was here visiting her daughter, Mrs. Robins.

On Saturday evening, Major and Mrs. Patton entertained at the Old Barn Club.

On Sunday, the 19th, Mrs. Kenny entertained at dinner for two of the departing officers with their families, soon to leave for a new station.

This station has had the pleasure of receiving numerous visitors within the last two weeks, chief of which, of course, has been the 113th Squadron of the National Guard, Air Service, encamped here for the last two weeks.

Captain Phillips, Air Service, attached to the Militia Bureau at Washington, made an inspection of the 113th Squadron last week, and was most pleased with its efficient showing.

The Guardsmen also received a very careful inspection at the hands of the Corps Area Commander - Gen James H. McKee, who came down from Columbus for the purpose, accompanied by his Chief of Staff - Col. C. D. Rhodes and the Corps Area Air Officer, Lieut. Col. Seth W. Cook.

Major Rush B. Lincoln, formerly of the Personnel Division of the Office of the Chief of Air Service, was here for a few days, having recently completed the course at Fort Leavenworth, Kansas, and now anticipating a course in Lighter-than-Air at Scott Field, Belleville, Ill.

Lieut. Kincaid, Adjutant at Maxwell Field, Montgomery, Alabama, who has just completed a ten-day parachute course at Chanute Field, stopped over with us on his way back to Alabama by way of Washington.

Lieut. Oscar Carleton Stewart, U.S.M.A. 1923 was the guest of Capt. Horton a few days ago. Lieut. Stewart was very much interested in Wilbur Wright Field since he reports at Brooks Field, Texas, September 12 for training in the Air Service, and was naturally interested to look over a real Air Service Post before proceeding to his new station for duty.

We are pleased to welcome to this Station, Lieut. Lewis R. P. Reese who reported for duty on July 25 last. He was a welcome addition to our Personnel and has, at once, been burdened with the duty of Post Exchange Officer and Educational and Recreational Officer. Lieut. Reese is a source of never ending information availed of by certain officers anticipating duty in the Philippines, since he has completed his tour of duty in the Islands. Lieut. Reese may be recognized by some as having been somewhat injured, as a by-stander, in the Bomber accident at the Aberdeen Proving Grounds, Aberdeen, Md. in May 1921.

This Field has been quite active in flying with numerous cross-country trips, amongst which might be mentioned:-

Three Curtiss airplanes left for Mitchel Field on the afternoon of Wednesday August 15, piloted by Capt. Drayton, Lieuts. Garrett and Amberg. Capt. Drayton and Lieut. Garret are stationed at Mitchel Field while Lieut. Amberg, who has been at Wilbur Wright Field for many months, was recently transferred to Mitchel Field. The planes are JNS type which were developed at the Repair Shops here. This is one of the first cross-country trips made in this new type of Curtiss Plane.

Capt. E. E. Adler and Lieut. G. V. McPike flew to Rantoul, Ill., and return, Tuesday, August 14, this being one of their regular cross-country trips.

Lieut. Guy Kirksey, accompanied by Lieut. O. Neirgarth, flew to Washington Saturday August 11 and returned Monday, August 13.

On August 5, Captain, H. H. Pascale and Lieut. G. V. McPike flew to Chanute Field, returning the same day.

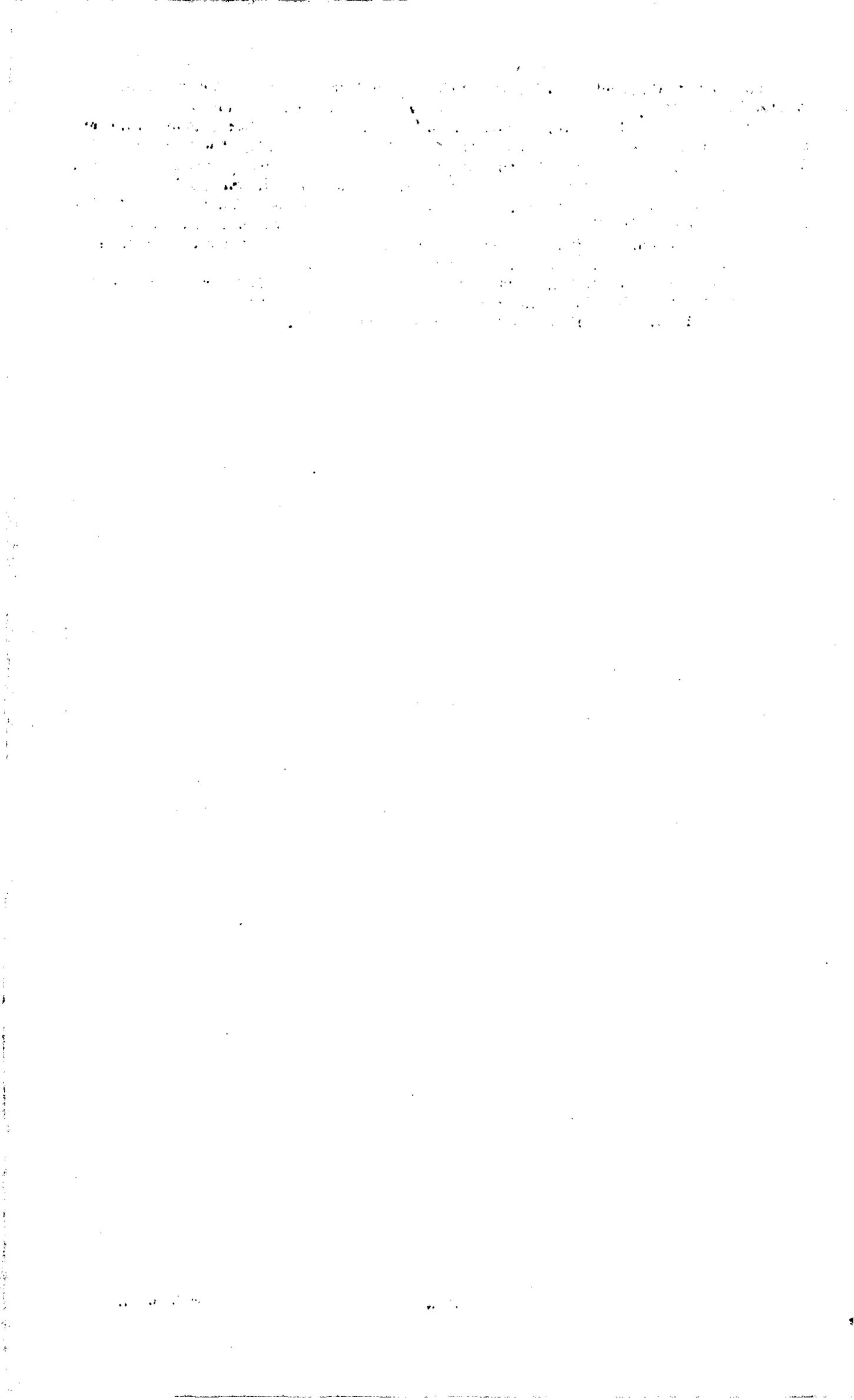
On August 8, Lieut. G. E. Ballard flew to Schoen Field, Indianapolis, Ind. and return.

On August 11, Lieut. H. A. Bartren also made the round trip from Fairfield to Schoen Field and back again.

On August 10, Lieut. G. V. McPike hopped off to Chicago. After making a brief visit at the Windy City, he returned to Fairfield on August 12.

On Saturday, August 18, Lieut. G. E. Ballard, in a Martin Bomber, ferried two Ordnance Officers from Wilbur Wright Field to Louisville, the former having been on duty at this Post with the 113th Observation Squadron, Indiana National Guard. Lieut Ballard returned the same day. On Sunday, Lieut. Ballard made another trip in the same Bomber, this time going to Kokomo, Indiana and taking with him three National Guard Officers who had been on duty with the above mentioned Squadron. Lieut. Ballard is certainly at home in the big bomber and nothing is better sport to him than piloting a Martin.

On Saturday, August 18, Lieut. Kirksey, Photographic Officer of the 86th Squadron, carrying Lieut. R. Page as a passenger, flew to Chicago in a DeHaviland plane. They returned to this post on Sunday.



The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE October 1, 1923.

TRAGIC FATE OF ARMY BALLOONISTS.

The 12th International contest for the Gordon-Bennett Balloon Trophy, which started from Brussels, Belgium, on September 23rd, was one marred by tragedy, due to the aeronauts encountering severe storms shortly after going aloft.

The Army Balloon S-6, piloted by 1st Lieut. Robert S. Olmstead, Army Air Service, with 1st Lieut. John W. Shoptaw as aide, was struck by lightning while it was sailing in a blinding storm over Nistelrode, Holland, resulting in the instant death of these two officers, upon whom the Army pinned its faith to win the Trophy permanently for America. Lieut. Olmstead was killed outright when the bolt struck the balloon, while Lieut. Shoptaw suffered death when the S-6 fell, in the opinion of Dr. van Binbergen, of Nistelrode, who examined the bodies. Lieut. Olmstead's body was found under the bag in the basket, while that of his aide was found about 25 feet away from the bag, as if he had jumped. At this particular time the disqualification of the Army entry had just been decided upon because the S-6, upon going aloft, rammed the Belgian entry "Ville de Bruxelles" at the start of the race.

Altogether five airmen lost their lives in this aeronautical competition, which started under the most adverse weather conditions ever experienced in the history of this annual classic. Lieuts. von Gruningen and Wehren, of the Swiss balloon "Geneva", and Penaranda Barca, of the Spanish balloon "Polar" were killed, and Gomez Guillamon, assistant to Barca, was seriously injured. The Swiss balloon was struck by lightning near Beverloo and burned in mid air, while the Spanish balloon caught fire from a lightning bolt and fell near Heyst-Goor. No fewer than six balloons were destroyed or badly damaged. At this writing some of the contestants have not yet been heard from; they may have escaped the fury of the storm or met the same fate as the British balloon "Margaret", the latest to be reported, which fell into the sea off Denmark, pilots Allen and Berry being rescued.

The officials of the Brussels Aero Club, appalled by the catastrophe, point out that they had advocated a postponement of the race, but found that the rules were absolutely inflexible. They will propose changes to overcome this difficulty in the future. It is reported that many members favor the cancellation of the competition altogether. The President of the Belgian Aero Club stated, however, that the pilots had full liberty to cancel their engagement if they considered the weather conditions too dangerous and added that the weather was no worse than at Geneva last year, when there was a thunder storm lasting an hour and a half.

The United States Navy Balloon A-6699, manned by Lieuts. Lawrence and Reichelderfer, landed safely at Putten, Holland, and the other American (civilian) entry, the "St. Louis", piloted by Messrs. Honeywell and McCullough, was out of the race at the very start by reason of the balloon having burst.

Seventeen balloons lined up for the race, the United States, Belgium, France, Spain and Switzerland being represented by three entries each, and England by two. The three Italian entrants withdrew, as did the one representing the colors of Poland.

Lieut. Olmstead, one of the most promising young officers of the Lighter-than-Air Division of the Army Air Service, was born on July 28, 1886, at Sheldon, Vt. Prior to his entry into the military service during the late war, his occupation was that of designing engineer for the Boston and Albany Railroad. He studied civil engineering at Tufts College, Franklin Union, and Boston College. In September, 1917, he enlisted in the Aviation Section of the Signal Corps and was sent to the Army Balloon School, Fort Omaha, Neb., for instruction in ballooning. He was commissioned 2nd Lieut. January 9, 1918, and was assigned to duty with a balloon detachment at Fort Sill, Okla. In April he was sent back to Fort Omaha for duty as instructor in the Balloon School. He was promoted 1st Lieut. September 17, 1918. After a course of training in lighter-than-air work at Ross Field, Arcadia, Calif., he was transferred, in November, 1918, to Washington, D.C., for duty in the Training Division, Office Chief of Air Service.

He later pursued a course of instruction in airship piloting at Langley Field, Va. and was rated as an Airship Pilot. Lieut. Olmstead's last assignment was with the Industrial War Plans Division of the Air Service, with station at Middletown, Pa. He participated as an Army Air Service entrant in the International Balloon Race which started from Birmingham, Ala., in September, 1920, finishing sixth. With Lieut. Shoptaw as his aide he won first place in the National Balloon Race, which started from Indianapolis, Ind., on July 4th last, his victory entitling him to compete for the James Gordon-Bennett Trophy in the International Balloon Race at Brussels, Belgium.

Lieut. John W. Shoptaw, Air Service, was born at Worthington, Ind., on March 28, 1869. He enlisted in the Signal Corps of the Regular Army in 1908, serving a 3-year enlistment. Thereafter and up to 1917 he was a member of Company A, Signal Corps, National Guard of Pennsylvania. During the war he was appointed a Master Signal Electrician in the Signal Corps, Regular Army, and was assigned to take a course of instruction at the Balloon School at Fort Omaha, Nebraska, upon completion of which, on February 11, 1918, he was commissioned 2nd Lieut. On August 13, 1918, he was promoted 1st Lieut. Due to his particular aptitude in all matters relating to the construction and rigging of balloons, most of his service during the war and for some time thereafter was at the factory of the Goodyear Tire and Rubber Co., Akron, O. During the time the Army Air Service conducted an aerial patrol along the Mexican Border, Lieut. Shoptaw was stationed at Camp Biernie, El Paso, Texas, in command of the 8th Airship Company. He had the distinction of piloting the first airship along the border. He was later assigned to take a course of instruction in lighter-than-air work at Ross Field, Arcadia, Calif., and was rated as Airship Pilot on October 21, 1921. He was then transferred to Chanute Field, Rantoul, Ill., where he was in charge of instruction in the Lighter-than-Air course at the Air Service Technical School. He was rated as Balloon Observer on April 24, 1922.

Lieut. Shoptaw has had over 40 free balloon flights, his longest being 17 hours and 10 minutes. His total flying time in free balloons was 86 hours, in observation balloons 150 hours, in airships 120 hours and in airplanes 100 hours.

Prior to his departure for Europe to participate in the International Balloon Race, Lieut. Olmstead wrote the following article, giving a history of this aeronautical classic since its inception. It is given below, in full, as follows:

"The oldest Aeronautical Classic of the world, the annual international competition for the Gordon-Bennett Balloon Trophy, will start from Brussels, Belgium, on September 23rd. That our country, the United States of America, following its usual custom, has three balloons entered therein will be of interest to every true American. Throughout Europe the greatest enthusiasm is exhibited towards the Big Bag Classic. This year the event promises to be the most popular of its history. Back in 1906 the initial Gordon-Bennett Balloon Race was won by an American, then Lieutenant, now Lt.-Col. Frank P. Lahm, U.S.A., starting from Paris and landing at Scarborough, England; duration of flight twenty-one hours. The following year (1907) the Race was held from St. Louis, a German balloon winning the cup with a flight of 872 miles, the landing being made at Asbury Park, N.J., after 41 hours in the air. In 1908 Berlin was the site of the start, Col. Schaeck, of the Swiss Army, winning after a very slow flight of 753 miles, landing in the sea off Norway after 73 hours in the air. Under the rules as they have been revised since, he would have been disqualified, any pilot now landing in the water and requiring assistance to reach shore being counted out. Switzerland, a Swiss balloon having won the previous year, was the starting point for the Race in 1909, the favored city being Zurich. An American balloon again won, piloted by Mr. E. W. Mix, who made a distance of 696 miles and landed near Warsaw after 35 hours in the air. St. Louis was the site of the fifth contest held the following year (1910), Mr. Alan R. Hawley, an American, being the winner. He landed in Quebec, a distance of 1,358 miles, in 46 hours. Kansas City was the starting point for the sixth race, a German winning with a distance of 455 miles, made in 39 hours. The scene of the Race now (1912) moved back to Germany, Stuttgart being the city selected. This seventh event was won by France. The landing was made near Moscow, a distance of 1,358 miles, after 46 hours in the air. The eighth (1913) contest started from Paris and was won by Ralph Upson, an American, who landed near Bridlington, England, making a distance of 550 miles in 44 hours, and bringing the cup to America once again. The United States had now won the cup four times, our

failure to win the following race (held after the war in 1920) losing temporarily to us the right to permanent possession of the Gordon-Bennett Trophy, for it becomes the property of that country which first wins five events. In 1920 the Race started from Birmingham, Ala., Lieut. DeMuyter, of Belgium, winning for his country, landing near Burlington, Vermont, in Lake Champlain but being able to get ashore without assistance.

The following year (1921) Brussels, Belgium, was the city chosen for the take-off, a Swiss Officer, Capt. Armbruster, taking the honors after flying across the English Channel and Irish Sea, landing in Ireland. The eleventh contest was held from Geneva, Switzerland, in 1922, being won by that very able Pilot, Lt. DeMuyter, for Belgium. Now comes the twelfth contest, scheduled for September 23rd from Brussels, Belgium. America has up to the present proven the most successful of any country, leading all others with four wins. Next comes Belgium, Switzerland and Germany each with two credits, followed by France with one. England and Italy both have been quite unfortunate, never yet winning. This year all of the major European countries are in the field with the maximum number of entries, three allowable, each determined to win and in any event to bar the United States from carrying off the Cup to America for all time. Needless to say, the pilots of the three American balloons entered have been very carefully chosen, in open competition, and with reasonable good fortune on their side may be confidently expected to come home with the bacon.

There are many quite romantic aspects to a Free Balloon Race which busy people never take the time and trouble to contemplate. The course covers whole continents. It is quite within the realm of possibility for some pilots to maneuver and shape their courses in a manner to carry them down through Central and Eastern Europe to Turkey (landing in that only remaining "Harem") while others more intent on the lasting fruits of victory than immediate pleasure will negotiate the North Sea to Scandinavia, thence over the Baltic to Finland, but not Russia, for the country of the Bolshevik is ruled out by the Race Committee. All pilots entered in this race have been studying the meteorological maps of Europe for many months, making hundreds of imaginary flights with every likely possible combination of weather and course. The prevailing winds from Brussels during the months of September and October are Southwest, that is, the Balloonists should be reasonably certain of traveling in a northeasterly direction, although in the tenth contest (1921) from Brussels all contestants were forced to pursue a north-westerly course, landing in England, the Irish Sea and Ireland. This was a very exceptional case, however.

Due to the possibility, if not probability, of an extended flight over the North Sea, the American Teams are fitted with full life saving equipment, the cars being provided with flotation rings, life suits, signal pistols with distress rockets, etc. The Army car is provided with swings, allowing pilot and aide to stretch out above the water level with all the comfort of a Pullman berth.

It is stated hereinbefore that the American Team has been selected with great care and in open competition. The contest for this purpose, the National Elimination Balloon Race, was held from Indianapolis on July 4th, resulting in the selection of the following teams:

Lt. Robert S. Olmstead, pilot; Lt. John W. Shoptaw, Aide, U.S. Army Air Service

Lt. J.B. Lawrence, Pilot; Lt. F.W. Reichelderfer, aide, U.S. Navy Air Service.

Mr. H. E. Honeywell, pilot; J.P. McCullough, aide, civilian entry.

The above American teams sail for Belgium under the auspices of the National Aeronautic Association of U.S.A., leaving New York September 1st on the S.S. GEORGE WASHINGTON. What could be more auspicious than the name of the craft in which they start their journey to the scene of the take-off?"

OFFICERS ASSIGNED TO TAKE ENGINEERING COURSE

The following Air Service officers have been ordered to report to McCook Field, Dayton, Ohio, for the 1923-24 General Aeronautical Engineering course which is to be held at the Engineering School: Major John F. Curry, Captains Leo A. Walton and Wm. B. Meyer, 1st Lieutenants George W. Polk, Jr., Charles L. Morse, Bernie R. Dallas, Alexander Pearson, Harold A. Wells and Wallace R. Fletcher. First Lieut. Richard C. Copeland, Ordnance Department, will also be a member of this class.

The following-named Air Service Reserve officers reported to the Engineering

School for a three-months' course of instruction in Engine and Plane Maintenance, their service to terminate November 30: Captain Dallas M. Speer, 1st Lieuts. David M. Wallace, Homer I. Sands, Otis B. Crocker, Harry J. Brady, Frank H. Clewers and Edward G. Knapp.

SOME FAST FLYING

The air line distance of 708 miles from Dayton, O. to Boston, Mass., was covered in 7 hours and 25 minutes, according to word received at Dayton from Lt. Albert F. Hegenberger who, with Mr. Bradley Jones as observer, left that city on September 6th for the purpose of making sextant tests and observations. Leaving Dayton at 10:25 a.m., they arrived in Boston at 6:25 p.m., daylight savings time, no stops being made en route.

AND NOW THEY ARE PLAYING GOLF IN PANAMA

The France Field golf course is rapidly nearing completion. All permanent greens are in and grassing over nicely. The 2500-yard nine-hole course will be a great asset to the personnel. With sixty charter members from France Field, Submarine Base and Fort Randolph as a starter, the France Field Golf Club is an assured success. As soon as the links are officially opened the membership is expected to jump to very near the hundred mark.

MAJOR FOLLETT BRADLEY ASSUMES COMMAND OF FRANCE FIELD

Our France Field Correspondent states: "Our new C.O., Major Follett Bradley, is greatly pleased with his new command. He went on record immediately as being strong for flying. Fortunately, most of the construction work is completed and flying training can be conducted on a larger scale. The late increase in commissioned personnel helps things a bit as it were. Some of the old timers down here have had so many jobs that they kept an alphabetical list and handled them on a time schedule.

CADET PILOTS HAVE TRYING EXPERIENCE IN RAIN STORM

Considerable anxiety was experienced at Kelly Field, Texas, recently over the safety of several of the Cadet Pilots who were absent from the field on a cross-country flight to Waco, Texas, and return, when a strong wind and rain storm which had been hanging low over the north and eastern horizon suddenly developed threatening proportions and swept a large area surrounding this locality. Cadets C. E. Smith and Johanpeter, Smith piloting, caught unexpectedly in the lips of the gale shortly after leaving Seguin, experienced a lively 30-minute battle with the wind and rain, landing safely at Kelly Field, at 5:15 P.M., relieving anxiety on their score. Priestley and Schwaemmel, engaged in a running combat with the elements augmented by Thor, a few miles south of Austin, which continued with increasing fury until after an excellent but difficult landing was made at Kelly Field. Cadets Fleet with Murphy, and Sherman with Gilkey, also experienced lively skirmishes with the storm but made safe landings at the home station.

Cadets Manning and Markle, Manning piloting, attempted to circumnavigate the approaching wall of jet black clouds, battling with its vanguard of occasional gusts of wind and rain, accompanied by liberal volleys of thunder and lightning, until they found that they were over Floresville. There they took refuge on welcome old terra firma, remaining down until about 7:00 P.M., when a lull permitted them safe return to Kelly Field. Collins and Earnest landed in the face of the storm at Zuehl, remaining there over night. Wisley and Wies went down at Seguin for the night and, being unable to start the motor the next morning, Wies returned by train, Wiseley remaining with the ship until the arrival of a mechanic the next day, when he returned with the ship. Chandler and McArthur spent the night at Manor in preference to engaging in a combat fraught with hazard and exposure.

LIGHTER THAN AIR TRAINING SCHOOL OPENS AT SCOTT FIELD

The 1923-24 class in lighter than air training at the Air Service Balloon

and Airship School at Scott Field, Belleville, Ill., commenced on Monday, September 17th. The student body is composed of 17 officers and 14 flying cadets. The course covers a period of ten months and leads to the rating of Airship Pilot. Students will start flying in observation balloons, spherical balloons and airships on the very first day of the course, and this will continue, weather permitting, until November 5th, the date set for the ground course to start. The ground course will be completed on or about March 20, 1924, when flying will be resumed.

Coincident with the flying course, the students will construct an airship at the large hangar. An obsolete envelope, car and motor will be used. The ship will be inflated with hydrogen gas and will be moored to a large mooring mast in the field. This ship will not fly but will be used solely for research purposes and will be left exposed to the elements until destroyed. One of the interesting features of the schedule is that the students will be attached to an airship company, having complete wartime equipment, and will go into the field for one week. Students and company will participate in maneuvers. The school staff consists of Major John A. Paeglow, Acting Commandant; Captain Laurence F. Stone, Assistant Commandant; Lieut. Arthur Thomas, O.I.C. Flying; Lieut. Angler H. Foster, O.I.C. Ground Course; Lieut. J.T. Shively, Acting Secretary, and Commandant of Cadets; Warrant Officer Trabold, Asst. Secretary. The faculty consists of Capt. L.F. Stone, Lts. Arthur Thomas, A.H. Foster, J. T. Shively, Chas. Clark, Frank McKee, W. A. Gray, Mr. A. Leo Stevens, Mr. Warwick, Mr. Boland and Mr. Medowcraft. The student officers are: Major Rush B. Lincoln, Captains Michael F. Davis, Hawthorne C. Gray, Henry C. White, Edmund W. Hill, Garth B. Haddock, 1st Lieuts. Douglas Johnson, Rogers S. McCullough, James F. Powell, Neil Creighton, Orin J. Bushey, James T. Nolley, Alfred Lindeberg, Ben B. Cassidy, William Turnbull, 2nd Lieuts. James F. Early and John G. Salsman, Flying Cadets H. W. Allen, H.G. Custance, C. L. Finley, R. R. Gellespie, H.G. Hoar, L. W. Kuntz, Harvey N. Martin, J. T. Murray, W. J. Paul, H. Seigler, Otto Wienecke, Merle E. Wilson, F. Morgan Wild.

TENNESSEE NATIONAL GUARD AIR SERVICE HAS SUCCESSFUL ENCAMPMENT

By Lieut. V. J. Meloy, Air Service.

Tennessee's air unit (136th Observation Squadron) returned from its second annual encampment, and the State can well afford to be proud of it. The camp brought out the fact that the squadron has become a practical and useful component of the Guard, ready for immediate use if necessary.

At the very beginning, we suffered a regrettable and sad accident in the fatal crash of Lt. Tyler Rascoe, C.C., of the Photo Section, and his mechanic, Sgt. Cook. This occurred at Roberts Field, Birmingham, on the afternoon of August 30th. The fatality was a hard blow to the officers and men, as Lt. Rascoe, a world war veteran, was one of the pioneer organizers of the 136th.

The camp this year differed very much from the first one, in that all our classes and drills came in the morning. The schedule began at five A.M., and ended at noon, thereby giving every one a chance to swim or follow some other diversion in the hot afternoons. Another feature of the schedule was the opportunity given all the officers and men of the squadron and Photo Section to qualify on the pistol range. Another radical change was the assignment of all pilots to the course for observers. This experiment proved highly satisfactory in that it brot about a high state of co-operation between pilots and observers and taught the former many things that an observation pilot should know.

Much of the success of the camp was due to the painstaking efforts of the Regular Army personnel at Maxwell Field. Due to the patience and ability of all our instructors, we returned from camp with a definite idea of the purpose of an observation squadron.

Shortly before camp we selected a squadron insignia from several designs submitted by Mrs. C. G. Percy, the wife of one of our officers. It consists of a pair of gold pilot's wings, upon which is mounted a large golden yellow circle. In the center of the circle is a silhouette of Andrew Jackson mounted on his charger. Henceforth we will be the "Old Hickory" squadron.

While in camp we were inspected by Capt. C.T. Phillips, A.S.(DOL), from the office of the Chief of Militia Bureau. He seemed quite pleased with the squadron.

THE FORMAL DEDICATION OF THE BOSTON AIRPORT
By Captain Robert Oldys, A.S.

The City of Boston, on Saturday, September 8, 1923, landed on the International Aeronautical Map with the most impressive ceremony yet chronicled in the history of American Aviation. The occasion, attended by perfect New England weather, was the formal opening of the great Boston Airport, where Regular Army, Organized Reserves, National Guard, United States Navy and civilian aviators carried out a flying program as varied as it was thrilling.

For the past two years preparations for the establishment of a modern airport in East Boston have been under way and, in consideration of the almost insurmountable difficulties encountered during the many and various phases of the necessary negotiations, the pluck, determination and far-sightedness of our good friends in Boston, from Mayor Curley on down through the long list of aviation enthusiasts, not only wins the profound admiration of the Air Service but serves as well to blaze the trail for adequate military defense for the Nation. It is but a step from one year to the next, and when we review the stupendous aeronautical strides made during the past ten years, there can be absolutely no exaggeration to the prediction that the next decade will usher in dependable trans-Atlantic as well as trans-continental air routes.

With an admirable airport an established fact, our prediction is that Boston, the geographical terminus for trans-Atlantic and transcontinental air lines, has hurled her Puritanical headgear into the ring of commerce with such force that the famous city now located adjacent to Brooklyn, New York, had best look to her laurels if she expects to provide employment for the majority of our governmental customs agents for a much longer period.

It has never been our privilege heretofore to witness a more efficiently planned and successfully executed aeronautical meet than the eventful dedication of the Boston airport. With a well-managed gathering of approximately 25,000 people eagerly following every move of the fifty or more airplanes in constant flight over East Boston and the surrounding harbors, Boston indicated with tremendous enthusiasm her intense interest in aviation and full cognizance of its possibilities.

Probably the biggest thriller of the day was the inter-city race between Boston, Mass.; Nashua, N.H.; Worcester, Mass.; Providence, R.I., and return to Boston. Lieutenant James L. Hutchinson, of Mitchel Field, piloting an Army DH-4-B Observation plane, finished first with the remarkable time of one hour, fifteen minutes, although no less remarkable was the fact that the other two DH-4B's and the two Navy Voughts, comprising the rest of the participants, all finished within three minutes of the winner! When one considers that ten years ago this famous course was flown in competition between five of the most advanced types of airplanes then known to America and that the winner finished in a little more than five hours, whereas the other four participants reached Boston the following day, the progress of aviation is, indeed, a remarkable achievement.

MORE ON THE FORMAL OPENING OF THE BOSTON AIRPORT
By our Mitchel Field Correspondent.

Six planes from Mitchel Field participated in the formal opening of the Boston Airport on September 8th. They consisted of a Martin Bomber, piloted by Captain Ira C. Eaker; an SE5, piloted by 1st Lieut. Marion L. Elliott, and four DH4B planes piloted, respectively, by Captain R.A. Kinloch, 1st Lieuts. James T. Hutchinson, Homer B. Chandler and Irwin Amberg.

The planes arrived at Boston at about ten a.m., and shortly afterwards Lieut. Hutchinson was entered in the great event of the day, the Four-City race, the course of which was to Nashua, N.H., Worcester, Mass., Providence, R.I. and return to Boston. Lieut. Hutchinson won the race in 1 hour, 24½ minutes against a field of five planes, defeating a Navy Vought by 29 seconds. Lieut. Hutchinson received a handsome loving cup that had been donated by the Aero Club of Massachusetts.

During the afternoon Lieut. Elliott gave an exhibition of acrobatic flying in an SE5, and Captain Eaker put a Martin Bomber through a series of maneuvers.

The planes remained overnight at Boston and returned to Mitchel Field late the following afternoon.

A LONG JOURNEY THROUGH THE AIR

What is probably one of the longest airplane trips on record started on September 1st, when Lieuts. Victor E. Bertrandias and Kenneth Garrett left Mitchel Field, L.I., New York, for Seattle, Washington, San Francisco, and a stop on the return trip at St. Louis, where Lieut. Bertrandias is an alternate in Event No. 3 of the Pulitzer Races. When the plane returns to Mitchel Field it will have covered approximately 6300 miles.

While en route the pilots will locate and map landing fields for future reference. This information will be particularly valuable between Chicago and Seattle, as to date there has been very little aviation activity in the Northwest.

MITCHEL FIELD PILOTS PARTICIPATE IN POLICE GAMES ✓

An elaborate aviation program was put on by Mitchel Field at the Police Games at the Jamaica Race Track on Saturday, September 8th. In addition to acrobatics, formation flying, message dropping, bubble chasing and dropping photographs of the games, a five-mile race was staged between six DH's. Major Junius W. Jones just nosed out Captain F. M. Brady for first place. The same program was put on on Saturday, Sept. 15th, when the final set of games were run off, with the addition of a simulated aerial combat between 1st Lieuts. E. M. Barksdale and M.L.Elliott, flying SE5's.

CHANGE IN ARMY ENTRANTS IN INTERNATIONAL AIR RACES ✓

Due to certain exigencies of the service, the Chief of Air Service has found it necessary to revise the list of Army Air Service entrants in the International Air Races to be held at St. Louis, Mo., October 1 to 3 inclusive. According to this revised list the pilots and alternates for Event No. 3, observation 2-passenger type of airplanes, are as follows: DH4-B airplane - Major Roy S. Brown, 1st Lieuts. J. J. O'Connell, W. H. Bleakley, D. M. Outcalt (ORC) pilots, and Major C.L.Tinker, 1st Lieuts. E. M. Powers, W. A. Maxwell, W. B. Robertson (ORC) alternates; DH4-L airplane - Lieut. H. A. Ramsey, pilot, and Lieut. H. W. Beaton, alternate; XB-1-A airplanes - Lieuts. W. T. Larson and V. J. Meloy, pilots, and Lieuts. P.T.Wagner and E. Holterman (ORC) alternates; CO-4 airplanes - Lieuts. C. McMullen and H.N. Heisen, pilots, and Major B. Q. Jones, alternate; CO-5 airplane - Lieut. Lowell H. Smith, pilot and Captain Ernest Clark, alternate; Packard Fokker airplane - Capt. Robert Oldys, pilot; Curtiss D-12 airplane - Lieut. W. H. Brookley, pilot.

Event No. 5 - large capacity airplanes: Martin Bombers - Capt. E. C. Black, Lieuts. Leigh Wade, Leslie P. Arnold, H. L. George, pilots, and Lieuts. H.D.Smith, Aubrey Hornsby, Ross F. Cole and J. F. Whiteley, alternates; T-2, Lieut. H.G.Crocker, pilot, and Lieut. G. H. Beverley, alternate; DT-2 airplane, Lieut. Robert J. Brown, Jr., pilot; Breguet 14-B-2, Lieut. M.S.Fairchild, pilot, and Lieut. G. C.Kenney, alternate.

Event No. 8 - High speed airplanes (Pulitzer Race): Verville-Sperry Racer, Lieut. Alexander Pearson, pilot, and Lieut. J. K. Cannon, alternate; Curtiss Army Racers - Lieuts. J.D.Corkille and Walter Miller, pilots, and Lieuts. H.H.Mills and Lucas V. Beau, Jr., alternates.

Event No. 8a, Service type pursuit airplanes (Mitchell Trophy): MB-3 airplanes - Lieuts. T. W. Blackburn, T. K. Matthews, G. P. Tourtellot, Thad J. Johnson, Captains V. B. Dixon and Burt E. Skeel, pilots, and Lieuts. Leland C. Hurd, F.O.D. Hunter, A. G. Liggett, L. G. Simon, E. M. Haight and H. R. Yeager, alternates.

Lieuts. Russell L. Maughan and Lester J. Maitland, who finished first and second, respectively, in the Pulitzer Race last year at Detroit, will not compete this year in the races at St. Louis, since it is the policy of the Chief of Air Service to have different pilots fly in the International Races each year. As a result of this policy, the officers entered in the races this year are an entirely new group. The above policy also embraces the selection of pilots from different Air Service fields and commands throughout the United States as far as possible, to the end that all officers of the Army Air Service may know that they are being considered for participation in this annual aviation classic. General Patrick realizes the advantages inherent in assigning to the Pulitzer Race the pilots who last year won this contest, but feels that the maintenance of the morale of his personnel by distributing participation in this Annual Classic is of more importance than winning the Race.

OBSERVATION TRAINING AT KELLY FIELD

A special course of training in observation, of five weeks' duration, began in the Tenth School Group at Kelly Field, Texas, on Monday, August 27th. This course is for the benefit of those officers from Lighter-than-air who are to be sent on foreign duty to serve with Heavier-than-air detachments, and also for those officers at the Air Service Advanced Flying School who are awaiting transfer to other branches of the Army and who have not received any specialized training in the Air Service. The following named officers are taking this course: Captains H. C. Gray and H. V. Hopkins, 1st Lieuts. J. W. Benson, G. M. Brown, A. J. Etheridge, F. W. Evans, J. D. Jordan, P. Schneeberger, E. L. Fernsten, R. J. Ignico, E. S. Moon, 2nd Lieuts. W. B. Goddard, W. S. Lawton, E. C. Lynch, R. A. Peterson and F. J. Woods.

The students now taking the regular course at the Air Service Advanced Flying School are acting as pilots for the above named officers on all missions.

CITIZENS MILITARY TRAINING CAMP ENDS WITH A "BANG".

The Citizens' Military Training Camp at Camp Bullis, Texas, ended on August 24th with a gigantic mimic battle in which all arms of the service participated. The Air Service was very much in evidence and their work called for much commendation, not only from the newspapers but also from all who witnessed it - some 2500 spectators.

The program opened by an attack on the enemy's batteries by the Third Attack Group of Kelly Field who, by the use of 50-pound demolition bombs supplemented with machine guns, completely demolished their target in approximately eleven minutes. Bombing by the School Group (Kelly Field) on enemy emplacements secured similar results. Infantry contact planes, artillery reglage and command planes were kept busy throughout the problem.

Some excellent photographs of the results accomplished were made by the 22nd Photo Section, under the command of Lieut. Croneau. In the main the Air Service end of the problem consisted in driving out the enemy by use of machine guns, neutralizing their artillery with bombs, marking the Infantry front line with smoke candles, reporting the progress of the flight, etc.

Communication by radio telephone was exceptionally effective, it being possible to speak clearly to the command plane at all times. Much credit is due the 42nd Squadron for the installation of this set, which functioned perfectly throughout the problem.

The effect of the demonstration was very marked on the spectators, who expressed astonishment and amazement at all phases of same.

On the following day (Saturday) a dismounted wing review was held by the post commander.

GETTING A KICK OUT OF SEAPLANING.

The incident which we are about to relate happened in the Philippines, and since it takes some time for news from the Islands to reach here we are not going to mention any dates. As our Correspondent from Kindley Field, Fort Mills, P.I., puts it, on Wednesday, a perfect day for flying, two seaplanes were put in the water, one of them going on a cross country run and the other on a local flying mission. This latter plane had somewhat of an amusing experience. Lieut. Laughinghouse was piloting and giving Lieut. Bartlett instructions on how to fly a seaplane, this being the latter's first experience in handling this particular kind of watercraft. A landing was made near Carbac, a distance of about five miles from the airdrome, and Lieut. Bartlett took a chance on taking off. The waves were rather high and were not as easy for taking off as they might have been, so after hitting the tops of a number of these waves Lieut. Bartlett gave Lieut. Laughinghouse the signal that he was unable to do it. The latter, however, had been getting a kick out of hitting the top of the waves and was laughing at Lieut. Bartlett's attempts to take the air when a large wave broke over the bow of the ship, completely covering it and filling the engine with water, and incidentally giving the passenger a jolt which made him think it was doomsday. By the time he came to realize what had happened and to see if he was all together he found he was short one pair of goggles and wet to the skin. To top it all off he was told

to crank the ship so they could get home and change clothes, but he found that the most he could turn the motor was a half turn either way. While they were waiting for a ship to come and tow them in, Lieut. Laughinghouse was heard by passenger and assistant pilot to say: "Why the ---- don't they fill these ships with food instead of life preservers", and all the time the land looked mighty good to him and he was thinking of swimming to it.

A RESERVE OFFICER'S COMMENTS ON TRAINING CAMP

The following comments by a Reserve Officer who attended a recent training camp at Wilbur Wright Field were published in the 83rd Division Bulletin, which is printed each month at Ft. Hayes, Columbus, Ohio. This publication is edited and controlled by the Reserve Officers of the 83rd Division and has proven its usefulness in maintaining the morale of that unit. It is believed that Lieut. Centner's comments will be found of interest to the personnel of the Air Service:

"About 80 Air Service Reserve Officers of the Fifth Corps Area reported for active duty at Wilbur Wright Field on July 8, 1923. The War Department's decision to hold this year's camp for Air Service men at the various air depots and stations, assured greater success than has ever been possible before, on account of the facilities for flying and special training afforded.

"The camp was commanded by Major Henry J. F. Miller, whose popularity with the student officers was one of the important factors in the development of enthusiasm and morale. Major Miller and his able assistants had evidently been on the job quite a while before our arrival, because the stage was all set and activities started with a war-time expedition.

"The usual formations and roll calls were dispensed with and, instead, every officer was left to carry out his own schedule without any checking up. The presumption that if we were interested enough to apply for training and come to camp, we could be relied upon to follow the program, was certainly well founded and proved to be correct.

"By Wednesday of the first week, every officer had completed the 609, physical examination necessary for flying duty, and on Thursday, classes reported to the airdrome. All former pilots were given a refresher course, preparatory to their solo flight. The non-flying officers were given dual instruction and several completed the requirements for 'Junior Airplane Pilot' ratings before the camp was over. Usual operations of the 88th Aero Squadron were suspended in order to keep the 15 Curtiss-H training planes in commission. Consequently, everyone got in all the flying time he wanted. When it is considered that most of the birds hadn't 'taken off' since 1919, it's easy to understand why we used up almost \$10,000.00 worth of gasoline.

"To an Air Service man, flying is, of course, paramount. But we learned, as we knew before, that the organization which keeps the ships in the air is equally important. Our inspection trips through the wonderful repair and supply Depot at Wilbur Wright Field, as well as our half day visit to McCook Field, were sources of most useful knowledge and information. In addition, considerable time was given each officer to service his own plane, the idea of this being to acquaint the flying personnel with the problems of minor repairs for emergencies away from the home airdrome.

"Aside from the flying activities and hangar duties, the program contained a list of lectures on special subjects that must have been handpicked. Major A. W. Robins, Commanding Officer of the Field, gave a most interesting talk on the administration of the Army, explaining in his clear way the various departments and divisions from the Commander-in-Chief on down. The world's record altitude flight and the transcontinental flight of the T-2 were the subjects of a lecture by Lieut. John A. MacReady. 'Mac' had a crowd of 80 more boosters all for him after he had finished.

"Lieut. Guy Kirksey of the 7th Photo Section gave two mighty interesting and instructive talks on the Porto Rican flight and the Chesapeake Bay bombing operations. Lieut. George V. McPike and Capt. E. E. Adler explained the system of supply, maintenance and cost compilation of the Air Service, which should make delivery of equipment in peace and war time much easier and better. There were also other lectures on squadron administration operations and aerial navigation.

"Regulation of artillery fire was demonstrated on the airdrome with a radio

ship observing puff targets on the ground. An amusing incident in connection with this demonstration was the receiving of a band concert from Cincinnati while trying to tune in with the observation plane above. We at least ought to have music with our wars after this.

"The old saying about 'all work and no play, etc' was strictly adhered to. Every officer was required to devote one hour a day to athletics. You had your choice of the whole catalog of sports: golf, tennis, swimming, baseball, handball, boxing, etc. Socially the camp was also a success. The Post Officers entertained us the first week with a garden party and dance, and the compliment was returned by us the following week. Unique souvenir invitations, printed by the Photo Section were issued for both affairs.

"Enthusiasm ran high on the last day when several 'fur lined' prizes were awarded those officers who had pulled 'boners' during the camp. Major Miller's farewell talk summed up the work we had done, and reminded us that we are really on constant active duty and that our mission back home is to boost the Reserve and the Army, to the end that national defense will receive the support it deserves".-----1st. Lt. Wm. F. Centner, A.S.O.R.C.

ELEMENTS FOIL ATTEMPT TO PHOTOGRAPH ECLIPSE OF THE SUN

Lieut. John A. Macready, pilot, and Lieut. Albert W. Stevens, photographer, battled the clouds in vain for three hours in their determination to gain an unobstructed view of the sun in order to take photographs of the total eclipse which occurred near the Santa Catalina Islands at noon on September 10th last. They flew to an altitude of about 16,000 feet, winging their way along in utter darkness with tongues of blue flames shooting through the exhaust pipes and with the wings and fuselage of their plane drenched with moisture when the drama of the skies was being enacted.

These two officers left Dayton, Ohio, on August 23rd on a cross-country trip to the Pacific Coast. They landed at Clover Field, Calif., on September 6th, after having photographed all landing fields, government reclamation dams and irrigation projects en route. Their's was the first airplane to fly through Yellowstone Park, of which they secured good views. The Columbia River, Mt. Hood, Mt. Adams, Mt. Shasta, Crater Lake and the Yosemite National Park also fell under the eye of their camera.

SCOTT FIELD TO HOLD AIR CARNIVAL

An immense aerial demonstration is being planned by Scott Field, to take place Sunday, October 21st. Major John A. Paeglow, Commanding Officer, announces that arrangements have been made through the Chief of Air Service to give the public an exhibition heretofore unseen in any part of the country. The demonstration will be given for the benefit of the Army Relief Society, and both heavier-than-air and lighter-than-air personnel will take part.

JOY AND GLOOM AT FRANCE FIELD

A bit of excitement held France Field, Panama Canal Zone, in its grip for a few days during the first part of August. Captain "Andy" Smith, the flight surgeon, was "sitting in" at a session of draw poker on Friday night. A hand was dealt, the dealer opening up on two pair, kings up. "Andy" stuck around on a pair of sevens. After the draw, the dealer was fondling a king full and "Andy" was looking at a reunion of the seven family. The ultimate result was heart-failure for the king full victim and a hunch for "Andy". The following morning he burned up the road getting in to Colon and began a frantic search for lottery tickets bearing the hunch numbers "7777". He found five tickets of that number and bought the lot at a cost of \$2.50. The following morning the bunch were at the bathing pier for the usual Sunday morning dip in the briny. "Andy" with several others were flat on their backs tossing a medicine ball about. Some one walked up and casually remarked that a very unusual number had won the capital prize of the lottery and followed the remark by asking if any one had ever heard of four sevens winning before. "Andy" floated to an upright position, let out one wild howl and started toward his quarters like a Curtiss Racer in a hurry. Several of those present sadly shook their heads and murmured something about the results of not sticking to good Scotch. Almost immediately "Andy" dashed

from his quarters, yelling and waving something over his head. Those of the crowd who were in bathing suits jumped into the bay and started swimming quickly away, while others not so fortunate gathered closely together with the women in the center. There were some quietly whispered instructions to try and take him alive. As he approached the grim faced and determined little band, parts of his yell became intelligible. Something that sounded like "\$5,000", "five tickets", "hit it on the head", "oh, you li'l old four sevens" was sandwiched between yells. The crowd then recognized what was in "Andy's" wildly waving hand - a strip of lottery tickets. "Andy" had hit the lottery for \$5,000 gold. While every one was gathered around "Andy" hearing about how it had happened, a yell from toward the bachelor quarters attracted attention and figure in bathing suit dashed madly down toward the pier, sprang into the water, had three fits, climbed up on the pier and gasped out four words, "I hit the lottery". The fortunate bird this time was "Swede" Carlson. He had bought one ticket of 7777 from OK Robbins the night before. Poor old Robbins is slowly recovering from the shock but will never be the same happy care-free O.K.

McCOOK FIELD'S AIR CARNIVAL FOR ARMY RELIEF FUND ✓
By our McCook Field Correspondent

The Air Carnival held on Labor Day was the third public performance staged at McCook Field this year and by all odds the most ambitious air show ever put on in this part of the country.

Ten days before the event, highly colored posters were put on duty throughout the county and announcements promising Twenty One Big Acts were dropped from the air over all towns and cities within a radius of sixty miles. Had Barnum and Bailey been in the vicinity, they would have folded their tents disheartened and, three rings included, silently stolen away. Even the movies were utilized by the Publicity Committee to acquaint the public with the aerial thrills which awaited it.

Perhaps the fact that the Carnival was held to swell the funds of a charity close to the interests of all Army people, the Army Relief Fund, gave inspiration to the whole-hearted endeavor that went toward insuring its success. Perhaps even more the natural growth of interest in aviation swelled the gate receipts. At any rate, with the sky that looked what the English would call "showery", all thoroughfares leading into the city of Dayton were crowded with a steady stream of incoming automobiles all day, and well before three o'clock, all parking space in the Field and within a mile outside had been settled upon and police had to turn approaching autos back. Tickets which cost 15, 25 and 50 cents were sold out. Reserved seats, standing room, neighboring hill sides, roofs and dikes were swarmed, and the great green platter of the Field was bordered with a solid mass of faces. The press numbered those present at 100,000. From the sight of litter, abandoned lunches, and pop bottles the next day, we could well accept the estimate as conservative. Nor have gate receipts so far discouraged it.

The Field itself formed a stage never so novel and highly colored. Well in view was massed a mighty and magnificent fortress - or perhaps it was a fort - belonging to the period of architecture described somewhere as "carpenter's Gothic." Presenting an unbroken front one hundred feet long, with its high battlements and lofty towers, it seemed - no matter how much we knew about it - well nigh impregnable. Several balloons, one a sausage blimp, were anchored about. Airplanes of all sizes and types were on the line ready to take off. Later there were sixteen in the air at once, flown by pilots from McCook, Wilbur Wright, Selfridge, Chanute and Scott Fields. Dozens of clowns cluttered about, followed by laughter, giving the audience an opportunity to relieve craned necks now and then. There were many of our old favorites among them: Spark Plug, and the bucking Ford, which was dressed up as an airplane and given the coy name of "Flapper". There were clowns who played craps with dice ten feet high, which were rolled about in the slipstream of a DeHaviland-4 and there was the clown who went up in the jumping balloon, designed at McCook Field, and the demonstration of which was one of the features of the entertainment. The balloon was lifted some thirty feet and brought to earth by the weight of the pilot, several times. But to come to the program.

It started promptly at three. That's one thing we modestly like about our

shows: the pilots are ready to "go" and the enthusiasm of the audience is not damped by a bored preliminary wait. Lt. Brookley soared away and wrote the greeting "Hello" in smoke across the sky. But the weather was not the best for smoke writing. Sky and smoke were too much the same color. But we understand that one old lady did exclaim to her husband, "Oh look, James, there's one of those wireless messages caught fire." (Authenticity not to be investigated). At any rate, Lt. Brookley came to earth leaving a thick smoke screen in his wake as he dove low over the buildings and field.

A free training type balloon was then launched from the north end of the Field and floated away toward the East. This was followed by a tug of war between a Martin Bomber and a White truck. This playful exhibition is always interesting for the first time, especially for those not disillusioned as to the actual pulling power of the two engines. However since the Martin seemed to have a little the better of the match, the audience seemed pleased.

Formation flying by three pursuit planes, whose pilots had come from Selfridge Field for the exhibition was the next feature and ably illustrated the ability of these swift smaller ships to either defend or harass the slow-moving big bombers.

A number described on the program as "Foolish Flyer's Freak Flight" by Lt. Jimmie Doolittle provided all the thrill prophesied for it. A false landing gear had been constructed on top of the little PS-1, Dayton Wright Alert, which has a retractable chassis. When the chassis was drawn up and the pilot seemed to be flying round and round, up side down, gasps of dismay rose from all quarters.

The Radio Car, designed at McCook Field, aroused its usual share of wonder and amusement. Without apparent control it traveled about the Field as it chose, making swift turns in an uncannily knowing way. The control was from the Water Tower. Another radio demonstration was one in which formation flying was done by pilots from Selfridge Field, under orders transmitted to the planes by radio, the orders being simultaneously made known to those on the ground by the Magnavox.

Lts. Brookley, Pearson and Doolittle gave their trio close formation demonstration and never was their team work so perfect. The speed with which they recovered place after such slight separations as were caused by loops and rolls, was nothing short of remarkable. Even those who had seen these three together in the air on former occasions gained a new impression of the beauty of their flying from the performance. Lts. Brookley and Pearson gave a further demonstration of airplane control when they took off with a sixty-foot string joining the tails of their planes, flew for fifteen minutes and landed without breaking the string. This program number grew out of an argument raised some months ago in the hangars as to whether the flyers could accomplish such a feat. A pot was raised. Brookley and Pearson, very much "Off-agin, On-agin, Gone-agin, Finnegan," went up, came down and pocketed the pot.

The sight of the largest airplanes in the world, the great Barling Bomber, seen by the vast throng for the first time, was the occasion of a renewed expression of interest. Piloted by Lt. Harold R. Harris, pioneer flyer of big planes, and carrying nine passengers, it flew over from Wilbur Wright Field, McCook Field being too small to give it residence, and circled the Field several times. The roar of its six Liberty engines was not especially noticeable in the general uproar of the other planes. Flying beside it was the small Sperry Messenger airplane, the contrast in proportions being something akin to those of an eagle and a fly. It is good to those who have watched the Barling develop, who have heard the fears of the pessimists and the very reserved hopes of the optimists, to at last see the Barling in the air. It is good to know that in its tests, it has so far surpassed expectations and that it may be considered a distinct step forward in the development of large airplanes. And on top of it all, it is good to see its designer, his delight as impossible of concealment as is a small boy's on his way to a circus. The T-2, the huge monoplane of Transcontinental Nonstop fame, took the air at the same time, piloted by Lt. Van Veghten, and against the gray massed clouds the clear cut lines of its fuselage and single wing took on a sort of majesty. Lt. Van Veghten put the T-2 through some very good maneuvers. The Curtiss Pursuit, in which Lt. Maughan made his "Dawn to Dusk" transcontinental attempt, not to be ignored in the assemblage of distinguished planes, also came whistling across the sky, a miracle of speed in contrast to its two famous sisters.

Lt. Doolittle's acrobatic act, called "Flipping the Fokker," solicited much comment. There were moments when the tiny plane might have been the sport of freak winds, so completely did it seem without guidance in its unexpected flips

and turns, but whether high against the sky or near the ground, seemingly at the moment of crisis, it showed perfect subservience to its master hand.

Lt. Harris returning the Barling to its hangar, next exhibited the helicopter in flight. Not a favorite child of our ambition, the helicopter. Its fortunes are cast too much in the future to bring us present satisfaction, perhaps. Under Lt. Harris' guidance, it rose ten feet vertically and maintained stability in the air for several minutes.

The climax of the Carnival approached with the sham battle. We all love a fight. An enemy observation balloon having been boldly launched across McCook Field, was bravely attacked by several airplanes. The balloon was brought down most sensationally spurning smoke and flames. Just before it caught fire, the two Sandoag brothers, seeming to have a premonition of danger escaped by parachute from the basket, suffering, we hope, little nervous shock in their descent. We then found that the beautiful fort was also occupied by the enemy and had been picked for destruction. Pursuit planes made an attack, protecting the approach of the Martin Bomber from the anti-aircraft guns. The Bomber circled the Fort twice before releasing its bombs. There was a deafening report, the ground was shaken with shock and the great Gothic stronghold crumbled to the ground, a mass of writhing flames and twisted timber. The report, it happened, came just a bit before the release of the bombs, but the effect was gorgeous and, anyway, all's fair in war.

The program closed by chorus stunting by all the planes, with Lt. Brockley doing especially spectacular work near the ground. When all the others had come in, he flew the length of the Field, the wings of his plane in vertical position. Three live parachute jumps were an added attraction.

It was a great show. It lasted from three until six o'clock and the audience seemed to feel that it had got its money's worth. To Lt. Brockley goes the utmost congratulations for the planning and carrying through of the program. All the Committee however deserve great credit, and all the Committee's helpers who worked heart and soul for the success of this first big undertaking of its kind by the Engineering Division.

Perhaps when the broad acres of our new Field are an actuality and the room for hospitality has become our heritage, it will be possible to arrange for a National Carnival, in which representative flyers of all the U.S. Air Service flying fields may assemble for competition, racing and exhibition flying, such a presentation as would offer the ultimate progress in American flying in a single program. The educational value of such a meet would certainly be worth all the time and effort expended on it.

ECONOMY IN THE USE OF SUPPLIES

Our Correspondent from the Fairfield Air Intermediate Depot states that "it has been found necessary to reduce to a considerable extent the 1924 consolidated requisitions for supplies. This requisition was prepared last spring by Property Maintenance and Cost Compilation, and it was based on requisitions submitted by the several fields and stations. Owing to lack of funds, it will be altogether impossible to purchase the full amount of the items requested, and it has been necessary to make several drastic reductions. The Chief of Air Service considers the situation to be quite serious, and it is hoped that all fields and stations will make their supplies last as long as they can and, like Mutt and Jeff, will 'use discretion' in submitting requisitions in the future."

MAJOR RAYCROFT WALSH ASSUMES HIS NEW JOB

Major Raycroft Walsh, Commanding Officer of France Field for the past two and one-half years, moved to Quarry Heights, Canal Zone, the latter part of August to assume the duties of Department Air Officer. Through Major Walsh's untiring efforts, France Field has been built up from a one-squadron field to its present strength of 7th Observation Squadron, 24th Pursuit Squadron, 25th Bombardment Squadron, 63rd Service Squadron, 12th Photo Section and 40th Air Intelligence Section. Quarters, barracks, shops and ships have kept pace with this increase. As the saying goes, "He put over his job with a bang". His foreign service tour ends in March.

MAPPING THE AIRWAYS IN THE SOUTHWEST

Kelly Field, although greatly handicapped for lack of personnel, is making every effort to expedite the various airways logs throughout that part of the Southwest. Practically all have been completed and the remaining flights are in progress and will no doubt be ready for forwarding within a brief space of time. Questionnaires have been prepared and forwarded to the various cities throughout Texas calling on the local Chamber of Commerce, Rotary Club and other similar organizations for information on emergency landing field facilities. Texas is enthusiastic and lends its cooperation to practically all Army projects.

THE VALUE OF THE AIR SERVICE AS A COOPERATIVE AGENCY

From all indications the ground troops are realizing the benefit of aerial observation, surveillance and other advantages derived from airplanes in conjunction with their own branch. Numerous requests are received at Kelly Field for planes to cooperate in maneuvers, and in practically every case pleasing results were obtained. Every effort is put forth not only by Kelly Field, but also by its pilots and observers, to make such problems a success, and the results have been well worth it.

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, August 11.

THIRD ATTACK GROUP

GROUP HEADQUARTERS: Officers of the Group participated in daily training and practice bombing flights, using 50 lb. loaded bombs and dummy bombs. Lieut. Zettel, the Group Operations Officer, conducted a special bombing test with a plane of the 8th Squadron, pertinent to the latest improvement made upon the release on the Mark A 2 type bomb rack by the Armament and Engineering Department of the 8th Attack Squadron.

EIGHTH SQUADRON: Operations involving flying duty pertinent to this organization for the past week were composed of practice formation and combat signal flights (both individual and with the Group), individual bombing practice, using both dummy and live bombs, cross-country, and the regular test flights of all planes and motors.

Captain Davidson, recently transferred to this organization from the 42nd School Squadron, has assumed the duties of Commanding Officer, Captain Bubb being relieved and transferred to the 10th School Group.

Lieut. Carr with Lieut. Barreger as passenger, proceeded on a cross country flight to Fort Ringgold, Texas, on the 6th, returning the same day.

All pilots of this organization participated in the individual bombing instructions and practice, under the supervision of Lieutenant Moor. Captain Davidson participated in individual bombing practice, using dummy bombs.

All of the regular assigned observers have taken part in the bombing practice of the Group during the period of training.

NINETIETH SQUADRON: The greater part of the flying hours of the week were devoted to individual bombing practice, using "live" 50 lb. demolition bombs. Although some trouble was experienced with the release mechanism of the new type bomb racks, several very good scores were reported.

Lieut. Kemmer, with Private Laza as gunner, tested a Browning machine gun mounted on the scarf mount on the rear cockpit. The mounting for the gun was designed and constructed by the Squadron Armament Section and Lieut. Kemmer reports that the one flexible Browning gun mounted on the rear cockpit is much more satisfactory than the former method of using the Lewis machine gun.

TWENTY-SIXTH SQUADRON: On August 4th, the commissioned and enlisted personnel of the organization participated in a dismounted review in honor of the late Commander-in-Chief. The Post Adjutant read a communication from the President directing that ceremonies be observed at all camps, posts and stations, as a tribute to the late President.

All organizations on duty at this field were assembled on the parade grounds and after the reading by the Adjutant of the communication, the entire command passed in review. The flag was lowered to half staff and the sword hilts of all officers were draped with black. The guidons of each organization carried a small streamer of black.

A fishing party, composed of several members of the squadron, left for Crystal City, Texas, where they remained over the week end. A camp prepared at Crystal city by members of this organization is used for fishing and bathing, and is ideal for both. The members of the party reported a fine catch and an enjoyable time.

During the week the officers of the squadron participated in attack problems, formation flights, test for training and bombing.

Staff Sergeant Royal Peck joined the Squadron on August 6th. He has been on duty with the Air Service in the Islands for a period of approximately 4 years.

Master Sergeant Thomas Keenan, formerly Post Sergeant-Major, was recently discharged on Surgeon's Certificate of Disability. He has been with the organization since the Squadron was organized, September 25th, 1921. The Squadron as a whole extends its wishes to Sergeant Keenan for a successful future in civilian life.

THIRTEENTH SQUADRON: The activities of the organization during the last week have been pleasant duties to the members of the squadron. After about 6 months of the G.A.X. type of planes and no others, we are again mentioned in Operations Orders, and our mechanics and crews are again wearing that smile of contentment. We like to see the number thirteen on orders and reports. Our pilots, too, have the opportunity to become better acquainted with their men, and the enlisted men get those long deferred "hops" that take the monotony out of the succession of Military duty.

Our Commanding Officer, Lieut. Jones, is acting Group Adjutant during the temporary absence of Lieut. Robinson, and we are closer to headquarters than we have been for some time.

Both pilots and selected enlisted men have been receiving instruction in bombing and machine gun work. Ask those who know what kind of a record we make. When our formations are in the air look them over and note the condition of our ships.

Lieut. Wheeler made two cross-country flights during the past week: one to Fort Worth and return and one to Laredo and return.

Major Burwell, the Wing Operations Officer, with Sergeant Giles of this organization as mechanic, using a DH4B-1 attached to the Squadron, made a cross-country flight to Fort Worth and Dallas in connection with the investigation of landing facilities at both places. While on the return and upon taking off at Miles, Texas, the motor cut out while at an altitude of 75 feet, necessitating the stretching of a glide in order to get over a gully, resulting in the plane settling into a ditch and being damaged to such an extent as to necessitate its being stored at Barron Field at Fort Worth. The Major returned with Lieut. Wheeler. A detail was dispatched to Fort Worth, and the plane will be in condition to be flown back to the field by the latter part of the week.

TENTH SCHOOL GROUP

FORTIETH SQUADRON: Lieut. Frederick and Captain Lynd made a successful cross country flight to Galveston in a Martin Bomber on the 3rd returning the same day.

Several cadets have reached the cross-country stage, and this squadron has furnished the planes on several occasions. The flights have been to Austin.

Another DH4B was added to our flock this week, making a total of ten.

Lieut. Frederick left for Chanute Field on the 5th to attend a two weeks' course in parachute work. He will return to this squadron to resume his former duties as Supply Officer.

FORTY FIRST SQUADRON: Flying operations practically ceased in this organization, along with the other organizations of the field, Wednesday forenoon in respect for the late President. Although a few test flights were made to determine the fitness of some of the ships that had been repaired, practically all energy was directed along the lines of preparation of ships and equipment for resumption of activities on a larger scale than ever, Monday, August 13th.

FORTY SECOND SQUADRON: During the earlier part of the week, cross-country flying was the mission assigned student officers and cadets, one cross-country being to Austin, Texas and return, another to Smithville, Texas and return, and several to neighboring fields. Since flying has been suspended, all the time was spent in getting the planes in commission for the coming week, when flying by students will consist mostly of cross-country missions. On Friday noon all planes in the 42nd Squadron were reported in commission.

FORTY THIRD SQUADRON: Flying for the week consisted of test and routine flights in DH4B's, Spad's, SE5A's and MB3's. Advance check and special instructions were given to student officers and cadets, the flying being done in DH4B's. Several cross country flights were made during the week. Captain McDaniel flew to Palestine, Texas. While attempting a landing in a bad field the plane crashed. Sergeant Warner flew a DH4B to Palestine for the purpose of bringing the Captain back. While there, the Sergeant assisted the Captain in pulling the motor of the SE5A, and the plane, being unfit for further flying, was condemned and burned at the scene of the wreck. Lieut. Strickland made a cross country flight to Galveston and Smithville during the week. Work is going on steadily

on the assembling of the new SE5A's.

SIXTY EIGHTH SERVICE SQUADRON: The Group performed the usual line duties during the week. Several DH4B planes were received from the San Antonio Air Intermediate Depot, and 8 SE5A planes, equipped with Wright "E" engines. Two DH4B planes were dropped on approved survey, one being a DH4B-Amb-2.

Ten Liberty 12-A engines were received from the Motor Overhaul and eleven were sent for repairs.

Four DH4B planes were placed out of commission, due to crashes, and one MB3-A with Wright H-3 engine, was wrecked at Lexington. One SE5A with Wright E engine was also wrecked at Palestine.

Kelly Field, San Antonio, Texas, August 18.

THIRD ATTACK GROUP

Officers of the Group participated in daily training and practice flights in bombing and practice formation of all combat signals, pertinent to the training schedule of the Group for the past week.

EIGHTH ATTACK SQUADRON: During the late training schedule, considerable flying has been accomplished, composed of Group and individual formation and attack practice flights.

Captain J. H. Davidson, with Lieut. R. H. Clark of the 26th Attack Squadron as alternate pilot, is soon to proceed on Airway Mapping flights, covering Texas, Louisiana, Mississippi, Tennessee, Arkansas and Oklahoma. A DH4B-1 plane will be used for this mission.

Lieut. E. V. Harbeck is at present on a 20 days' sick leave.

All pilots and the regular assigned observers of the squadron participated in the regular Group training schedule during the past week.

NINETIETH ATTACK SQUADRON: There has been very little flying during the week, except routine formation work. Officers and enlisted bombers practiced bombing with both live and dummy bombs. A new release mechanism for Mark A 2 bomb racks has been designed and is being installed on one of the planes of this organization. This release mechanism was designed and installed by the Squadron Armament Section and it is hoped that it will prove satisfactory in the test which will be made shortly.

Interest in baseball, which has been lagging for the past month, has again picked up with receipt of the schedule for the new Post League. We are looking forward to some very interesting games, for several Squadrons on the field have very good teams.

TWENTY-SIXTH ATTACK SQUADRON: Lieut. Duke made a cross country flight to Fort Worth, Texas, for the purpose of ferrying Major Brereton to Kelly Field.

Lieut. Phillips, of the 60th Service Squadron, with Sergeant Hammock, made a cross country flight to El Paso, Texas, using a plane from this Squadron. The purpose of the flight was to secure training in cross country flying and to chart airways from this field to El Paso. The return flight was made the next day.

Flying during the past week consisted of regular Group schedule of training in attack problems, formation flights and cross country flights.

SIXTIETH SERVICE SQUADRON: Lieut. Zettel, Operations Officer for the Group, accompanied by Lieut. Gillispie as passenger, made a cross country flight to Eagle Pass, Texas, on the 10th, in a DH belonging to this organization.

During the past week, Staff Sergeant Leonard Williams was discharged per expiration term of service and reenlisted.

THIRTEENTH ATTACK SQUADRON: The past week was used for formation and test flights. The 13th is back in the race now, since we have received the DH's. Two more were received during the week, making a total of seven.

We have reorganized our baseball team and our first game of a new series is with the 8th Squadron, Saturday, the 18th. We hope to win so as to give.

us a jump on the other squadrons. We lose several of our best players on account of the ruling that no men will play on the squadron teams who played with the Post Team. But we still have some very good players and we will make the 13th pround of its team.

TENTH SCHOOL GROUP

TWENTY-SECOND PHOTO SECTION: During the past week aerial photographs were taken of different tactical formations of the 3rd Attack Group.

Necessary electrical work is being installed by this Section so that the new lathe recently placed in the camera repair room may be operated. This lathe will permit a great deal of work to be done which heretofore had to be sent out to the Engineering Department on the field.

Ten new cameras were placed in condition for use in instruction in the Air Service Advanced Flying School course.

FORTIETH SCHOOL SQUADRON: Preparations are being made in this organization for the instruction of the students in the Martin Bombers, which will start Monday. Owing to the shortage of mechanical personnel, the crews of the Martins will be short handed. Ten of the 12 Martins are in commission and the other two are in the S.A.A.I.D. awaiting major repairs.

Lieut. Canfield made a successful cross country trip to Fort Worth, Texas over the last week end, acting as investigation officer for a crack-up that occurred there.

Several students have made cross country trips to various stations and experienced no serious difficulties. The trips have so far been very successful and show a rapid advancement in the course.

A parade in commemoration of our late Commander-in-Chief was well attended by the entire personnel of the organization.

FORTY FIRST SCHOOL SQUADRON: The students of the present class, having advanced to the cross-country stage, were busily engaged in that work for the past week. Missions to Laredo, Beeville and Smithville have been flown by practically all students.

A surprisingly small number of forced landings have been noted since commencing the cross country work, apparently due to the very good condition in which the ships are to be found at all times, despite the fact that the organization labors under serious handicaps through lack of sufficient personnel to properly crew the ships.

Lieut. DeFord made a cross country flight to Corpus Christi, Texas, and to Alice, Texas, during the last week, carrying supplies and repairs to ships from this field that had been forced down at those places.

FORTY SECOND SCHOOL SQUADRON: Student officers and cadets have been making cross country flights during the past week to Corpus Christi, Laredo, Beeville, and Smithville, Texas. The squadron was assigned two DH4B's, formerly the property of the 40th School Squadron. This assignment of ships increases the total number of ships in the organization to twenty three, all of them being in commission and flying daily.

Second Lieut. Lyman P. Whitten was relieved as assistant Engineering Officer, in order to take advantage of a leave of absence granted him before reporting to his new station.

The squadron purchased a new victrola for the day room and also some new records. The squadron commander appropriated the sum of ten dollars monthly for the purpose of purchasing new records.

FORTY THIRD SCHOOL SQUADRON: Several test flights were made in three of the new SE5A's and several more will be ready for test hops in the very near future. Test and routine training flights were made in DH4B's, MB3A's, Spad's 13 and SE5A's. Several accuracy instruction and special instruction hops were given in DH4B's to student officers and cadets during the week. Cross country flights were made to Houston, Corpus Christi and Callahan. Most of the work in the hangars now consists of assembling SE5A's and getting everything in readiness for the class in Pursuit training.

SIXTY EIGHTH SERVICE SQUADRON: Nine Liberty 12 engines and one Wright "E" engine, now undergoing overhaul in the Motor Overhaul Shops of this organization, will soon be completed.

Another improvement has been added to the Motor Overhaul shops, namely, - a compressed air cylinder testing device. Lieutenant Nelson of McCook Field was greatly impressed with it while visiting here and requested that drawings and blue prints be sent to McCook Field. This has been done.

Two DH4B planes and one SE5A are now undergoing reconstruction in the Aero Repair shops of this organization. This work, although handicapped because of a shortage of skilled men, is progressing very nicely.

Brooks Field, San Antonio, Texas, August 20.

The routine training of the earlier arrivals of the class scheduled to start in September is progressing very nicely. The first casualties occurred last Friday, when six Cadets fell before the Academic Board. Three more Cadets from our foreign possessions and Lieut. Homer W. Ferguson, F.A., from Fort Sill reported during the week for training. Lieut. T. C. Hardin, of the Air Service Reserve, who has been spending ten days on inactive duty status at this field, left for his home on Friday. During the past week several cross-countries have been made by the members of this command. On Monday Lieut. R. G. Breene, A.S. flew to Waxahatchie and there persuaded officials at the county jail to turn over one of our men who had been A. W. O. L., and who had been arrested at this point for vagrancy. Later in the week Lieut. Breene made a trip to El Paso and return. Lieut. Prentiss and Lieut. McCormick, with two mechanics, made a trip to Fort Worth and back during the week. Major Royce and Lieuts. McClellan, Patrick and Williams made a trip to Galveston and spent the week-end as the guests of Captain Mansfield at Fort Crockett, on recruiting duty there.

Friday morning three parachute jumps were made, all by the personnel who are engaged in the caring of the parachutes at this station. Piloted by Lieut. Corkille, Privates Lage and Madden made pull off jumps from the upper wing of the DH and Private Hoyt dove from the cockpit. The personnel at this field is rapidly regaining confidence in the chutes, said confidence having been lost to a great extent by the failure of a chute while the command was at Carlstrom.

The baseball schedule is still creating a lot of interest and two hot games were played during the past week. On Wednesday, the 46th Squadron defeated the 11th Group Headquarters to the tune of 8-5 and on Saturday the 47th Squadron triumphed over the 62nd Squadron by the score of 12-9. The 46th Squadron now occupies first place in the league standing, with the 47th and 11th Group tied for second and the 62nd last.

Brooks Field, San Antonio, Texas, August 27.

The interest in the post baseball league is still at a high key, as evinced by the large number of men present and the "rooting" at the two games during the last week. On last Wednesday the 46th Squadron defeated the 47th Squadron, which placed the 46th at the head of the league standing. On Saturday, the 11th Group School defeated the 62nd Service Squadron, making the 11th Group School a close contender for first position.

On Saturday the Post swimming team met the strong team from Austin at the Municipal pool at San Pedro park. The meet was interesting and closely contested thruout and the Post team was defeated by a small margin.

During the past week cross-countries were made by members of this command as follows: Lieut. Breene and mechanic to Amarillo and return, Lieut. Wimsatt and mechanic to Muskogee, Oklahoma and return, Lieut. Chauncey and mechanic to Smithville and return, Captain Sturcken to Kennedy and return, Sergeant Winston to Comfort and return, Lieut. Perrin to Boerke and return. Lieut. McConnell piloted by Lieut. Breene made a trip to Laredo and return on a photographic mission. Sergeant Blizzard suffered a forced landing in a ploughed field during the week and ended up with the wheels in the air. No great damage was done to

the ship and it was righted, repaired and flown back on the same day. Lieut. Walter S. Smith, one of the student officers, had a forced landing, due to the breaking of a vertical shaft and set the ship down nicely in a pasture about 8 miles south of the field. The plane was repaired and flown back the same day. Lieut. Smith reported the accumulation of a terrible thirst as a result of staying by the plane for about eight hours during the middle of a very hot day.

Orders have been received for Lieut. Corkille to proceed to Dayton, in order to prepare himself for flying in the Pulitzer race. Information has also been received that Lieut. McMullen will proceed by air to St. Louis in order to be present as an alternate at the Liberty motor race. During the past week Lieut. Davidson returned from sick leave which he had spent at Tiffin, Ohio, and at various points enroute, he having made the trip both going and coming in his Ford Sedan. Lieut. Lake, from the Cavalry Division at El Paso, reported for flying training. Captain McIntyre, Ordnance Department, lately stationed at Watertown Arsenal, Mass. also reported to take the course in flying training. Lieut. Twining has been sent to this station from the Second Division at Camp Travis, on temporary duty, to take the course in flying training.

Arrangements are now under way to move the Salvage Department from one end of the steel hangar to the old Plumbing Shop. The work in the Aero Repair is now going full blast and needs more room, and the space now used by the Salvage Department will be taken over by the Aero Repair. This move will practically put the field on a permanent basis, the last of a large number of changes taking place ever since the departure of the Lighter-than-Air troops and the arrival of the 11th Group School at this station.

Kindley Field, Fort Mills, P.I., July 17

On Monday morning, July 9th, two DeHaviland planes set out from Camp Nichols on a photographic mission that would take in all the little Barrios around Mariviles and vicinity. Everything went well until the planes got around Cob Cobbin when Lt. Glascock, piloting one of the planes, became aware of motor trouble and immediately started for shore, but he started a little too late. When about 100 yds. from shore he hit the water and the plane turned over covering both pilot and passenger under the water and giving them a bath which they had no idea of taking, since Saturday had just passed. So after getting ashore and giving Lt. Walker in the other plane, the signal that everything was O.K. he immediately set out for Kindley Field, just across from where Glascock had landed in Manila bay. Lt. Walker took a long chance in landing at the Seaplane station and, as luck would have it, he made a perfect landing. He gave the officers and men something to talk about, as he was the second officer to land a plane in that field without breaking up, the other officer being Major Jones, now returned to the states.

Lt. Ray L. Owens took a seaplane and went to the rescue of Lt. Glascock and passenger, and arrangements were made at the dock of Corregidor to have a barge and boat go over to get the plane and if they had time before the night set in to take it to Manila. But the men on the detail did not know this or they would have sure made Manila with the plane because they had till four o'clock the next afternoon to make the boat back to Corregidor and they could have seen plenty of birdies during that time. After the boat was towed back to Corregidor, a watchman was sent to guard it for the night and early the next morning he was told that he had better get off as they were getting ready to tow the barge to Manila. The guard, obeying General Order #5, did not leave his post because he was not properly relieved, and so he took the trip to Manila having no idea that he was going to take a trip like this the day before.

Lt. and Mrs Woodward have taken a short trip to Bagiau for twenty days being that the winter weather is about to set in.

Lt. Gullet had a slight accident when he threw his ankle out of joint going down the long hill to the hangar. He is now back on duty and declares he feels fine after the few days rest he had.

Kindley Field, Fort Mills, P.I., August 7.

The last week there has been so much rain and weather conditions have been so unfavorable that flying has been an unthought of luxury. With the China Sea having a spell of roughness that comes with the typhoon season, members of the flight have been taking things easy and enjoying themselves making odds and ends that may come in handy when flying starts again, which is generally in October, if the typhoon season ends by that time.

The men of this Squadron are having a contest to see who can make work the easiest and so far the tractor driver has won. About four days ago there were three 20,000 gallon tanks to move, and while everybody joined in the general discussion on which would be the easiest way to move them the tractor driver mounted his faithful steed and started up and proceeded to move them while the rest were still arguing. Besides having the laugh on them, he had a lot of fun playing a new game which he called "Tractor Pushball", and he is very sorry that there isn't a thousand more to move around because, using his own statement, he said "It was more fun than being on a happy drunk." He ought to know because, well -----.

So far, out of the few men that have been on the firing range we have a good percentage of qualifications in the three grades of good shots on the shooting for finals. Under the expert instructions of Lts. Laughinghouse and Bartlett, the men have learnt in such a short time the use of the sights and trigger squeeze and with the preliminaries all over they did well considering that very few of the men ever had a 45 Colt in their hands before. When the weather lets up, another class will go out and see how well they can do, and we hope a bigger number will qualify, and with a little luck we are pretty sure a big number of the men will have a few more dollars added to their payroll.

Lt. Woodward and wife returned from their visit to Baguio and said they thought they were in New York in winter. They say they had a pleasant trip anyway and would try to make the trip again some time when it is not so cold.

Clark Field, Pampanga, P.I., July 18.

The Third Pursuit Squadron received five new additions to its commissioned strength. Captain J. H. Houghton, 1st Lieuts. William S. Gravely, A.E. Waller, G. A. McHenry and 2nd Lieut. J. H. Wilson, although having been on duty at Clark Field for some time, were members of other organizations. With the loss of Captain L. N. Keesling and 1st Lieut. R. Baez, Jr. and the present gain, we have a total strength of twenty officers.

We have been able heretofore to maintain a maximum of six planes for training and cross-country purposes, due to restrictions regarding the use of DH-4A's and our inability to obtain the conversion of "A"s into DH-B's. Authority has been recently granted by the Department Commander allowing the use of DH-4A's for airdrome work. This will greatly facilitate the consistency and smoothness of our training schedule. It has been a problem as to how the training could be conducted, giving each officer daily flying duty, with a very limited number of planes. The new "A"s are in storage at this station and can be immediately conditioned and put in service.

Ground training for the week consisted of one hour's daily instruction in Administration. Air work covered: Simulated Artillery Observation, Fixed gunnery (Twin Marlin), Flying Qualification tests, Radio communication, Message dropping and Camera Obscura. At the end of the week's work examinations are given covering ground instructions for that period. Officers are advanced in aerial training weekly, or as soon thereafter as they qualify in subjects given during the previous week.

On July 9th the officers of Clark Field were afforded the opportunity of meeting the new Air Officer, Major G. A. Reinburg, who visited Clark Field for the first time since his arrival in the Department. During the day Major Reinburg gave the assembled officers a straight from the shoulder talk in which

he told them what he expected of them and the object toward which he wished the Air Service in the Philippine Department to work.

On Thursday evening the "Pancake" issued an "Extra", featuring the commissioned personnel of Clark Field. As was previously announced in our news letters, the "Pancake" is a screen magazine, edited by 1st Lieut. John Beveridge, Jr. Heretofore the "Pancake" has been contented in dealing with soldiers particularly, but the advent of an Extra offered opportunity for the officers to get off a little accumulated steam, and give every one a good laugh.

Training in aerial gunnery has been frequently interfered with, due to natives collecting around the targets to gather up the shells. Although warnings are posted around the range area, they are scarcely heeded and as soon as firing commences the field is swarming with people. On Wednesday a guard was thrown out and made a collection of eighteen persons. The people, including men, women and children, were turned over to the Post Provost Marshal who gave them emphatic instructions concerning the danger they were exposed to and additional warning.

The Third Squadron has on hand an airplane "Freighter", which was converted from a DH-4A and is modeled somewhat along the lines followed in conversion of airplanes for the Aerial Mail Service. This freighter is in frequent use for the ferrying of supplies from Camp Nichols to this station.

Aerial work for the week totaled one hundred nine flights of ninety five man-hours.

Clark Field, Pampanga, P.I., July 24.

With continuation of the Training Program, a Puff Target range, ground targets for Aerial Gunnery (Flexible guns), and a bombing range have been completed. Three bombing missions have been carried out and work with the Puff Targets and Aerial Gunnery are engaged in daily. Captain A. H. Gilkeson bombed with six 50 pound Mark III, Demolition bombs and the other two planes used the Mark II, 16½ pound Fragmentation bombs. All bombing was done from 3000 feet altitude. Due to long storage, and storage in unsuitable buildings, some of the bombs were defective and proved duds. However as an experimental beginning the missions were satisfactory. Officers are required to load and fuse their own bombs, supervised by the armament officer, on the morning scheduled for bombing prior to take-off.

Training in Aerial Gunnery, firing single and twin Lewis Machine guns, subsequent to all officers qualifying in firing fixed guns (Marlin), is progressive in character. Officers are required to qualify in firing Single Lewis before firing twin guns. The same kind of targets that were used for fixed gunnery are used: "L" type targets pasted on salvaged airplane wings arranged in four rows of three targets each. Targets are located on the North end of the airdrome and officers firing Lewis guns are required to fire over each side of the cockpit, the plane being flown from West to East and East to West along the line of Targets.

A period of thirty minutes is allotted for each problem with the Puff Targets. Officers are given their problem prior to take-off, and upon landing the problem is reviewed with the idea in view of discerning the errors made in observation and eradicating them. Telephone communication is maintained between headquarters and the Field commander. All data from the observing plane is communicated to headquarters by means of radio. Standard sets of panels are used in acknowledgment of observations and giving directions to the observer.

Aerial work totaled 102 flights of 102:15 man-hours.

Camp Nichols, Rizal, P.I., July 7.

With the sailing of the Transport "Thomas", Pay day, and the "Glorious Fourth", the week was well filled with excitement. Monday was a dull day on the Field, as far as work was concerned, mostly due to the fact that quite a few of the "old timers" were leaving for the States on the "Thomas", and it was the idea to be present on the Dock to bid them farewell and a pleasant trip across the "pond".

First Lieut. Cyrus Bettis started on his extended journey to New York, via the Suez Canal, on the "President Grant", which sailed for Shanghai on Friday, July 6th. He was accompanied by First Lieut. Raphael Baaz, Jr.

Captain Idwal H. Edwards and First Lieut. Neal Creighton, both of whom have been stationed at Kindley Field, Fort Mills, left on the "Thomas" for the homeland. Captain Lloyd N. Keesling, who has been stationed at Clark Field, Camp Stotsenburg, also embarked on the "Thomas".

On Saturday evening, June 30th, the Air Service gave a dinner dance at the Army and Navy Club, welcoming newly arrived Air Service Officers and in farewell to the departing Air Service Officers. There were about eighty present. Over the table was suspended a miniature airplane with "welcome" at one end and "Bon Voyage" at the other.

The Commanding Officer of the 42nd Air Intelligence Section again contributes:

"Several days ago the notorious 42nd descended a la rabble on a nipa shack, said shack being in the deep of the forest. The owner was deprived of much Government property to his great anguish of spirit. Possibly he was disgusted too. He didn't say. At any rate we took him down to the Pasay calaboose and hoose-gow, where he had a good cry on the judge's shoulder. This raid was conducted with our usual dash. The native was stripped of his very undershirt and drawers, leaving him standing in bare anticipation. Filipinos now have the impression that it is poor form to wear Government property to social functions. They were assisted in acquiring that impression. The supply of barrels is limited.

It has been suggested that the 42nd adopt a coat of arms, to-wit: a Moro's head rampant - no, juramentada - on a field of garlic with a large club superimposed - the club being partly imbedded in the head. This was intended to symbolize "Taps" so dearly loved by the soldiers, also of the fraternal feeling existing toward our little brown brother. Further suggestions as to a battle of square-faced gin were withdrawn. No action has been taken by the C.O., but when he starts he will probably take lots.

The mutilation division was very much pleased to hear itself discussed as being composed of "long headed" men. On investigation it was found that the wrong adjective had been used. The speaker meant "thick" not "long". HABLIA."

Captain and Mrs. T. J. Hanley honored Major and Mrs. G.E.A. Reinburg at tea at the Polo Club on Sunday, July 1st.

Camp Nichols, Rizal, P.I., July 17.

While on a photo mission last Monday, Lieut. John R. Glascock was forced down by engine trouble on the edge of the Bay at Mariveles, opposite Manila and beyond Corregidor. Although he landed on the rocks, turning over, neither he nor Sergeant E. R. Davis, 6th Photo Section, were injured, and Sergeant Davis succeeded in saving the camera with the plates intact. Lieut. K.N. Walker brought the news in, so the castaways were promptly rescued without having to spend a night without mosquito nets on that inhospitable shore, of which 'tis sung "the birdies have no feet, they've been burned off by the heat, on Mariveles".

On Wednesday afternoon, at five, the officers of Camp Nichols were entertained at the Manila Polo Club by Lieut. John R. Glascock, who recently returned from a short sojourn at Mariveles. Refreshments were served and a pleasant time enjoyed by all.

First Lieut. John Y. York, Jr. is a patient in Sternberg General Hospital, but is able to visit his Armament Activities occasionally when the doctor permits.

The Commanding Officer of the 42nd Air Intelligence Section continues:

"As this goes forward the 42nd Air Intelligence Section is engaged in a rather intense legal argument. Readers of the News Letter may recall that last week we raided a nipa shack. We further preferred charges against the proprietor in the civil courts. The result cannot yet be foreseen, but it is likely the judge will set him free with an apology and a box of cigars.

Lieut. Hicks expects to participate in the polo organization at present being formed among the officers. It is anticipated that polo will be quite expensive--if all who are policed buy drinks."

First Lieut. E. H. Guilford, having been on fifteen days' Detached Service in Manila, assisting the new Department Air Officer, Major George E. A. Reinburg, returned to duty with his organization as Group Communications Officer.

Other branches of the Service seem to be waking up to the fact that the Air

Service is a branch with unlimited opportunities, and no less than a dozen applications for transfers, both written and personal, have been made to the Commanding Officer from the Ordnance, Artillery, Anti-aircraft, and the Infantry. Yes, some of them have been approved. Also the number of re-enlistments is comparatively large for Camp Nichols.

Hqrs. 2nd Division, Air Service, Fort Bliss, El Paso, Texas, Sept. 1.

The Twelfth Squadron is occupied with preparations for the coming maneuvers of the Cavalry Division at Marfa, Texas. The Squadron will leave in company with the Motor Transport Train about the 19th. of this month making the march in two days. The pilots will join the squadron at the Marfa Airdrome. It is rumored that the Attack Group from Kelly Field will come to Marfa for the maneuvers.

1st. Lieut. J. J. O'Connell, A.S. has been selected to take part in the coming Pulitzer Races, and will leave for St. Louis about the 12th of September.

1st Lieut. C. L. Chennault, A. S. is preparing to depart for his new station in the Hawaiian Islands and will leave about the 10th of September.

During the week ending Saturday, August 31st, the squadron had a total of 36 hours fifty minutes and 47 missions.

Wilbur Wright Field, Fairfield, Ohio, Sept. 6.

Major A. W. Robins, Commanding Officer, accompanied by Mrs. Robins, left the field by automobile for Washington, D.C. and will view the bombing events off Cape Hatteras, probably from the decks of the U.S.S. Henderson.

Lieut. E. E. Adler, accompanied by Lieut. G. V. McPike, left on Sunday Sept. 2 by airplane for Washington from which point, after viewing the bombing events off the coast, they will make inspections as to supply conditions at Mitchel Field and Langley Field before returning to this station.

Capt. F. F. Christine reported for duty this week after having completed the course at the Photographic School at Chanute Field. He immediately departed, however, for the home of his sister in Philadelphia, who is quite ill as the result of a recent nervous breakdown.

Major Hugh Knerr, Commanding Officer of the 88th Squadron, left on leave of absence in excess of two months. Accompanied by his family, he departed by automobile with an itinerary to include the northwestern country and the Yosemite Valley Park.

Lieut. W. J. Hanlon reported back for duty after a leave of absence of two months. Lieut. Hanlon left the field by airplane, accompanying Lieut. Skanse, who was ferrying a Martin Bomber to Kelly Field at San Antonio. After a few days renewing old acquaintanceships, Lieut. Hanlon proceeded to his home in San Francisco, visiting his mother whom he had not seen for nearly four years. Six weeks were spent in the vicinity of San Francisco, during which time the Lieutenant had an opportunity to fly from Crissy Field and for the first time to view from the air the scenes of his childhood. He was in San Francisco at the time of the death of the late President and has many interesting stories to tell of the interest and grief displayed by the people of that vicinity. He returned filled with enthusiasm for his new work with the Compilation Department.

Lt. H. H. Mills returned from six weeks' leave of absence, the time having been spent in motoring east as far as New Brunswick, returning thru southern Canada and northern New York. He was accompanied by Mrs. Mills and his mother. Upon his return, he found word awaiting him to report to McCook Field for temporary duty as alternate to Lieut. Corkille, who has been selected to fly one of the Curtiss Racers in the Pulitzer Races at St. Louis October 3.

Many temporary changes are in effect at the present time. Lieut. W.S. Hamlin, accompanied by Mrs. Hamlin, left on a 30-day leave of absence by automobile for a tour of the New England states. During his absence, his duties as Finance and Personnel Officer will be taken over by Lieut. Thomas, Post Adjutant. Lieut. Guy Kirksey is away on leave of absence, visiting with Mrs. Kirksey's folks in the vicinity of Washington, upon the conclusion of which he will join Capt. Stevens at Pope Field for a photographic mission in that vicinity. During his absence, his duties as Photographic Officer of the 7th Photo Section, have been taken over by Lieut. Gothlin. Lieut. M. N. Stewart has been detailed to Chanute Field, leaving here about September 15th. to take the new nine months' Communication Course.

The Post was favored with a visit by Major Fickel on August 30, the Major

remaining here for three or four days, being in conference with the Commanding Officer and Captain Adler of the P.M. & C. C. in matters relative to supply, maintenance, cost, etc.

Capt. Thomas F. Weldon, M.C., reported for duty at this Station to replace Capt. B. J. Peters, Flight Surgeon who left a few days ago for Carlisle, Pa. Prior to Capt. Peters' departure, the McGregor Golf Club entertained the officers with their families from this station at the McGregor Club House, Capt. Peters being the star guest. A round of golf was enjoyed, followed by a most enjoyable luncheon, prepared by the ladies of the McGregor Golf Club. Following the luncheon, impromptu speeches were indulged in, affording the speakers many opportunities to remark, in jest, opinions of each other which probably would not be expressed otherwise. Capt. Peters was presented with a sample copy of the new "Yardmore" brassy, perfected by the McGregor Company.

Certain of the ladies of the Post are adding to the prestige of the Field by virtue of their ability in the great game of golf. Upon the invitation of the ladies of the McGregor Golf Club, Mrs. Robins, Mrs. Page, Mrs. Neirgarth and Mrs. Adler, joined forces with the latter in a match game with the ladies of the Dayton Community Club, playing the first match on the Community Course. The ladies from the Community Club were given a very satisfactory "trouncing" with the final score of 18 to 7, several numbers of the 18 being contributed by the representatives of this Field. A return match is to be played upon the McGregor course where, with the advantage of playing on the home course, it is expected our representatives will make an even better showing.

Lieut. D. L. Decker, Q.M.C., who for the last year served as Utilities Officer on this Post, left on August 26 for his new station at Ft. Thomas, Ky. The evening before his departure was made memorable by a little farewell party given by him and Mrs. Decker to the officers of the Post in the Officers' Club. A most enjoyable luncheon was followed by dancing. Lieut. Decker, by his never failing courtesy and desire to serve, has made his transfer a direct loss to the Post in the eyes of his fellow officers.

A flight of six D.H.'s left this Field on Saturday, August 25th for Louisville, Ky., to participate in the dedication of the new Bowman Field. The affair was a huge success, and the entertainment by the Kentucky Aero Club of the visiting pilots, in no way belittled the reputation which Kentucky holds for hospitality.

On Thursday, August 23, Mrs. H. H. Bartron entertained with a luncheon followed by bridge, in honor of her sister, Mrs. Pavey, of Columbus, Ohio. Covers were laid for sixteen, the guests being wives of the officers at Wilbur Wright Field.

McCook Field, Dayton, Ohio, September 10.

Captain George W. McEntire, Lighter-Than-Air-Section, received orders to report to the Primary Training School, Brooks Field, San Antonio, Texas, on or about September 10, for a course of instruction in heavier-than-air training.

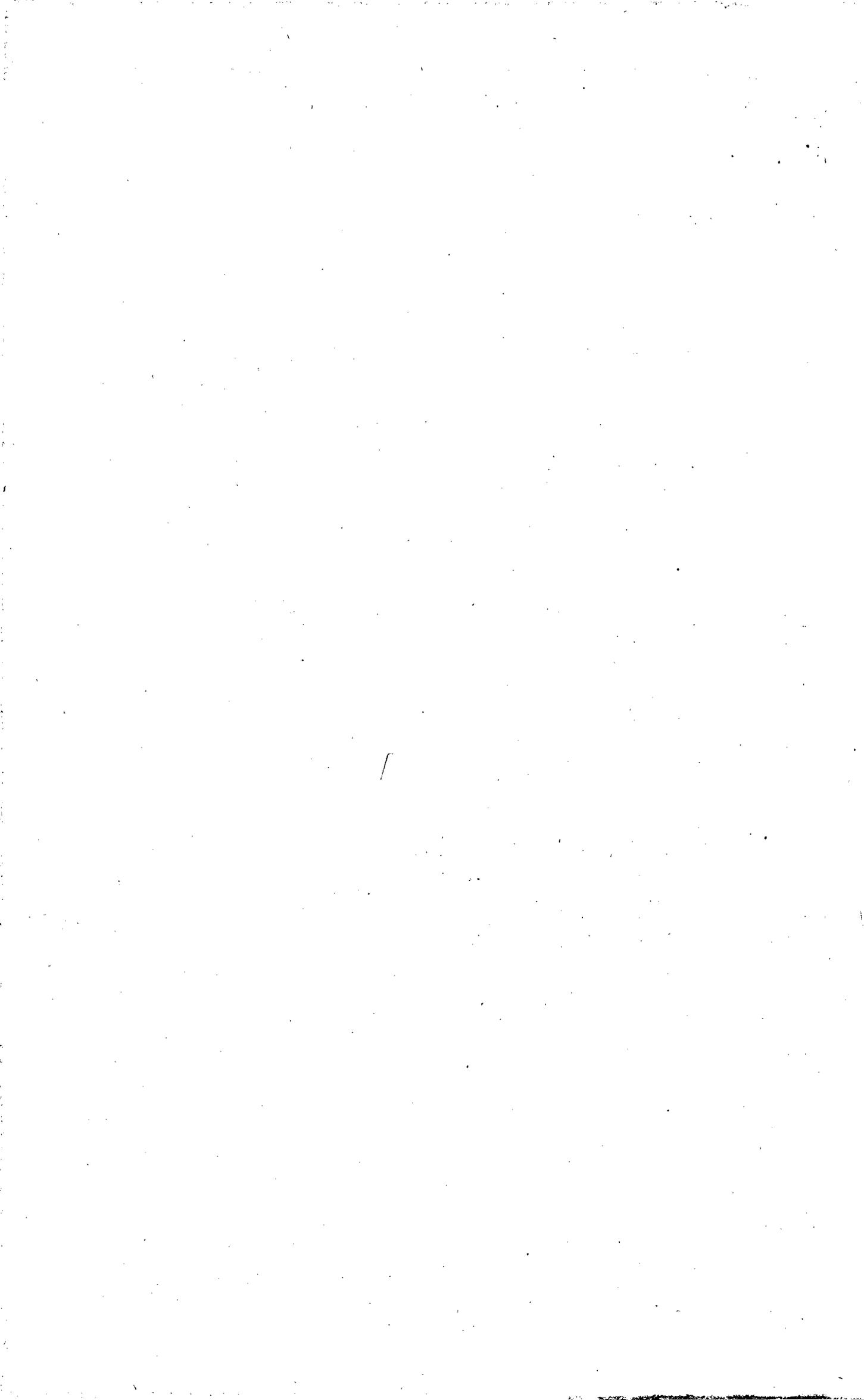
First Lieuts. John D. Corkille, Brooks Field, Harry Mills, Wilbur Wright Field, and Walter Miller, Crissy Field have reported at McCook Field for temporary duty in connection with the Pulitzer Cup Races.

First Lieuts. Albert F. Hegenberger and Oscar W. Monthan have received notice of transfer to the Hawaiian Department and will sail on the transport scheduled to leave San Francisco on or about September 26.

Lt. Sam Mills, who is in charge of the Engineering School, returned from an extensive automobile tour through the West. Leaving Dayton on August 24, Lt. Mills, with his mother and father as passengers, arrived in due time in Seattle, having taken in the Yellowstone Park on the way. He then proceeded through California, returning by the southern route, choosing the Grand Canyon as one of the many points of interest from which to send picture post cards to his friends.

Major Alfred H. Hobley returned August 22 from a month's stay in Augusta, Michigan, where it was evidently wet, as the Major says he practically lived in his bathing suit all day long. A beautiful coat of tan bore out the Major's statement.

Announcement is made of the resignation from the Air Service of Lt. Kenneth G. Fraser. Lt. Fraser has allied himself with lumber interests in the state of Washington and, although his headquarters will be in Seattle, his duties will take him chiefly to the forest territory thereabouts. He has already been greatly missed at McCook, and the best wishes for success follow him.



Information Division
Air Service

October 12, 1923.

Munitions Building
Washington, D.C.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE October 15, 1923.

ABOVE THE CLOUDS FROM THE OHIO TO THE HUDSON

By our McCook Field Correspondent

A unique cross-country, non-stop flight was made by Lt. Albert F. Hegenberger and Mr. Bradley Jones, navigation engineer at McCook Field, on September 6th when the greater part of a journey from Dayton to Boston was made, completely out of sight of land and flying at an altitude of more than 10,000 feet.

Undaunted by reports of adverse weather conditions, Lt. Hegenberger and Mr. Jones took off at 10 A.M. A stock DH airplane was used, modified to carry large gasoline and oil tanks. A complete vertical instrument board, holding an air speed meter, a flight indicator, and earth inductor compass dial was placed in the front cockpit. The rear cockpit was especially fitted to facilitate the taking of sextant observations. It contained a magnetic compass, the control dial of the earth inductor compass and in the floor was a large drift sight.

The sky was filled with large cloud patches, which increased as they flew eastward. By means of a new type of drift meter, the drift to the north by a cross wind was measured and the compass course rectified accordingly. After forty minutes of flying the stadium of Ohio State University at Columbus was sighted to the south of the course. Then the clouds becoming quite dense, the plane ascended above them. A brief glimpse of the Ohio River at Beavertown gave assurance that the course was being correctly followed, then the blanket of clouds again hid the ground.

The lower layer of clouds stretched from 300 to 7000 feet altitude. The plane climbed above this storm only to encounter another strata of clouds at 9,000 feet. Climbing through this, the flyers found themselves in clear sunlight a little above 10,000 feet. A solid wall of clouds stretched beneath them. Not a glimpse of a landmark was obtained thereafter for several hours. The entire state of Pennsylvania was passed over. At 3:40 P.M. Lt. Hegenberger estimated that he should be close to the Hudson River, so he descended through the clouds and the Hudson was crossed not five minutes later. From the Ohio to the Hudson River, the trip had been made without sight of the earth. The flight was continued under the clouds, passing over Hartford, Connecticut, which was recognized and was the first check on the course after 400 miles of travel. As Hartford is but a few miles off the direct course, the flyers were delighted with the results of their experiment. The new airport at Boston was reached without incident and a landing accomplished at 6:25 P.M. daylight savings time, making the time consumed by the flight seven hours and twenty five minutes. But a small ration of gasoline remained in the tank. The latest model of earth inductor compass was used to steer by, and it functioned perfectly. The purpose of the trip was the testing of these instruments.

Lt. Hegenberger, who has been in charge of the Instrument Branch at McCook Field, is one of the foremost exponents of the use of navigation instruments in flying and, as an example of such use, this flight is looked upon as a remarkable achievement.

NEWSPAPER ENTERPRISE AND THE AIR LANE

Perhaps in no line of business is competition so keen as between various individual newspapers, newspaper syndicates and the photographic syndicates furnishing the pictures which go to make up the photographic page featuring a good many of our prominent newspapers. All of them are literally on their toes in their endeavor to "get there first". Ever since the Dempsey-Willard prize fight in Toledo, Ohio, on July 4, 1919, it has been a hotter and hotter race to see who got there first.

It seems that airplanes today are hired much like taxicabs, but generally always at exorbitant prices. Each paper or syndicate must bear this burden

individually in their endeavor to give their public the best and to give it first. Airplanes have brought pictures from all of the fights which Dempsey was engaged in since he became the world's champion. They also brought photographs of the late President Harding's inauguration; of the burial of the unknown soldier at Arlington, Va.; of the funeral of President Harding, and just lately of the horrible catastrophe in Japan which has rendered that country desolate. It is concerning this last adventure in news gathering which it is desired to touch upon here.

It appears that photographs of the devastation caused by the earthquake in Japan were taken aboard the Steamship "Empress of Australia" while it was moored to the quay in Yokohama Harbor as the quake struck the doomed city. These pictures were purchased by the Pacific and Atlantic Photos., Inc., using the radio as the method of communication. When the steamer reached Victoria, B.C., it was met by a seaplane, on board of which was a Pacific and Atlantic Photos correspondent. He took the pictures and beat the steamer to Seattle by seven hours. At Seattle no time was lost in making sets of prints of same. These sets were then rushed eastward from Seattle in a U. S. Army airplane piloted by Lieut. Victor E. Bertrandias, Air Service, with Lieut. Kenneth E. Garrett, alternating pilot. These two airmen happened to be in Seattle at this particular time, having just completed a coast to coast flight in the interest of aerial airways.

The Chief of Air Service authorized them to carry the pictures to Chicago. They left Seattle at six o'clock on Sunday morning, September 16th. Crossing the Rockies, nightfall found them in Montana with the continuous rain and fog forcing them to fly so low that they barely skimmed the peaks. They were forced down once, but dawn found them on their way again. The finish of the second day found them again in the rain which forced them to land at St. Cloud, Minnesota, at ten o'clock Monday, the 17th. They had been in the air more than 17 hours out of a total of 40. The pictures might have been delayed for some time at St. Cloud had it not been for the foresight of the P. & A. Service. In Minneapolis, 60 miles from St. Cloud, two Curtiss pilots, P. M. Boyd and H. J. Quinn, were waiting. A P. & A. representative tore in an automobile to St. Cloud and back in time to give the pictures to the Curtiss men at dawn of Sept. 18th. These two airmen were also in constant difficulties because of the rain and mist, but landed at last at the Checkerboard Field at Maywood, Ill., at 10:18 o'clock, 52 hours out of Seattle and considerably ahead of any competing news picture service. Another fast plane was waiting at Maywood, and the picture sets were transferred to it, and at 10:20 a.m. it was winging its way to Cleveland and New York -- a real adventure in news pictures.

The General Manager of the Pacific and Atlantic Photos., Inc., sent the following letter of appreciation to General Patrick:

"The Pacific & Atlantic Photos wishes to thank your service for its assistance in bringing to Chicago our pictures of the Japanese earthquake. The Air Service is to be congratulated on the remarkable flight made by Lieuts. Victor Bertrandias and Kenneth Garrett. These men battled through storms that forced all civilian fliers down, and they reached Chicago twenty-four hours before civilian fliers who started from the west at about the same time.

Under cover I am sending a few sheets from the issues of various subscribers showing the publicity that has been given the Air Service as the result of this flight. I am also enclosing a notice we sent to each of our 120 subscribers with the photographs. The same notice has since been sent to more than 200 additional newspapers.

Again permit me to thank the Air Service and assure you the Pacific & Atlantic Photos will always welcome an opportunity to reciprocate.

Sincerely yours,

A. B. BAKER, General Manager."

AMERICA STILL RETAINS THE ALTITUDE RECORD ✓

Newspapers recently carried the announcement that Sadi Lecointe, the famous French high speed pilot, had carried off the record held by Lieut. John A. Macready, Army Air Service, of reaching the highest altitude ever attained by an airplane pilot. The British aeronautical publication "Flight" makes the following statement in this connection:

"Although at one time it was thought that Sadi Lecointe had succeeded in

bringing back to France the world's altitude record, it now appears that on his best performance Sadi only equalled the record established by Macready. On August 1 Sadi made a first attempt, his two barographs registering 10,800 m, and 11,000 m, respectively. On being corrected these figures became 10,127 m. On a second attempt, on August 8, Lecoq's altitude as officially corrected and passed was 10,518 m., or exactly the same as the record figure. On a third attempt, on August 14, Sadi's barograph read 10,800 m., but this figure had not yet been checked by the Laboratoire des Arts-et-Metiers."

CHANGES IN AIR SERVICE ORGANIZATIONS IN HAWAII

The organization of the 17th Composite Group, was recently effected in accordance with General Orders of Headquarters, Hawaiian Department, and as then made up was comprised of the following:

Group Headquarters Detachment - 4 officers and 9 enlisted men.

4th Observation Squadron: 6 officers and 119 enlisted men.

19th Pursuit Squadron: 5 officers and 124 enlisted men.

The 19th Pursuit Squadron was removed from inactive status and placed on active status. The former squadron insignia and colors were resumed and placed on its ships. Ships and material were loaned to the 19th Squadron by the 4th Squadron pending the arrival of its own equipment of M.B.'s. At the present time neither squadron is dependent upon the other in administration or operation.

After being quartered and rationed for 18 months at Schofield Barracks proper, the men have been moved to quarters on Wheeler Field and have their own mess. This move has increased morale and efficiency at least 100 per cent. More than two hours daily in working time and many gallons of gasoline have been saved. The Group now has a Branch Post Exchange, Restaurant, Pool Room and Athletic Field of its own. Arrangements have been made with the Post E. & R. Officer for the installation and service of moving pictures.

Despite the fact that this Group was organized with a two-thirds shortage of commissioned personnel, the process of organizing has been successfully completed, a large amount of equipment obtained, and efficient functioning has been maintained.

SEARCHING FOR A LOST RECONNAISSANCE PARTY IN HAWAIIAN MOUNTAINS.

A report recently received from the Hawaiian Department tells of a search made by pilots of the 17th Composite Group, stationed at Wheeler Field, for a reconnaissance party sent out from the 19th Infantry, consisting of one officer and three enlisted men, reported to be missing and probably lost in an almost inaccessible region of the Koolau Range. These mountains are considered as treacherous and impassable as any in the Territory of Hawaii, due to continuous low overhanging clouds, extremely dense underbrush, constant rain and deep perfidious gulches with perpendicular sides.

On the morning that the Commanding Officer of the 17th Composite Group was notified that this reconnaissance party was long overdue and was ordered to send out searching planes, he had planes in the air 45 minutes later. The start was made at 6:45 a.m., and during the succeeding three days planes were continuously flying around the range. Only on a few occasions were they able to cross over between the ridge of the range and clouds. All occupants of planes on these missions reported extremely unfavorable weather conditions, and several reported that they had only narrowly escaped crashing. Some pilots lost control and dropped hundreds of feet into gulches before regaining mastery of their ship. One officer reported a single drop of approximately 750 feet. Altogether thirty flights were made in three days.

The report states that the flights were unhesitatingly carried on in spite of the difficulties and continued danger, and that they were made without incident indicated that the Group is well trained and maintained, and is prepared to carry out its mission.

No mention is made as to whether the reconnaissance party in question was eventually located.

AIRPLANE GOLF. ✓

An innovation in message dropping practice has been instituted by members of the 12th Observation Squadron, stationed at Fort Bliss, Texas, under the

name of Airplane Golf. To play the game two teams are required, a player on the "links" and a ship in the air for each side. The game consists of dropping the balls on the successive greens as near the hole as possible, when the player attempts to make the hole in the usual way, the lowest score winning as in golf.

HOW AIRWAYS WORK IS PROGRESSING

By Lt. Burdette S. Wright, Chief, Airways Section

Lieut. Burdette S. Wright, Air Service, Chief of the Airways Section, Office Chief of Air Service, under whose direction excellent work is being done by the Army Air Service in making aerial surveys of landing fields all over the country, submits an interesting report of a week's journey by air to various localities in connection with general airways matters. His observation of conditions found at the various points visited leads to the conclusion that encouraging progress is being made along the line of establishing landing fields in different sections of the country and that the outlook for the future development in this regard is very bright.

Lieut. Wright's report of his trip is as follows:

"On orders in connection with the inauguration of the test of night flying over the air mail airway between Chicago and Cheyenne, and general airway matters at fields on the Model Airway, the undersigned left Washington in a DH4B with 135-gallon gas attachment, recently turned over to airways work by General Patrick, on Monday, August 20th. at 8:05 A.M., and in two hops, of 4 hours and twenty-five minutes to Dayton and 4 hours and twenty minutes to Iowa City, arrived at the latter place at 5:15 Central Time, where the night was spent.

The field was found to be enlarged to an L shape of 2500 feet east and west by 1800 feet north and south, the new hangar having been constructed at the east side near the road, of concrete blocks, with concrete floor, and furnished with store room and wash room facilities. The hangar cost the Air Mail \$7,000 and is the best hangar of its kind the undersigned has seen, being particularly adaptable for use on commercial and municipal fields requiring space for four or five airplanes of the DH4 type. The field is equipped with 18-inch incandescent searchlights, mounted on a windmill, and is the midway point between Chicago and Omaha, now being used for the servicing of planes en route at night between these points. The radio station is available for the transmission of information in connection with the dispatch of planes and for the dissemination and receipt of weather information.

On August 21st a flight was made from Iowa City to Omaha, via Des Moines, at which time opportunity was taken to observe the various fields selected at twenty-five mile intervals by the Air Mail Division for emergency use, and also for the installation, in the northeast corner of each, of an 18-inch incandescent searchlight on a wooden tower, in the base of which a small house was constructed for emergency supplies and spare parts for the planes. These various lights which are used as beacons are revolved at night giving, in effect, a blinking or flashing light. At three mile intervals were noted the American Gas Accumulator Co. flashing light installed as additional route lights or beacons in case of such poor visibility as to make it impossible to see the larger lights placed at 25 mile intervals.

The night of August 21st was spent at the Ft. Crook field, where a landing was made. The field itself proved to be entirely adequate for night flying and was well provided with various aids in the way of beacon and flood lights. In addition, the Air Mail has placed upon the field one of the A.G.A. illuminated wind vanes.

A large gathering of men interested in the development of aviation was present at the field and included 2nd Asst. Postmaster General Paul Henderson, Mr. C. F. Egge, Supt. of the Air Mail, Mr. Glenn L. Martin, Mr. McGee, in Charge of the Night Flying Facilities, a number of Air Mail pilots, Mr. C. F. Redden, Mr. Bell of the Aeronautical Chamber of Commerce, Mr. Boets, formerly Major, Air Service, of the A.G.A. Co., Mr. Patterson of the Sperry Gyroscope Co., and others. Tremendous interest was shown by the large numbers of civilians who appeared at the field in the evening to witness the night test. This gathering diminished somewhat as the hour grew late, but a number remained at the field to view the west-bound mail brought in by plane, arriving at 10:54 and leaving at 11 P.M., and the east-bound mail arriving at 3 A.M. and leaving shortly thereafter. Exceptionally good landings were made by the Air Mail pilots by the aid of the lights installed

on the field and the use of the lights on the planes, which were copied from the wing tip lights recently developed at McCook Field.

On August 22nd, the undersigned left Omaha, and, making a short flight, owing to the lack of rest the night before, arrived at Iowa City, where he remained over night.

On August 23d the take-off was made from Iowa City at 9:55 A.M., and landing was made at Davenport, Iowa, at the Wallace Prothers Corporation field, at 10:30. Activities were found to be carried out commercially here, in the form of the training of students and the holding of ships available for various commercial enterprises for which the field is often called upon. Conferences were held with the commercial aviators at this point, and the flight continued to Chicago, where the Air Mail has established an excellent field at Maywood. The undersigned talked with various authorities here on the arrangements made for the carrying on of the routine flying of the Air Mail; then visited the Repair Depot of the Air Mail at this point, finding it to be of an excellent character. The new type of Martin plane, built around the 180 Wright motor, was seen at this depot, and the pilots were questioned with reference to its performance.

Shortly after lunch, a take-off was made and flight continued to Chanute Field, where conferences were held on airway and photographic matters with the officers.

On August 24th a flight was made from Chanute Field to Scott Field, where conferences were held with reference to the facilities to be provided for the visiting pilots after the Pulitzer Races in October, and, further, in connection with the organization of an airway control office at Scott Field.

Departure was made from Scott Field at 11 A.M., and after circling over the municipal field at Vincennes, Ind., noting its condition and the extent of organization, it was decided to make no landing, as no personnel were seen to be present at the field, and the flight was continued to Louisville, Ky., where the undersigned stayed the remainder of the day.

On August 25th, prior to the opening of the flying in connection with the dedication of the field, the undersigned flew about Louisville and the towns in the immediate vicinity for the purpose of arousing interest in aviation, the plane carrying the word "Airways" underneath the lower wing, and the flight being made with the intention of reminding the people that that day was the one on which the meet was to be held in Louisville. The meet itself, or aerial exhibition, at Bowman Field was conducted by the Aero Club of Kentucky, the arrangements being made through the cooperation of Lieut. Brookley, of McCook Field, who visited Louisville one week prior to the date of the exhibition for the purpose of arranging the program. The flying was carried out without mishap and was of an excellent nature. The formation from Chanute Field, headed by Major Martin, deserve the greatest commendation, and the flight of Lieutenants Brookley and Pearson in two Voughts tied together by a sixty foot cord, effecting landings without the breaking of the cord shows the greatest of precision in flying. The triple parachute jump by three enlisted men from Chanute Field also proved of great interest.

There were about forty planes at Bowman Field during the exhibition, including representatives from Selfridge, Fairfield, McCook, Chanute, Bolling, Schoen Field at Indianapolis, Norton Field at Columbus and Blackwood Field at Nashville, Tenn. The hospitality of the Aero Club was unprecedented, and the phrase on the invitation reading "your money's no good in Louisville," was strictly adhered to in all ways, even to the furnishing of taxis and soft drinks at the field. The dinner given the night of the exhibition (August 25th) at the Edgewater Club, and the hospitality and courtesy shown following it at the Louisville Country Club caused every aviator to leave Louisville with fond memory and the decision to make an early return visit.

Leaving Louisville August 26th, the undersigned, making one stop at Fairfield (where conference was held with Lt. Eaton on the status of the radio installation) concluded the week's flying at Bolling Field at 4:35 P.M., making a total of 28 hours and 15 minutes flown in the seven days' absence from Washington, which included 12 flights.

FLIGHT AROUND THE WORLD BY PORTUGUESE AVIATORS ✓

The Round the World flight to be attempted early next year by Captain Sacadura Cabral and Admiral Gago Coutinho for the Portuguese Government will

be made in Fokker seaplanes, according to an announcement recently made by Mr. R. B. C. Noorduyn, American representative for Anthony H. G. Fokker, famous Dutch airplane manufacturer.

In connection with this attempt to circumnavigate the world before the other nations do so, Mr. Noorduyn said that he had been advised by cable of the purchase of five seaplanes by Captain Cabral and that he had also been requested to cooperate with the Portuguese expedition when they reached the United States.

The route of the flyers as originally outlined is Lisbon to Japan, a distance of 9870 miles, Japan to Newfoundland, 7580 miles, and Newfoundland to Lisbon by way of Fayal and Punta del Gada. According to later advices this route will be slightly changed to include the United States.

Commenting on the project, Mr. Noorduyn said: "This flight will be watched with interest by U. S. officials because the planes Cabral will use are of somewhat similar design to the Fokker planes purchased by the United States Navy. With the proposed U. S. Round the World Expedition, to be attempted by the U.S. Air Service, the British effort, and also that of the French, there has developed an international air race of greater importance than any attempted up to this time."

Captain Cabral received recognition in aeronautical circles last year when he made the first flight from Lisbon to South America. These seaplanes have a wing spread of 65 feet and carry a useful load of 3100 pounds at a speed of 110 miles an hour.

CONSIDERABLE FLYING AT KELLY FIELD

Flying record for the Tenth School Group at Kelly Field, San Antonio, Texas, for the month of August is as follows: 1st week, 733 hours, 55 min.; 2nd week, 643 hours, 20 min.; 3rd week, 407 hours, 25 min.; 4th week, 286 hours, 15 min. Maximum hours in one day -- 150 hours.

Inclement weather made it necessary to discontinue flying for several days during the last week of August.

HOW THE PRESS GOT THE BOMBING STORY.

On the stormy sand-blown coast below Cape Hatteras a drama was enacted the night of September 5th, in which the esprit de corps of the Army Air Service was the dominant theme. The battleship "Virginia" had been sunk in the bombing maneuvers by the Army flyers, and the newspaper and special correspondents aboard the Transport "St. Mihiel" wrote up their stories, which were to be delivered by air to the nearest telegraph station where they would be sent out in time to catch the morning newspapers made up at night. Two Air Service lieutenants, who were designated dispatch bearers, were put aboard a mine planter and started for the shore at Cape Hatteras with the messages and stories. It was the plan to land at the temporary airdrome below Hatteras and fly with the dispatches to Langley Field, where they would be delivered to the telegraph office at Newport News, Va.

The mine planter, however, arrived at the shore only a short time before dark and, in the meantime, storms had brewed along the coast to the north and airplane flights at that hour and in the face of the storms would have been a most hazardous and perhaps foolhardy undertaking. There seemed to be no chance to get the dispatches through, and every newspaper was holding open space to receive the stories on the bombing results. Norfolk, Va., the nearest telegraph office capable of handling the volume of the matter, was over 150 miles away. The two lieutenants bearing the dispatches raved, coaxed, threatened and did everything they could to see if there was any possible way of delivering the "messages to Garcia", but all in vain. They had been told it was an Air Service problem, and it was up to the Air Service to deliver them.

Darkness was fast approaching, and with it came despair to the two dispatch bearers. Finally, Lieut. F. N. Shumaker, of Langley Field, who was the communications officer at the little airdrome at Cape Hatteras for the bombing operations, asked the officer in command of the station if he would let him take a ship and try to get through. He explained that he had once been in the newspaper game, had been an Associated Press dispatcher at one time, and realized the importance of getting these stories through. The Commanding Officer forbade his taking a ship off in the teeth of the storm and the darkness. Lieut. Shumaker then explained

that the little temporary field telegraph and radio set, which he had set up in a deserted Coast Guard house, had never given any satisfactory service, as several other people up the long coast line were on it and it was very improbable that anything like 15,000 words of dispatches could be put over it, even if a clear wire could be procured, but he declared that he would try and see if for once connection could be made with Norfolk via Virginia Beach and Cape Henry stations. He put extra batteries on the little set and started work at the telegraph key at about 6:45 p.m.

After two and one-half hours of the most difficult labor, he managed to get other "parties" up the line off and got a clear wire to Norfolk. He secured the cooperation of Mr. Newsome, of the Cape Henry weather station, who assisted in keeping the wire clear. There was still great doubt as to whether any long messages could be sent, as the static was playing havoc with the wires and other people kept getting on at intervals and had to be asked to get off, so he sent a radio to General Patrick, Chief of Air Service, at sea on the "St. Mihiel", which was returning to Washington, that the dispatches were stranded and could not get through, and to notify the correspondents accordingly.

Soon after communication was established with Norfolk, however, the static began to subside a little, other parties began to realize that something important was going on, and the wire got better. Lieut. Shumaker managed to get off the Associated Press dispatch, and on the end of it was tacked a paragraph that the other stories could not get through.

It should be stated here that when the two officers left the "St. Mihiel" the "New Jersey" had not yet been sunk, and the stories which they carried told that the bombing would be resumed the following day on this ship. But when the mine planter carrying the officers got about seven miles away, they saw a formation of bombers sweep over the "New Jersey" and drop their bombs. They timed the shots, one of which proved fatal and sank the ship. Immediately a wireless was sent the General Staff Officer on board the transport asking if the correspondents wanted this last chapter written in their stories. No reply was received due, it was later learned, to the fact that the mine planter's wireless was not in good order, so the last chapter was written in anyway, and all the stories carried the full report, much to the surprise of the writers who read their stories later when they returned. Many of them do not yet know how it happened that their stories contained the full report.

After Lieut. Shumaker got the Associated Press story through, he started on the Universal News story, then followed the New York Times story. The "last chapter", written by the two officers coming in on the mine planter, was stuck, and the Norfolk operator was told to repeat it on all the stories. After about three hours, Lieut. Shumaker began to get his "hand in" on the telegraph key and some of the newspaper code that he had used several years ago began to come back to him. By the dim lantern light which the wind was trying to extinguish Shumaker sat and fed the messages off as fast as the wire capacity would stand. The two officers who brought the messages and a Radio Sergeant remained by him. The Sergeant made a large pot of coffee, and it was given Shumaker as he continued to send. The officers with him put cigarettes in his mouth and lit them to make every precious second on the wire count. At regular intervals there was a pause from Norfolk as the "stuff" was being taken from the typewriter that was receiving the Hatteras messages to another key that was sending it on direct wires right on into the newspaper offices where it was being set into type immediately. Following the New York "Times" story came the New York "Tribune's", then the New York "World's" and the Chicago "Tribune's". Following these came the smaller papers and afternoon service agencies.

At 1:30 a.m. Lieut. Shumaker sent another radio to General Patrick on the transport that the messages were being put through. At 2:30 a.m. he had sent the last of the dispatches, and the "Air Service Problem" had been solved, but Shumaker was nearly exhausted. The stories had been edited down by Shumaker and by the two officers who carried them before they were put on the wire in order to cut out unnecessary words, which resulted in a saving of considerable time. Incidentally, a few inaccuracies were also corrected.

Lieut. Shumaker had pounded out about 15,000 words and had made good the promise of the Air Service to get the dispatches through in time and, as a result, he is receiving the highest admiration of his brother officers for the feat.

AVIATION IN CHINA IN HOPELESS SITUATION ✓

Aviation is the plaything of militarism in China and commercial development is an impossibility, judging from remarks made to a representative of the "Japan Advertiser" by Captain C. H. Dolan, former instructor in aviation in the employ of the Chinese Government. Some of the readers of the NEWS LETTER will recall Captain Dolan, who served in France during the war as a member of the famous Lafayette Flying Escadrille, and who, upon his return to the United States, served for a period of about two years in the Information Division of the Army Air Service.

Captain Dolan recently finished a two-year contract in the Chinese service, and has just left en route to Honolulu with his wife, where they intend to stay for several months. Mrs. Dolan's parents have large sugar interests in Hawaii.

Reverting to the aviation question in China, Captain Dolan states that "the extravagant plans of the aeronautical bureau in the Chinese government have practically vanished in thin air, and the immense sums of money spent in airplanes, spare parts and equipment have been wasted.

"Like every other kind of business in China, commercial flying will never be placed on a paying basis until there is a government to guarantee safety of property and encourage foreign capital to invest in Chinese enterprises. A stable government will not be seen in China for generations. For that reason the progress made in aviation through the aid of four foreign instructors can be regarded as wasted."

Two air routes exist in China at present, one from Peking to Tientsin and one from Peking to Peitaiho. They are not very successful, as there is no money to maintain them. The government has exhausted the Vickers loan which kept the aviation school running for a time in addition to buying equipment.

"Commercial flying is impracticable, however, as the pilot runs the chance of having some tuchun confiscate it as 'just what he needs' to protect his own interest," Captain Dolan says. "Neither Chinese nor foreign capital can be attracted, as no guarantees against theft can be made. For the same reason American business men are closing up shop and moving out of China, convinced that the political situation is hopeless and that it will remain in its present state for years."

FLYING STATISTICS FROM BROOKS FIELD

A new system has been installed in the flying office of the Primary Flying School at Brooks Field, San Antonio, Texas. This system shows the total of flying hours as the month progresses and also the totals of the previous months. The figures for August show that there were 969.55 aircraft hours, 1670.30 man hours, 187.10 aircraft cross-country hours, 365.35 man cross-country hours, or a total cross-country man miles of 30,278 and a total of man miles for the field for the month of 109,793.

FACILITATING FLYING OPERATIONS AT KELLY FIELD

The three operation huts now under construction at Kelly Field, San Antonio, Texas, are practically completed and will shortly be put in operation. Heretofore attempt has been made to carry on this work within the respective Group Headquarters buildings, with the Wing Operations Office in the building assigned the School, but due to the limited space therein it prevented the full functioning of same.

As all heavier-than-air students finish their training at this station, every effort is put forth to operate all departments along "Model" lines. The operations huts when completed will function in a like manner. Complete equipment and map data will be available for all pilots who go on cross-country flights. A weather map, similar to the one now in use at Bolling Field, is believed will be one of the most complete "cross-country information bureaus" in the Air Service. The obtaining of landing field facilities is not being neglected, and every effort is being put forth to eventually obtain such data covering all towns of any size in this part of the Southwest.

A NEW HOME FOR THE SEVENTH PHOTOGRAPHIC SECTION

The 7th Photographic Section, stationed at Wilbur Wright Field, Fairfield, Ohio, is now installed in a completely equipped series of rooms on the sunny side of the Headquarters Building, where the conditions are ideal for developing and printing. The photographic section has recently made some excellent pictures of the Barling bomber in flight and of the various racing planes which have been going through the try-outs at Wilbur Wright Field.

GOVERNOR OF ALABAMA ENCOURAGES AVIATION

The Montgomery Advertiser of Montgomery, Ala., recently printed a proclamation issued by the Hon. William W. Brandon, Governor of Alabama, wherein he reviews briefly the tremendous progress that has been made in the science of aviation, and especially its remarkable commercial and industrial utility. He mentions the fact that the development of aerial traffic imposes certain duties and obligations upon States, counties and municipalities as well as upon the Federal Government. His proclamation should be of interest to all in the Air Service, and the following paragraphs from the proclamation are therefore quoted, viz:

"Now, therefore, I, William W. Brandon, governor of the state of Alabama, in consideration of the premises and by virtue of the authority vested in me, by this instrument do appeal to the municipal officials and civic organizations of this state to effect the following:

"1. Locate a terrain in proximity to their town or city which can be used and designed as a municipal landing field for aircraft. Such field should be smooth and dry of surface, reasonably level, unobstructed and in dimensions should not be less than 3,000 feet square; there should be no wires, high trees, fences or other obstacles surrounding the landing place.

"2. Mark such field with a large white circle of durable material 100 feet in diameter, the band of which should not be less than 4 feet in width. Paint the name of the city or town on the roof of some prominent building preferably the railroad station, if there is such, in large letters which will be visible to a height of 3,000 feet in clear weather.

"3. Place a cloth cone, flag or instrument to indicate the wind direction at the edge of the field".

BOLLING FIELD'S AIR CARNIVAL ✓

The most successful air carnival ever held in the Capital of the Nation was witnessed by some 15,000 spectators at Bolling Field on Sunday afternoon, September 23rd. The aerial entertainment was staged for the benefit of the Army Relief Society, an organization which provides relief for widows and relief and education of orphans of soldiers of the Regular Army.

The carnival was originally set for Saturday, September 22nd, but the weather conditions were so wretched that, after the show had started and several events were pulled off, the downpour of rain became so heavy and flooded the field to such an extent that the program was called off. Despite the unfavorable weather, a goodly sized crowd had journeyed out to the field, the flight of the Navy ZR-1 over the city at noon evidently having heightened interest in the carnival.

Three events of the program had been carried out and the fourth was in progress before the driving rain intervened. Lieut. Wendell H. Brookley, from McCook Field, Dayton, Ohio, was the first to start the program. He was scheduled to perform a sky-writing stunt, but the low hanging clouds preventing this, he made the audience gasp while he performed "stunts" at a low altitude. The next event was a low flying formation of five DH4B's, participated in by Lieuts. Harold W. Beaton, LeRoy M. Wolfe, Lester J. Maitland, Talcott P. Smith and St. Clair Streett. They flew over the field at about 300 feet altitude, and the planes flew so close to one another that it seemed they were only a few feet apart. All five planes landed without breaking their alignment.

Lieut. H. K. Ramey next took the air with Sergeant Matos, photographer, as passenger, the latter taking photographs of the crowd on the field. Event No. 4 called for a parachute jump from the wings of a Martin Bomber. Captain Duncan of Langley Field took off with Sergeant C. M. Strosnider and Corp. R. E. Maust standing on the wings. At a pre-determined altitude these men were to take French leave of their plane, jump into space and pull a cord which would open their parachutes. At this particular time, however, the clouds opened up in full force and everybody sought cover. Captain Duncan lost no time in making a landing. Further flying that afternoon was impossible, so announcement was made that the holders of

ticket stubs for the carnival would be admitted the following day when there would be a complete repetition of the program. During the downpour the Bolling Field Band rendered some lively tunes in one of the big hangars which had been converted into a ballroom, and which, we suppose, will add not a little in promoting social activities amongst the officers and enlisted men of Bolling Field from now on.

The following day (Sunday), from the standpoint of the weather, promised to be a repetition of Saturday, as the clouds looked rather threatening and there was some rain in the morning. Towards noon, however, the sky cleared, and the warm rays of the sun brought out the crowd to the field in full force. They were well repaid by a program of extraordinary aerial maneuvers lasting nearly three hours.

As a starter, Lieut. J. M. Davies took off in a Martin Bomber with Captain Weaver as passenger. The latter, employing the latest development of the Chemical Warfare Service in producing smoke screens, laid a veritable lace curtain of light rich yellow over the field which obscured the sun for a time. This spectacle of beauty drew applause and created amazement amongst the crowd of spectators.

Lieut. Brookley, frustrated in his attempt to perform his sky-writing stunt the day before, climbed two miles into the air and wrote in perfect discernible letters "Hello, D.C." A shift in the wind afforded some amusement below as the words were being spelled out, the last letter of the first word being obscured by a cloud. Lieut. Brookley later repeated his act with pronounced success, and after a tail spin for several thousand feet traced various maneuvers with smoke at a low altitude above the ground.

Sergeant Strosnider and Corp. Maust, standing on the wings of a Martin Bomber, successfully performed their postponed parachute jump. At an altitude of about 1,500 feet they jumped off into space and gracefully settled down to terra firma.

The bombardment of a temporarily constructed fortification at the south end of the field by three DH planes was quite realistic. The pilots of the three planes were Lieuts. P. C. Wilkins, H. W. Beaton and Capt. W. C. Ocker, and the bombers were Lieut. T. P. Smith and Sgts. L. Hukill and J. Gilbert.

The sporting events of the afternoon were three races. The first, a 15-mile event, was won by Lieut. LeRoy M. Wolfe, other participants being Lieut. C. W. Steinmetz, Adjutant of Bolling Field, and Sgt. G. D. Warner. The planes remained in the air after the finish line and performed acrobatics for the crowd. The second race was between three Voughts, the average speed of which is around 120 miles an hour. They were piloted by Lieuts. L. P. Arnold, L. J. Maitland and St. Clair Streett. The first-named pilot captured this event. In contrast to the speed of the above three fast little planes was the race between three big Martin Bombers. Major John B. Reynolds was the winner of this event.

The next event, a pageant of the air, was featured by the participation of the famous T-2 in which Lieuts. Oakley K. Kelly and John A. Macready performed the notable feats of breaking the world's duration record and making the non-stop flight from the Atlantic to the Pacific coast. Quite a number of ships smaller in size accompanied this famous ship in the realm of ozone, and performed to the limits of their ability. The air was literally full of airplanes and the crowd had a hard time following their antics. Lieut. T. S. Van Veghten, pilot of the T-2 gave an excellent performance with the big ship. Lieut. Streett, in the Thomas Morse B-3, shot the little plane over the crowd at about fifty feet and then zoomed her up. Lieut. Maitland, in the Fokker D-7, performed along similar lines, while Lieut. Wolfe, in an SE-5, flying somewhat higher, looped, made Immelman turns, spins and barrel rolls. Meantime Lieut. Walter K. Burgess, piloting a new DeH Airways plane, tore through the air at about a 115-mile clip, and Major Reynold's big Martin Bomber, with its two Liberty motors wide open, added to the buzzing din. During the progress of this melee, Lieut. Brookley performed another sky-writing stunt.

Lieut. Thomas Carroll, of the National Advisory Committee of Aeronautics, flying a special ship, gave several of the audience free rides.

The little group of officers who arranged and promoted the carnival were able to realize a good sum for the Army Relief Society. Military and social Washington enthusiastically aided in the arrangements, and the Washington newspapers are to be commended for the liberal space they gave in bringing this event before the public. Their able assistance added in a great measure to the successful outcome of the carnival.

Major R. L. Walsh, acting Commanding Officer of Bolling Field, received many congratulations, as did the individual officers of the field. Much credit is due

Lieut. Lester J. Maitland, who was in charge of the flying and of the program. Other committee heads and members were: Concessions and tickets: Capt. B.J. Sherry; traffic and parking, Capt. Charles Kraus; reception and program, Lieut. St. Clair Streett; decorations, Lieut. H. Z. Bogert; photographs, Lieut. Arnold; ground exhibitions, Lieut. Wolfe; amusements and clowns, Sgt. H.B. Lewis and Sgt. Golden; publicity, Capt. D. S. Seaton, and Lieuts. C. P. McDarment, Courtney Whitney and St. Clair Streett.

BARLING BOMBER TO PARTICIPATE IN ST. LOUIS RACES

Our McCook Field Correspondent says that "the Barling Bomber is stretching her wings for her first long flight, for she has decided to take in the Pulitzer Races at St. Louis. Lieuts. Harold R. Harris and M. S. Fairchild will be her pilots. We should like to break a costly bottle across her prow in the good old fashioned way, before she goes, for no ship that ever was launched has deserved praise more for her power and beauty."

MAJOR NAPIER KILLED IN CRASH

McCook Field, Dayton, Ohio, was on Saturday, Sept. 15th, thrown into depression when it was learned that Major E. L. Napier, Flight Surgeon, Medical Corps, had been killed about 9:30 in the morning, when the Fokker D-7, which he was flying, crashed to earth. Wing failure is thought to have caused the accident. Major Napier jumped for a parachute descent, but must have been struck on the head and made unconscious before clearing the spinning plane, as the rip cord had not been pulled.

Captain John B. Powers accompanied the body to Major Napier's home, Union Springs, Alabama, where the funeral services were held.

NEW GYMNASIUM FOR MCCOOK FIELD

In some three weeks, our McCook Field Correspondent tells us, McCook Field is to have a gymnasium and an indoor swimming pool, that is, completion is prophesied for that time. It is many moons since the Helicopter and Lighter-than-Air hangars were vacated. It was at that time decided to throw them into one and convert them to the above athletic uses. Work on the project was immediately begun by the Maintenance Branch and has continued steadily through the summer. The Lighter-than-Air hangar, which has a floor space of 66 by 120 feet and a twenty-foot ceiling has been transformed by paint and carpentering into a very promising "gym". It will be equipped with two hand ball courts, indoor tennis and volley ball courts, and arrangements will be made for basket ball and indoor baseball. Extra tiers of windows have been added, so that ventilation will be adequate and every corner will be flooded with light. Athletic appliances will be added in due time.

The swimming pool, which takes up most of the former helicopter hangar, is of the most modern concrete construction, measures 25 by 60 feet and varies in depth from four feet at one end to seven feet at the other. The water to fill it will be furnished by McCook Field wells. The building is to be steam heated and the water will be tempered for winter use. Locker rooms and showers have been provided for. A unique feature of the pool is the life rail, which is formed in the wall of the pool and which also forms the gutter wall of the overflow. The hangars will be lighted so that night sports, games and splash parties may be possible, if not contrary to regulations.

"HOOT, MON."

Our Kelly Field Correspondent states that it might be of interest to some of the "Border Gang" to learn that recently two of its former members literally had their brand new "golf breeches" beaten off. The comedy, or rather, tragedy, which is probably more correct, happened between the hours of 2:00 p.m. and 5:00 p.m. at the Brackenridge Links and was caused directly by the appearance of the two culprits upon said links dressed after the fashion of the advertisements of a popular brand of men's clothing. Their appearance caused such a storm of protest from their adversaries (who were fully cognizant of the fact that both are married and too old for that sort of thing) that the more vindictive of the two proposed a

round of Scottish pastime to decide whether they would ever again appear thusly clad or whether their worthy opponents would have to dress likewise. To prove that even the Gods objected to such liberties taken by wolves in sheep's clothing their defeat was assumed as early as the first hole when "Looie" sliced his drive 50 yards towards the coveted goal and 200 yards at right angles to same. His partner with a sign of resignation shed tears of mortification when he unwisely forgot the teachings of Vardon, Evans, Barnes and all other lovers of the national rolling game by nicking it on the tee for about 25 yards. Their defeat was assured and bitter arguments followed each stroke, and what was worst, "they couldn't even win an argument". However, they eventually behaved like good sports and bought the drinks (after we matched for them) and they even lost at that game, so their opponents relented and decided they could again wear the "panties" in question at the end of one month. To disclose the names of the offenders, thus making an example of them, would no doubt be the correct method of procedure against such criminals. However, the moral involved is of such a grave nature and their wives such charming ladies that it will suffice to call attention to a proverb that our dear old friend Omar Khayyam should have included in his celebrated "Rubaiyat" - "An Irishman just naturally cannot appear in the garb of a Scotchman and get by with it." Those who fail to profit by the above lesson and desire further details should communicate with either "Bob" or "Looie" and such sad information covering same as would be of value will be forwarded by either one or both of them.

MITCHEL FIELD TO HOLD AN AERIAL MEET.

Plans are now in course of formation for an aerial meet to be held at Mitchel Field, L.I., New York, on Sunday, October 14th, for the benefit of the Army Relief Society.

Perhaps nowhere in the United States is competition so keen in the staging of events calculated to interest the general public as in the vicinity of New York. In the less cosmopolitan centers airplanes are still a novelty, but around New York the average person sees a half a dozen carrying passengers at nominal prices when he drives out in the suburbs. These roadside gypsies, to stimulate business, give free exhibitions of wing walking and parachute jumping every Sunday afternoon, so therefore even these stunts lack the appeal of something with which the public is unfamiliar.

Mitchel Field realizes these handicaps and is therefore the more determined to make its meet a financial success in order that the Army Relief Fund will not suffer. It is hoped to secure the Barling Bomber for that day; the T-2 with Lieuts. Macready and Kelly, the ZR-1 or any other dirigible that may be available, and a representation of the racing planes that competed in the Pulitzer Race in St. Louis. With all or some of these attractions, in addition to the regular program staged by the pilots of the post, Mitchel Field would be in a position to make a very substantial contribution to the Army Relief Fund.

If any of the stations that have staged meets lately would care to make any suggestions or recommendations as to events that particularly interested the public, it would be of great assistance at this time.

ONE ON KELLY FIELD

Perhaps no flying field in the country is as generally known as Kelly Field situated some seven miles from San Antonio, Texas. An Air Service officer who was not stationed at Kelly Field during one time or another in his military career is the exception rather than the rule. Recently the multigraph operator on duty with the Air Service Advanced Flying School at Kelly Field received, in answer to his request for a catalogue, the following letter:

"We have your letter of the 7th in which you advise us that you just had two Multigraphs installed and desire a book of instructions and a catalogue of parts for same. In order that we may have you located here at the factory so that we will know under what branch office you are located, will you please write and advise us what county in Texas you are in. By doing so you will render us a great favor, as we cannot seem to locate Kelly Field, Texas, on the map."

Our Correspondent believes that this letter is an excellent argument for the need of Air Service publicity.

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, Aug. 25.

TWENTY-SECOND PHOTO SECTION: During the past week mosaics were taken of Fort Sam Houston, Camp Travis, Remount Depot No. 2, Kelly Field No. 1, Kelly Field No. 2, and the Bombing Range.

FORTIETH SCHOOL SQUADRON: Captain Lynd, the squadron commander, returned from a short leave of absence on the 28th. During his leave the Captain was visiting in Galveston.

Lieut. Frederick returned on the 28th from Chanute Field where he took a two-weeks' course in parachutes. During his stay at Chanute Field he made a live jump.

Several of the student officers are receiving instructions in the art of Martin Bomber flying. The class is progressing very rapidly and are proving to be good prospects for bombardment pilots.

Cross-country trips by students in the past week have been as follows: Houston, Beeville, Bay City, Arcola, Corpus Christi and Austin. No serious accidents occurred during the flights and they were adjudged a success.

FORTY FIRST SCHOOL SQUADRON: With the exception of a few test flights, all flying in ships of this organization for the week has been cross-country work by students.

The squadron is still holding its own with reference to having a large percentage of ships in commission. We have never had more than five planes out of commission in any one day during the last week. The average has not been more than three per day.

FORTY SECOND SCHOOL SQUADRON: The flying time for the past week totaled two hundred hours and forty minutes. Flights were made by student officers, flying cadets and flying instructors to Laredo, Corpus Christi, Uvalde, Georgetown and Austin, for the purpose of training students in cross country flying.

The radio ships were flown to Camp Bullis for the purpose of testing the radio equipment in preparation for the demonstration staged at that place on August 24th. The planes were piloted by Lieuts. Biggs, Wagner and Chapman, with Captains Wilson and Crom and Lieut. Finn as radio observers. These same ships and officers participated in Friday's event at Camp Bullis.

The organization has 23 planes assigned, all of which are in commission and flying daily.

FORTY THIRD SCHOOL SQUADRON: The new SE5A's have undergone a very thorough test and most all of them are in commission and are being flown by the new class of pursuit students. The class in pursuit work started the first of the week and most of their flying has been transition and formation flying, while some of their work has been acrobatics, all being done in SE5A's. Cross-country flights were made during the week to Houston, Corpus Christi, Laredo, Alice and Brackettville in DH4B's. Assembling of the SE5A's is still going on, as all of them have not been received.

The new Sperry Messengers are expected most any day now.

SIXTY EIGHTH SERVICE SQUADRON: The organization wrecking truck has been kept busy during the past week. This truck was sent on three trips to replace motors and bring in wrecks.

Plans have been made to take pictures and make blue prints of the wrecking truck, to be sent to McCook Field. The pictures have been made and work is now progressing on the blue prints.

Arrangements have been made to build another wrecking truck for this organization. It will be of the same type as the old one; mounted on a White $1\frac{1}{2}$ ton truck.

One Spad and an SE5A have been salvaged. These planes had proven very satisfactory while in flying condition.

THIRD ATTACK GROUP

EIGHTH ATTACK SQUADRON: During the past week the daily training schedule constituted the greater part of flying operations of this organization. Several flights

were made to Camps Stanley and Bullis in preparation for the maneuver with the ground troops at those stations.

Captain Davidson, the Squadron Commander, with Lieut. Clark of the 26th Attack Squadron, proceeded on an Airways Mapping flight on August 20th. The first leg of the flight was to New Orleans, via Lake Charles, La. A DH4B-1 plane of the 60th Service Squadron was used for this mission.

Technical Sergeant Carl B. McDaniel, who holds a Reserve Officer's commission and an enlisted pilot's rating, has this week received official notification of having passed the examination for a Regular Army commission in the Air Service. Each and every member of the organization extend their heartiest congratulations to him.

All pilots and the regular assigned observers have participated in the daily training flights.

NINETIETH ATTACK SQUADRON: Flying during the past week consisted mostly of formation practice, this squadron furnishing one three-plane formation in the Group formation. Upon completion of the formation work the Squadron practised attack formation flights, using 50 lb. demolition bombs on the target range situated approximately a mile west of the field.

Lieuts. Moor and Phillips performed a very successful liaison mission with the Cavalry Brigade at Fort Clark, Texas, on August 16th.

On Saturday, August 18th, the squadron passed in review before the Group Commander. Following the review, the Group Commander inspected the Squadron Barracks, mess Halls and Hangars.

Lieut. Kemmer, with Lieut. Felix N. Parsons as passenger, made a cross-country flight to Fort Worth, Texas, and return.

TWENTY SIXTH ATTACK SQUADRON: Lieut. Robinson made a cross country flight to Fort Clark, Texas, for the purpose of transporting Colonel Sayles, Commanding Officer of the 5th Cavalry at that station, to San Antonio, Texas.

On August 18th, this squadron participated in a dismounted review held by the Group Commander.

Lieutenant Duke with Sergeant Hoyle as passenger, made a cross country flight to Del Rio and Fort Clark for the purpose of checking property at those stations which belongs to the squadron, and to look over the new airdrome at Fort Clark. The airdrome has recently been transferred from Del Rio to Fort Clark, Texas, and is under a caretaker detachment from this squadron.

THIRTEENTH ATTACK SQUADRON: Lieut. Zettel with Lieut. Gillispie as passenger, made a cross-country flight to Galveston, Texas, on August 20th, returning the next day.

Lieut. Wheeler made a cross country flight to Laredo, Texas and return, on the 22nd. This flight was made for the purpose of making an inventory of property at the Laredo airdrome.

Several reconnaissance and observation flights were made with planes from this squadron during the past week for the purpose of observing hits made by planes from other organizations during the bombing practice.

SIXTIETH SERVICE SQUADRON: Lieut. D. G. Duke, Assistant to the Corps Area Air Officer, with Sergeant Barkalow as mechanic, made a cross-country flight to Brownsville, Texas, leaving this station on the 18th, and returning the following day.

The 60th played their first baseball game of the new series on the 22nd, as called for in the new baseball schedule of the group, and defeated their opponents, the 26th squadron, by a score of ten to two.

Kelly Field, San Antonio, Texas, September 1.

THIRD ATTACK GROUP

NINETIETH ATTACK SQUADRON: There has been very little flying this week, except for a cross country flight by Lt. Andrews to Fort Clark, returning with Colonel Sayles as passenger. Lt. Andrews left here Saturday noon, returning a few hours after.

During the afternoon of August 24th the Squadron flew in a three-ship formation

in liaison maneuvers with C.M.T.C. at Camp Bullis. Planes were equipped with three live bombs each, tourelle and synchronized machine guns. Three attacks were made on targets at Camp Bullis, results being very good.

There was a review of the entire command by the Post Commander on Saturday morning. This squadron turned out in full strength.

Tuesday evening the Squadron bid farewell to Captain and Mrs. Hayes at a supper prepared by our able mess Sergeant Rowell and his help. Sergeant Schencks made an appropriate address, expressing regret at the departure of Captain and Mrs. Hayes. Captain Hayes replied with the cheering news that he hopes to be able to return to the organization.

TWENTY-SIXTH ATTACK SQUADRON: On August 25th, Lt. Robinson with Sgt. Marsh as passenger, made a cross country flight to Stone ranch, Texas, returning by sundown the following day.

On August 29th Lts. Robinson and Zettle flew to Galveston, Texas, for the purpose of demonstrating attack Aviation to the American Legion who had assembled at that place.

On August 24th the officers of this organization participated in a demonstration consisting of bombing with high explosives bombs and machine gun fire, for the CMTC students assembled at Camp Bullis, Texas. The targets were completely demolished.

For the past week officers of this organization participated in attack problems, formation flights, bombing with high explosives and training flights.

THIRTEENTH ATTACK SQUADRON: This squadron received another DH4B type plane from the S.A.A.I.D. on August 29th, making a total of eight of this type plane which we now have assigned.

We now have two GAX planes in commission to fly, the 60th Service Squadron having put one in commission for us in the past week.

Two cross country flights were made from this squadron during the past week. Lt. Zettle and Pvt. Childress as passenger, made a flight to Crystal City, Texas, and returned August 24th. Lt. Wheeler, with Pvt. Andrews as passenger, made a flight to Del Rio and Bracketteville, Texas, August 27th, and returned to Kelly Field, August 28th. Lt. Phillips made several flights with the GAX plane.

EIGHTH ATTACK SQUADRON: The regular training schedule has been curtailed during the first part of the week by inclement weather.

Captain Davidson with Lt. Clark returned from an Air Way mapping flight to Memphis, Tenn. on August 30.

On August 29, Lt. Carr, Tech. Sgt. McDaniel participated in a Group four-plane formation to Galveston, Texas, to attend an American Legion Celebration at that station, the formation returning the next day.

All available time and men have been utilized in reserivicing of all planes and the painting of numbers on the under side of the right lower wings of each plane of this organization.

SIXTIETH SERVICE SQUADRON: 1st Lt. Robert D. Moor was transferred to this organization from the 90th Attack Squadron and placed on Special Duty as Group Engineering Officer, Officer in Charge of the Aero Repair, Motor Overhaul and Machine Shop, vice 2nd Lt. Donald B. Phillips, relieved and detailed as Air Service Supply Officer and Signal Corps and Engineering Property Officer for the Post. Lt. Moor also has been detailed as Supply Officer of this organization.

The 60th Service Squadron played baseball with the 8th Attack Sqdn., August 29th and defeated them by the score of 8 to 3.

TENTH SCHOOL GROUP

FORTIETH SCHOOL SQUADRON: A cross country trip was made by Sergeant Warner of the 43rd School Squadron to Houston, Texas, to take some spare parts to a wrecking truck that broke down at that city. The trip was made with great success and a heavy load carried down there.

The class of students who are taking a course in Martin Bomber flying are improving daily and some of them are doing solo flying. Considerable interest is being taken by the students and they are proving to be very aggressive. Major

Browne and Lt. Willis are conducting a class in armament in conjunction with the Bomber class.

Bombing maneuvers were held on the 24th at Camp Bullis in conjunction with the field troops stationed there. Three Martin Bombers and three DH4B airplanes from this organization participated in the maneuvers.

The Radio department of the Group have been very busy equipping the Martins and DH's of this organization with receiving and sending sets. The tests so far have proved to be very satisfactory.

One Martin Bomber was received from the SAAID where it has been undergoing repair. Owing to the fact that there are no spares available at this station, the hangar personnel of this organization have been unable to make repairs on the NBS-1 ships.

FORTY FIRST SCHOOL SQUADRON: The flying time of the 41st Squadron for this month to date totalled 712 hours 15 minutes, hardly as large a total as that at this time in July (last), but it is anticipated a larger total number of flying will be flown this month than ever before for one month since the Advanced Training commenced, due to cross country flying by students. To date a total of 31,254 man miles have been flown in ships of this organization.

FORTY SECOND SCHOOL SQUADRON: Routine flying has been performed by all student officers and cadets during the past week. Due to inclement weather, however, there was not as much flying as usual, only 106 hours being the total for the week.

On August 27th Lt. Chapman made a cross country flight to Waco, Texas, and on the return trip encountered some very severe rain storms, but managed to return to the field the same day. Students have also made cross country flights to Houston, Texas, and Georgetown, Texas, during the week.

Photographic installation has been completed in one of the ships which will be flown within the next few days to Louisiana where it will be used for mapping a territory of several hundred square miles.

The Squadron has 24 DH4B's in commission and flying daily.

FORTY THIRD SCHOOL SQUADRON: Flying for the week consisted of: Test training flights in MB-3A's, Spads XIII, SE-5A's, DH4B's, Fokker DVII, Sperry Messenger and JN-6H's. Formation flights were made in SE-5A's by student officers and cadets, also formation flights were made in Spads. The class in pursuit training has been doing combat work, accuracy landings and formation flying. During the first of the week several of our ships flew to Camp Bullis, Texas, to participate in maneuvers which were made by the C.M.T.C. Three MB-3A's flew protection patrol for the Bombing ships. Two Sperry Messengers were received during the week and everybody takes great delight in flying them. Two cross country flights were made to Seguin during the week. Several new ships were received during the week, consisting of SE-5A's, Spads XIII and Sperry Messengers. The Fokker DVII biplane was put in commission this week.

SIXTY EIGHTH SERVICE SQUADRON: The motor overhaul Department of this organization received seven Liberty and one Wright "E" motors to be overhauled during the past week. Eight Liberty and two Wright motors are now undergoing complete overhaul. Six motors were assigned to various squadrons of the Group. Three motors are awaiting test and one is now undergoing test.

The Aero Repair Department of this organization received two DH4B's and one SE-5A for repairs and overhaul. Two DH4B's are now being constructed, one is about 90% complete and the other about 50% complete. One DH4B and one SE-5A were salvaged, due to wood rot.

TWENTY SECOND PHOTO SECTION DETACHMENT: The Photo Detachment has been ordered to photograph about two hundred square miles of territory in the vicinity of Tallulah, Louisiana. This work will be done in conjunction with the Department of Agriculture's study of the boll weevil in that section.

TENTH SCHOOL GROUP HEADQUARTERS: The following named officers leave the 10th School Group within the next few days:

Captain T. S. Voss, A. S., to Panama.

Captain Wm. E. Lynd, A.S., to Tactical School, Langley Field, Va.

1st Lt. S. C. Skemp, A.S., to the Communication School, Chanute Field, Illinois.

Flying for students from the Advanced Flying School was interrupted by a rain on Tuesday and Wednesday for the first time since the present course started on June 1st, 1923. Four students were caught out on cross country by a violent and sudden thunder storm Tuesday, but managed to be on the airdrome by Wednesday noon.

Students are now soloing on Martin Bombers and SE-5's and are flying Lighter-than-air officers on reconnaissance missions.

Hqrs. 2nd Div. Air Service, Fort Bliss, Texas, Sept. 8.

The time of departure of the First Cavalry Division for the maneuvers at Camp Marfa, Texas, draws near, and preparations for the hike are continuing. The main column, consisting of the mounted troops with their trains will leave this post on Saturday morning of the fifteenth. The motor trains, to which the Second Division Air Service is attached, will leave Wednesday morning, the nineteenth, and make the march in two days. First Lieut. Guy H. Gale, Air Service, is in charge of the Air Service transportation and will make the march with the trains. The remaining officers will join the Squadron at Marfa with the ships.

To provide aerial observation for the opposing brigade, a division of the flying personnel has been made, assigning 1st Lieuts. Charles Douglas and W.C. Morris, A. S. to the White brigade, Lieuts. Sullivan, Gale and Evert, A.S. to the Brown brigade. To be neutral, Major Heffernan and Captain Bender, A.S. To perform photographic missions for both brigades, 1st Lieut. L. D. Weddington, A.S.

During the week ending September 9th, the Squadron completed twenty-one missions and eighteen hours, forty-five minutes flying time.

Hqrs. 2nd Div., Air Service, Fort Bliss, Texas, August 29.

During the past week 1st. Lt. J. J. O'Connell returned from Chanute Field, Ill., having completed a course of instruction in parachute work. The trip to Chanute Field and return was made in 37 hours 10 minutes flying time. A course of instruction in parachute work has been begun at this station, with Lt. O'Connell as instructor.

The Twelfth Observation Squadron added to its flying time during the period January 1st to June 30th, 1923, a total of 836 hours 30 minutes, involving a total of 674 missions flown as follows: test flights 210, cross country 154, courier 95, special 10, instruction 82, gunnery 40, artillery 46 and formation 37. Total time for week ending August 25th, 1923, 54 hours 50 minutes. Total missions flown 25, classified as follows: special missions 4, cross country 8, test 10 and photographic 3.

Brooks Field, San Antonio, Texas, Sept. 4.

The excitement in the baseball league ran high during the past week, especially during the game between Headquarters and the 46th Squadron. This game decided which team would assume the lead in the league standing and was very exciting thruout. The lead in the game shifted from one side to the other and in the beginning of the ninth inning the score stood 5-5. In their half of the ninth inning the 46th managed to shove one run across giving them the lead 6-5. Headquarters, in their half of the ninth managed to get two men on bases and a timely hit drove both of them in, giving them the game and the top point in the league standing. On Saturday the 62nd Service Squadron, after having lost all their previous games succeeded in surprising all the fans of the Post by defeating the 47th Squadron decisively, 12-7.

A large number of new students have reported and began their flying on September 5th, two days having been devoted to making the necessary reports and getting settled in quarters. Below listed are the new arrivals:

Captain Clarence F. Hofstetter, Ordnance Dept., Watertown Arsenal, Mass.

Captain Charles V. Hart, M.C., Governors Island, N.Y.

1st Lieut. Charles A. Morss, Jr., 101st Obs. Sq., Mass. N.G.

1st Lieut. Charles Backes, (3rd Infantry) AS - Fort Snelling, Minn.

2nd Lieut. John K. Sells, (2d Cavalry) AS - Fort Riley, Kansas.

2nd Lieut. Joseph F. Hunter, AS-ORC, Governor's Island, N.Y.

2nd Lieut. Otto Paul Weyland, AS-ORC, c/o Western Electric Co., Hawthorne Station, Chicago, Illinois.

2nd Lieut. Carl John Sack, AS-ORC, Dept. of Mil. Science, M.I.T. Cambridge, Massachusetts.

2nd Lieut. MacGregor, AS-ORC, 713 16th Street, Oakland, California.
 2nd Lieut. James Davis Fall, AS-ORC, Hq.R.O.T.C., Univ. of Washington,
 Seattle, Washington.
 2nd Lieut. William Ralph Eryart, AS-ORC, 301 Central Ave., Connersville, Ind.
 2nd Lieut. Raymond Milton Wilson, AS-ORC, Newton, Illinois.
 2nd Lieut. Will Carleton Hale, AS-ORC, Westover, Texas.
 2nd Lieut. Patton Wright Burns, AS-ORC, Brooks Field, Texas.
 2nd Lieut. Floyd Rowland Clafford, AS-ORC, Brooks Field, Texas.
 2nd Lieut. Eyrion Asberry Glover, AS-ORC, Brooks Field, Texas.
 2nd Lieut. Gunnard Alvin Dahlberg, AS-ORC, Brooks Field, Texas.
 2nd Lieut. Robert Bryan Baldwin, AS-ORC, De Kalb, Texas.
 2nd Lieut. Allan Burton Stanhope, AS-ORC, 301st Obs. Sq., 76th Div., USA.
 2nd Lieut. Ellis Way Bullock, AS-ORC, 107 W. Francis Street, Tampa, Fla.
 2nd Lieut. George Lowry Vickery, AS-ORC, Memphis, Tenn.
 2nd Lieut. James Montroville Sutton, 524 Spring Street, Atlanta, Ga. (AS-ORC)
 2nd Lieut. Henry J. Hodes, (CAV)AS - Fort Sam Houston, Texas.
 2nd Lieut. James Albert Gleaves, 136th Obs. Sq., Tenn. N.G.
 2nd Lieut. Albert Roberts, Jr., 136th Obs. Sq., Tenn. N.G.
 2nd Lieut. John Adams Austin, AS, New York, N.Y.
 2nd Lieut. Walter W. Gross, 11th Obs. Sq., Texas N.G.
 2nd Lieut. Joseph T. Reese, AS-ORC, Freeport, Texas.

Several cross countries have been undertaken by the permanent personnel during the past week. They being as follows:

Capt. Sturcken	-	-	To Bandera and Kennedy
Lieut. Webster and Wolf	-	-	To Waco
Lieut. Breene and Major Newsome,			Dental Corps To Laredo
Lieut. McCormick	-	-	To Laredo
Lieut. Haddon and Sergeant Smith	-		To Roswell, New Mexico and El Paso
Lieut. Breene	-	-	To Ringo

Two minor accidents occurred during the week. Captain Sturcken while landing in a cotton patch near Kennedy was unfortunate enough to crack his landing gear, overturning his plane. He is bearing a black eye as a result. Cadet H.F. Woolard had a forced landing last Friday morning and tried to stretch his glide into Stinson Field. He fell about 15 feet and totally washed out the ship, but only suffered a few cuts and bruises.

Major and Mrs. Royce and Scottie with Lieut. and Mrs. Patrick journeyed by automobile to Galveston for the week end. They were very loud in their praises of Lieut. Mansfield for the excellent way in which he put them up at Fort Crockett.

With the arrival of the new officers and the resumption of flying training on a large scale, Brooks Field has taken on the appearance of a very busy Post. Everything is now being done to prepare for the reception of the rest of the students who are to report about the 15th of the month. Assignments have been made as far as possible in preparation for their coming and quarters prepared for the students. Bunks, bed clothing and furniture are already in the rooms, and everything else possible is done to relieve the newcomer from any extra work, so that he may move in, get settled quickly and start his training.

Brooks Field, San Antonio, Texas, Sept. 11,

The students are still arriving and this week should see the last student report. Arrangements are now under way for a get-together party on the roof of the Gunter Hotel on the evening of September 21st.

The Post baseball schedule is nearing its completion, but the interest in the games is still kept up. During the past week the 62nd Service Squadron was defeated, decisively, by the 46th Squadron by a large score. On Saturday the 11th Group Headquarters managed to retain their lead after a ten inning up hill fight, defeating the 47th Squadron 8-7.

Cross-countries during the past week were very few due to the rain. A couple of trips were made to the vicinity of Kennedy to take rations to the men who were bringing in Captain Sturcken's crashed ship. On Saturday Lieut. McCormick got eighty miles on the way to Laredo and was turned back by rain in that vicinity.

Brooks Field, San Antonio, Texas, Sept. 17.

The 46th Squadron defeated the 11th Group Headquarters in the local baseball^{league} 7-6, on Wednesday, and on Saturday the 47th Squadron defeated the 62nd Service Squadron 8-2. Three more games will see the end of the schedule and it now looks very much as if the 46th and Headquarters will be tied for first place. Students have been reporting in wholesale during the past week. All the men from West Point have now reported and practically all the Cadets and officers transferring from the line. We were very glad to welcome 1st Lieut. George W. McEntire, A.S., who was with us about a year ago as a member of the crew of the C-2.

The Ladies Bridge Club was held at the Club Thursday, Mrs. Wolfe being the hostess. On Friday evening Major and Mrs. Royce entertained at dinner at the Club for the married officers and their wives of the West Point class of '23. The party attended the dance at Kelly Field afterwards.

Cross-countries during the past week were Lieut. McCormick to Eagle Pass and return, Lieut. Wimsatt and Lieut. Taylor to San Angelo and return, Lieut. Breene to El Paso, Major Bock to Corpus Christi and Sergeant Mitchell to Gonzales, Lieut. Adolphus R. McConnell, A.S., who has been photographic officer at this station during the past year, left for his new station in Hawaii.

Clark Field, Pampanga, P.I., July 30.

Instructions were recently received directing all flying personnel to report to Camp Nichols within the next few weeks for a 609 examination. Since the departure of Captain David W. Bedinger for Kindly Field, Corregidor, P.I. we have been without a Flight Surgeon at this station. Two officers are scheduled to fly to Camp Nichols each day until all have been examined. This will not greatly interrupt the present training schedule, as a shortage of airplanes (only three airplanes being available for training) has already condensed the daily program to include approximately four hours flying time per plane for each day's flying. It is intended to use the DH-4 Freighter, which is not adaptable for training purposes, in the necessary cross-country trips between Camp Nichols and Clark Field.

Four bombing missions were engaged in during the week, two of which proved interesting but almost disastrous. While the two planes were maneuvering for position over the target, each plane already having dropped two bombs, three natives with all the serenity of a clear conscience strolled grandly by red flags and painted sign boards and approached the bombing targets from the North. They were observed immediately upon emerging from a clump of trees and the danger signals were displayed calling the planes away. The signals were not at once noticed by the bombing planes due, possibly, to some drifting clouds in the vicinity. A mounted guard was hurriedly dispatched to escort them from the field. Luckily they passed beyond the danger zone unharmed, but a bomb released soon after made the dispatching of a mounted guard a superfluous procedure in so far as their future safety was concerned.

Aerial training was discontinued for two days due to inclement weather and the Rainy Day Schedule, which provides for instructions in handling Parachutes and installation of Radio Sets, was in effect, thereby avoiding the loss of valuable time. Fifty nine flights consuming 56,55 man-hours represents the total aerial training for the week.

Hqrs. Camp Nichols, Rizal, P.I., July 28.

Captain Thomas J. Hanley, Jr., departed July 24th for a month in China and Japan. 1st Lieut. E. E. Aldrin assumed command of the 28th Bombardment Squadron in his absence.

1st Lieut. A. J. Clayton returned July 25th from a two months' trip to China and Japan, reporting a pleasant visit, replete with interesting observations on the customs and habits of those people.

The 28th Bombardment Squadron entertained themselves with a beach party at Paranaque Beach last Sunday.

The Commanding Officer of the 42nd Air Intelligence Section states:

"In an effort to make this article more readable, the writer has from time to time plagiarized portions of thought from many. It was calculated by so doing

to make it less tiresome to inhale what was offered, General apology is herewith tendered.

Camp Nichols has been a quiet sector during the past week, which is good news, since we expect most when thievery or like villainy disturbs the command.

The distressing fact must be recorded that Lieut. Hicks' hair is getting thin. Each day the Commanding Officer looks more intellectual, the efforts of hair tonic and electric vibrators to the contrary notwithstanding. It is quite desolating, but so was the Chicago Fire, and good ultimately resulted. It cannot be foreseen just what good will result from a bald head but probably front row theatre tickets may be more easily secured in the future.

Meantime it rains."

Typhoon "fans" here had their hopes of a real treat shattered when what promised to be a Rip-Snorter as a Tropical Storm swerved in its course and went around instead of continuing on its path and visiting the vicinity of Camp Nichols. Enough of the effects of the storm were felt here, however, to make flying impossible the major part of the week, much to the disappointment and chagrin of that portion of the personnel who had counted on completing their flying time for the month during the past week.

1st Lieut. Arthur W. Vanaman, Commanding Officer of the 66th Service Squadron, is confined to his quarters with an attack of Dengue Fever, a disease which seems to be prevalent in this section of the country just at present. However, it is not as fatal as it is painful, and we expect Lieut. Vanaman to soon be back with his organization.

Camp Nichols, Rizal, P.I., July 25.

The 42nd Air Intelligence Section submits:

Conceive a slumberous tropical night and a nipa covered palace of iniquity, the latter decorated without by a big sign and a garbage can, within by rows of squarefaced gin and ponderous painted females.

The 42nd. feels the touch of ennui. An idea! Impossible? Fact. They will call. As befits men of peace they go lightly armed. Each man carries merely an automatic pistol, a rifle, a cavalry saber, a trench knife and a sawed off shotgun. The only reason for even this insignificant armament is to discuss with fitting dignity such matters as etiquette with the natives.

The joy emporium referred to above is in Culi Culi. A liner is in port and some of the male members of the crew and passenger list are whooping it up in the aforesaid joy shop. Idyllic! Ravishing! The 42nd walks in, expecting to be greeted warmly. They were. The patrons and bouncers threw them cheer after cheer, and piano stools; yes, even vegetables. One of the women entertainers became excited and dived for a door. Sgt. Haverlin, thinking she intended to conceal some government property followed with much gusto. She jumped over the porch and crashed through a perfectly bamboo fence, (demolishing same) and disappeared in the direction of Shanghai. Beat anything since Elisha crossed the ice a couple of jumps ahead of a fit--and two blood hounds. She would have left an MB-3 as if it were nailed to the track. This somewhat discouraged pursuit so the callers returned to the arena, affairs had quieted down, but a noise in a nearby room solicited investigation. On opening the door a native was found with his head under a bed, legs, etc., sticking out. The 42nd stopped and looked - and thought - and the longer they looked the less they thought and the more they laughed. The native remained as still as a stiff--which he was. On being hauled out by the legs, it was explained to him that few (except an ostrich) now believed that hiding one's head confers invisibility.

From the standpoint of government property recovered, the foray was a failure but anyway, we secured lots of laughs.

Lieut. Hicks on alternate days conducts a class in riding for polo aspirants. The practice of riding with both arms around the horse's neck is discouraged. Officers are cautioned to use the whip sparingly. In extreme cases of viciousness a two by four may be employed, first as a club and later as a stretcher.

Lieutenants E. E. Aldrin and C. C. Nutt returned from a three day yachting trip to Mindoro and vicinity.

Lieut. N. D. Brophy, who arrived recently on the "Thomas", is in charge of the latest Air Service activity--polo. It is confidently expected that we will be able to make a creditable showing next season.

The past week has been a very poor week for aerial photography, as the weather

was too unsettled to even give us a chance to make up for lost time. Operations have been held up temporarily in this Section on account of not having Aerial Plates. Here's hoping that we will soon be in receipt of a shipment of plates.

Captain Frederick I. Eglin, A.S., had the exquisite pleasure of reading the Articles of War to the members of this organization. After the Articles of War were read Captain Eglin asked the boys if there were any questions, which, after a time, resulted in quite a story telling contest. It is believed Staff Sergeant C. E. Petersen was the winner of the contest.

San Antonio Air Intermediate Depot, Texas, September 5.

The new systems of Cost Accounting and Operation of Engineering Departments, as outlined in Air Service Circulars No. 15 and No. 16, 1923, are being installed at this Depot. Considerable gray matter is being expended in getting them into smooth running order. The installation of the two systems has been somewhat delayed, due to non-receipt of forms from Washington.

Lieuts. Leonard D. Weddington and Paul Evert flew in from Fort Bliss, Texas, last Thursday. Lieut. Weddington flew back in a photographic ship Friday, and Lieut. Evert, after obtaining a new motor, left Saturday morning.

Lieut. Ivan G. Moorman, Miss Elizabeth Brown and Mr. and Mrs. Felix N. Parsons spent the week-end camping at New Braunfels.

Orders were received directing Lieut. Edward M. Powers to proceed by air to St. Louis Field for duty as an alternate for Lieut. O'Connell, of the Twelfth Observation Squadron, Fort Bliss, Texas, who has been designated as an entrant in the International Air Races to be held there in October. Lieut. Ivan G. Moorman will also make the trip by air to attend the races.

During the last half of August the Engineering Branch of the Depot overhauled and repaired 9 DH-4B's, 1 DH-4B-P1, 2 Spads (Type 13-E), 1 SE-5A, 1 Martin Bomber-NBS1, 2 Sperry Messengers-1A, 15 Liberties, 4 Wright-H-3's, and 3 Wright-E's.

From September 1, 1922 to August 31, 1923, the Engineering Branch of the Depot rebuilt and placed in commission 335 ships of all types, and 469 motors, a year's operation of which this Depot is justly proud.

It seemed that the Aerial Flivver had appeared at last, when Lieut. Dayton, in a Sperry Messenger, equipped with a Klaxon horn, took the air early last Wednesday morning. In answer to an anxious inquiry from one of the ladies at the Post as to what the noise was, she was informed that it was probably some species of wild duck headed for Medina Lake.

Mrs. Lawrence Lee, of Montgomery, Alabama, is visiting her daughter, Mrs. Charles T. C. Buckner. Mrs. Lee has been paying her daughter, Mrs. Lloyd Barnett, of Crissy Field, California, an extended visit. On her way to California she stopped over a few days at Denver, Colorado, and visited her brother.

Major Frank D. Lackland, the Commanding Officer, and his mother, entertained at dinner Colonel John H. Howard, Major Frank M. Andrews, Major Shepler W. FitzGerald and Major Lewis H. Brereton. After dinner a number of additional officers and ladies came in for cards and Mah Jongg, and a Dutch Supper was served.

Mrs. Dorwin Lackland entertained informally Wednesday afternoon from four to six o'clock at her quarters, to meet Mrs. Lee. Receiving with Mrs. Lackland were the honor guest and Mrs. Buckner. Mrs. C. C. Culver and Mrs. Walter Dabney served at the refreshment table. Mrs. C. C. B. Bubb presided at the punch bowl. About eighty guests were present from Fort Sam Houston, Kelly Field, Brooks Field, and other posts of the vicinity.

Fairfield Air Intermediate Depot, Fairfield, O., Sept. 25.

Wilbur Wright Field is concentrating its energies toward the Aerial Races to be held on the first three days of October in St. Louis. Nearly all of the officers from Wilbur Wright expect to attend in person and several civilians from Compilation will also be there to look after the special supplies which have been shipped to St. Louis to be used in case of emergencies. An entire car load of engine and plane spares and of spare Wright engines was shipped from the Supply Depot at Fairfield on Sept. 17.

McCook Field is sending two Curtiss racing planes to St. Louis. The preliminary trials were made by McCook flyers at this Field last week. The entries from Wilbur Wright Field consist of two XBIA planes, in one of which the Wright-H type of engine has been replaced by H-3 type. In making this replacement, it was

necessary to make new gasoline and oil lines and to devise a sloping magneto bracket instead of the straight bracket that was used when the H-type engine was installed. After the engine installation was complete, the airplane was improved from an aerodynamic standpoint by altering the streamlines in several places. The pilots for the XBIA, remodeled at this field, are Lieut. V.J. Meloy of the Tennessee National Guard and Lieut. W. T. Larson of Kelly Field, San Antonio, Texas.

Lieut. H. H. Mills, who has recently been transferred from Wilbur Wright Field to McCook Field, is one of the alternate pilots for the Curtiss Racer. The pilots for the two Curtiss racers are Lieut. J. D. Corkille and Lieut. Walter Miller, the former coming from Brooks Field and the latter from Crissy Field, San Francisco, Calif. Lieuts. Corkille and Miller have been at this field most of the time for the past two weeks while the Curtiss racers were being given the finishing touches.

Two other officers who have been here recently were Lieut. Harrison G. Crocker and Lieut. Geo. H. Beverley from McCook Field who have been practicing in the T-2 which has been entered for Event No. 5, Race for Large Capacity Airplanes.

Three Martin Bombers from Langley Field are also here at the present time. Two of them are entered in the Race for Large Capacity Airplanes and will leave for St. Louis in a few days. Capt. E. C. Black and Lieut. H. D. Smith and Lieut. Cole are the pilots. They brought with them a number of enlisted mechanics who will go with them to St. Louis. Lieut. Cole was delayed by engine trouble and was widely reported in the newspapers as being lost, but he stoutly denies that fact.

A series of dances will be given at the gymnasium at Wilbur Wright Field by the civilian employees of the Post during the coming fall and winter and arrangements are now being perfected.

Among officers who will receive their travel orders in the near future is Capt. R. W. Horton, Post Surgeon who expects to leave for the Philippine Islands early in December.

Major J. H. Rudolph, Engineer Officer, is expected to return from a leave of absence, the last of September. He has spent most of the time in Milwaukee and at various points in Canada.

Major B. Q. Jones, who has completed his foreign service in the Philippines and who has been appointed Assistant Chief Supply Division at Washington, D.C., will arrive at the office of the Property Maintenance and Cost Compilation about September 25 in order to familiarize himself with the activities that are carried on at this place.

A new line of work that has been taken up by the Engineering Department is the repair and rebuilding of airplanes and engines for the various National Guard Units. This work is of vital necessity if the National Guard Officers and the flyers in the Reserve Officers Training Corps are to be given the opportunity to fly at the airdromes recently established at various points. The National Guard Units are not equipped to make major repairs and therefore this work for the eastern part of the United States is being centralized at Fairfield and it is expected that a large number of rebuilt airplanes and engines will be turned out in the near future for the benefit of the flyers of the National Guard.

Lieut. Guy Kirksey has returned from a short leave of absence.

Property Maintenance and Cost Compilation.

Captain E. E. Adler, Officer in Charge, Property Maintenance and Cost Compilation returned to Fairfield, Monday September 17, together with Major A.W. Robins, Commanding Officer and Lieut. G. V. McPike who witnessed the bombing tests near Cape Hatteras, Va. After the tests were over, Capt. Adler visited Langley Field, Hampton Roads, Va., Bolling Field, D.C., Aberdeen Proving Grounds, Aberdeen, Md., and Middletown Air Intermediate Depot, Middletown, Pa. His purpose in visiting these Air Service stations was to make an inspection of the supply situation at each place and to advise and assist the several Supply Officers of those Fields.

The new and revised catalog of the DeHaviland airplane has just been completed by Property Maintenance and Cost Compilation and copies of the same were mailed Sept. 20, 1923 to all Air Service activities. This catalog is the largest that has so far been produced, and great pains have been taken to make all of the part numbers and names correct. Additional catalogs of other airplanes are in preparation.

Major Roy S. Brown, Commanding Officer, Maxwell Field, Montgomery, Ala., is also at Fairfield enroute to St. Louis. He piloted a DH4B plane and expects to fly it in the Liberty Engine Builders Trophy, Race No. 3, on Oct. 1.

Two Navy racing planes, known as the Douglas-Davis Torpedo plane (DT-4) are at this Field enroute to St. Louis. There is also a DH plane, property of the Marine Corps, which is here for the purpose of changing engines.

Moving pictures are now being shown on three evenings each week at the Post Gymnasium at Wilbur Wright Field. A small admission fee is charged and the profits are used for the support of educational and recreational facilities. The moving pictures have been largely attended, not only by the residents of the Post but by the civilian population of the neighboring towns of Fairfield and Osborn.

This is a sample of the remarks that are made by visitors who come to see the Barling Bomber for the first time: "I knew that they made them go forward with propellers, but I never knew that they used propellers on the back to slow them down with".

McCook Field, Dayton, Ohio, Sept. 20.

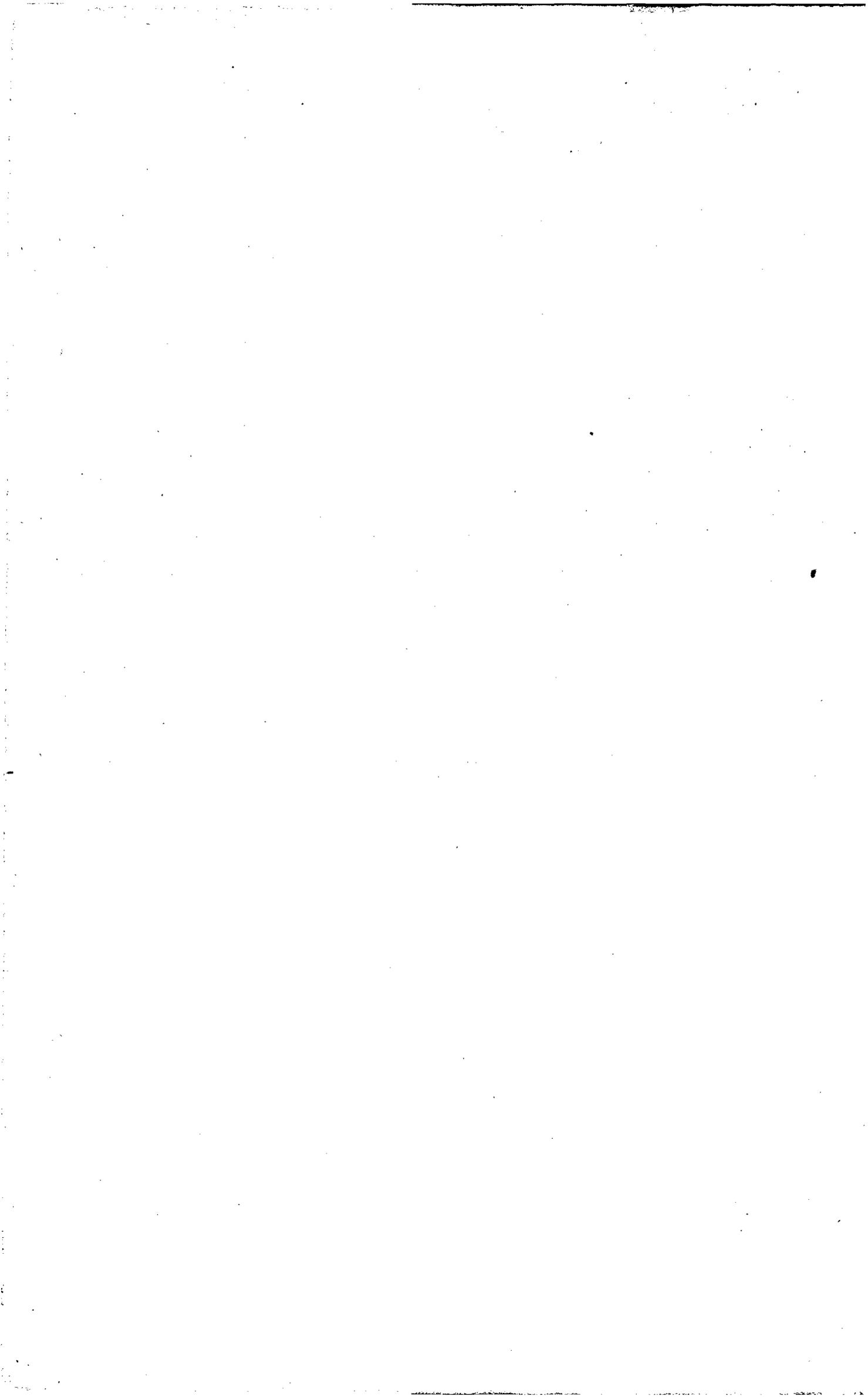
The following Air Service officers reported at this station for temporary duty in connection with the Pulitzer Cup Races to be held in St. Louis the first week in October: 1st Lt. Vincent Meloy, Organized Reserve, National Guard, Nashville, Tenn. to fly the XBl-A, 1st Lt. Lowell H. Smith, Rockwell Field, to fly the CO-5, Capt. Robert Oldys, O.C.A.S., to fly the CO-4, 1st Lt. Lucas V. Beau, Jr., Bolling Field, to fly the Curtiss Racer, R-3, 1st Lt. Harrison J. Crocker, Kelly Field, to fly the T-2, 1st Lt. George H. Beverley, Kelly Field, alternate for the T-2, 1st Lt. Dudley Miller Outcalt, A.S., O.R.C., Cincinnati, O., to fly the DH4B.

Captain J. C. Van Ingen, S.C., reported at this station on September 17, for the purpose of pursuing a course of instruction in meteorology.

1st Lt. Jesse E. Canary, now on duty at Fort Thomas, Ky., received orders to report to this station on or about October 1, for the purpose of pursuing a course in meteorology.

1st Lieutenants "Jimmie" Doolittle and Edgar P. Sorenson were transferred on September 14, from McCook Field to the Massachusetts Institute of Technology for a year's course of study.

1st Lt. A. W. Brock, Jr., returned looking very fit from a month's leave of absence, which he spent hunting and fishing in Michigan.



October 27, 1923.

Munitions Building
Washington, D.C.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE October 30, 1923.

THE AIRPLANE RACES AT ST. LOUIS

By Lieut. Robt. J. Brown, Jr., Air Service.

Four miles a minute! The average man can hardly bring himself to a realization that such tremendous speed is possible, and yet Lieut. A. J. Williams of the Navy flew the Navy Curtiss Racer in the Pulitzer Race at St. Louis on October 7th at an average speed for the 200 kilometres (124.27 miles) of the triangular course of 243.67 miles an hour. At such a rate of speed in continuous flight one could travel the distance between New York and San Francisco in ten hours or, counting the difference in time of three hours between the Atlantic and Pacific Coast, eat breakfast in New York and lunch in San Francisco. It means also that the Atlantic Ocean could be crossed in even less time than that, assuming that the start would be made from Newfoundland and the landing in Ireland.

But we are indulging in flights of fancy just now, although some may not be beyond the realm of possibility a few years hence. Already the world has been furnished a striking example of the ability of an airplane to make a non-stop flight of some 2500 miles in the noteworthy feat of Lieuts. Kelly and Macready, who travelled from New York to San Diego, Calif., in a little less than 27 hours. In the light of the remarkable advancement which has been made in airplane construction in the last few years, who can say that some aeronautical genius will not design an airplane that will cause our flight of fancy to become a reality?

This was not the Army's year so far as the Pulitzer Race was concerned, the Navy capturing the first four places in this annual airplane speed classic. Lieuts. Miller and Corkille, of the Army Air Service, piloting the Army Curtiss Racers which Lieuts. Maughan and Maitland piloted to first and second place, respectively, in the Pulitzer Race last year, finished fifth and sixth this year, but at that their average speed (218 and 214 m.p.h.) exceeded last year's highest mark, made by Lieut. Maughan, of 205.8 m.p.h.

Despite the loss of the Pulitzer Race, the Army Air Service carried off most of the honors at the races, winning Event No. 3 for observation types of airplanes and Event No. 5 for large capacity airplanes.

The big aviation meet this year was held at St. Louis Field, Bridgeton, Mo., some 20 miles from the city proper, and was by far the most successful one ever held in this country. Originally scheduled to begin on October 1st, the officials in charge found it necessary to postpone the races for three days due to the soft condition of the ground caused by excessive rain. The original program of races was, however, completely carried out, beginning on October 4th and ending with the Pulitzer Classic on Saturday afternoon, October 6th.

On the morning of October 1st practically all the civilian, military and Naval entrants for the various races were in St. Louis and ready for the word to go. In addition, numerous persons arrived by air from all parts of the United States to view America's foremost aviation classic. The postponement of the race was not without its advantages, however, for during the first three days of the week considerable flying time was obtained by the various contestants circling the 50-kilometer course to familiarize themselves with landmarks in order to map out the shortest possible distance around the course and to avoid the possibility of wandering off their course during the races in which they were entered as contestants. Considerable interest was aroused by the arrival at St. Louis of the Navy Airship ZR-1 (now the "Shenandoah") which flew from Lakehurst, N.J. to St. Louis and return. The airship arrived early Wednesday morning but only remained about one hour and then started on her homeward journey. Admiral Moffett, Chief of the Bureau of Aeronautics of the Navy, flew back to Lakehurst as passenger.

Great crowds witnessed the races each day, and the Mound City was literally overflowing with aviators and air enthusiasts from all parts of the world. The officers of the foreign legations were present from Washington and added much to

the gay color scheme with their bright dress uniforms. Plans and arrangements of all descriptions advertised the fact that St. Louis was the coming aeronautical center of the United States and that great air traffic lines to points on the opposite side of the globe would be projected from St. Louis. Aeronautical exhibits from the Army and Navy were viewed with considerable interest in various parts of the city and at St. Louis Field. An enormous grandstand had been erected in front of the "Home" pylbn on the flying field, from which point the interested spectators could view the various planes in flight in each of the races. Automobiles were parked by the thousands in all the fields in the vicinity of Bridgeton. The University Club, the Racquet Club, the Missouri Athletic Club and various other Country Clubs and Athletic institutions of the city extended full membership privileges to the visiting aviators, so that the three days' delay in the program was not without its recompense.

The Air mail planes, scheduled to participate in the Air Mail Race, arrived at different times on Monday and Tuesday. These planes later on during the week were used in a night flying demonstration. On Wednesday the Army Air Service staged an aerial demonstration, which included formation flying, parachute jumping, laying of smoke screens by airplanes, and aerial combat acrobatics. The spectators were afforded many thrills by the spectacular flying of the Army pilots of the First Pursuit Group from Mt. Clemens, Mich. During this exhibition the Army's "Leviathan of the Air", the Barling Bomber, arrived from Dayton. The world's largest airplane had landed previously at Scott Field, Belleville, Ill., and took off again shortly after two o'clock and directed its course over St. Louis. The thousands of St. Louisans who heard the drone overhead of her six Liberty engines immediately guessed its identity, but none of them knew that Major-General Mason M. Patrick, Chief of Air Service, was piloting it. The plane was escorted to St. Louis Field by a convoy of eight other planes and it was landed by Lieut. Harold R. Harris of McCook Field, who relieved the General at the controls. Lieut. Harris is the officer who took the Barling Bomber into the air on her maiden flight and he piloted her from McCook Field to St. Louis on this, her first long distance cross-country flight.

The first event on the program was the "On to St. Louis Race", for the trophy of the St. Louis Chamber of Commerce. Prizes were awarded to civilians only, based on the distance they had covered, the number of passengers carried, and their engine horsepower. This event was completed prior to October 2nd. Charles S. (Casey) Jones of the Curtiss Aeronautic Corporation, in a Curtiss "Oriole" was declared the winner. His flying time from Garden City, L.I., New York, to St. Louis was 13 hours. He carried one passenger and his plane was powered with a 40 h.p. engine. H. F. Cole, of North Dakota, was second; W. W. Meyer of Chicago, a former Air Service officer, third; and Lawrence Sperry, fourth. Mr. Sperry, as usual, flew his "flivver" plane, the Sperry Messenger, and while we are on the subject of this small plane - one of the smallest aircraft in the world - we might mention an amusing incident which happened shortly after the Barling Bomber landed. A. G. Lockwood, a civilian test pilot from McCook Field, saw a chance to bring out for the benefit of the crowd in a graphic manner the immensity of the Barling Bomber as compared with the Sperry "Flivver". He was taxiing along behind the giant ship when its pilot suddenly "gave her the gun". The six motors of the Barling were thrown open and a strong slip stream of air from the propellers turned the "flivver" on end, held her on the wing for an instant and then threw her forward on her nose. Lockwood was uninjured, but the propeller on the "flivver" was broken.

On the 4th of October a crowd of over 75,000 people gathered about the St. Louis flying field to witness the civilian airplane race for the Flying Club of St. Louis Trophy. Airplanes of every description were entered in this race, which furnished considerable entertainment for the spectators. Walter E. Lees, of Dayton, Ohio, in a Hartzell FG-1 plane won this event. Lees was the sixth to get away from the starting line, but he outdistanced all the leaders despite the time handicap and completed the course of 32.21 miles at an average speed of 89.31 miles an hour. Second place was won by Perry Hutton, flying a Laird Swallow, and third place by C. S. (Casey) Jones. Lawrence Sperry in his "flivver" was the popular favorite with the crowds and he gave a wonderful exhibition of maneuvering up to two miles from the finish line, when a leak in the oil line forced him to make a landing. He repaired the trouble, took off from the wheat field in which he landed and finished with an average time for the course of 81.97 miles an hour. Sperry forced Lees for first place throughout the entire course and drew favorable comment from the winner for his plucky fight. Considering that he was forced to

land, pilots considered his time remarkable.

The next event was a race between six Pursuit planes from the Army Pursuit group stationed at Selfridge Field, Mt. Clemens, Mich., for the John L. Mitchell Trophy. Captain Burt E. Skeel finished first with an average speed of over 156 miles an hour for the total four laps of the triangular course. Lieut. T. W. Blackburn was a close second. This Race was in the nature of an elimination contest for next year's Pulitzer Race, and the Chief of Air Service has indicated that he will allow the winner of this Race to participate in the Pulitzer contest next year.

The first day's program was concluded by the Race for the Liberty Engine Builders' Trophy. This event was limited to Military airplanes of the Observation type, and much interest was centered therein as the Navy Curtiss T-18 triplane with a reputed speed of 160 m.p.h. was over 20 miles faster than the next fastest plane entered, the Army Curtiss 2-seater modified Pursuit airplane having been withdrawn by General Patrick just previous to the Race. Other entries were the Navy Vought, which was reputed to be faster than any of the Army entries, and the Army's planes, comprising one DH-4-L, 2 XB-1A's, 2 CO-4's, 1 CO-5 and 1 LePere. With her two fast ships the Navy hoped to win first and second places, but the hopes of the Navy were dashed to the ground when the "Wasp", far in advance of the other airplanes, crashed on its first lap, due to engine trouble. Fortunately, no one was injured, but the airplane was a complete wreck. After the first lap, the CO-4, piloted by Lieut. Clements McMullen, had passed every airplane in the race except the Navy Vought, and was averaging about 139 m.p.h., with the DH-4L, piloted by Lieut. H. K. Ramey, following close at an average speed of 138 m.p.h. Lieut. Ramey on the next lap passed the Navy Vought, and on the final lap the Vought was passed by the CO-5, piloted by Lieut. Lowell H. Smith. The Race was won by Lieut. McMullen with an average speed of over 139 m.p.h. Second place was won by Lieut. Ramey, with an average speed of over 137 m.p.h., and third place by Lieut. Smith, with an average speed of over 132 m.p.h. The LePere, piloted by Lieut. S. M. Connell, had a forced landing with a broken connection rod, and one of the XB-1A's ran out of gas. All the other planes finished the Race.

The result of this contest, the first clash of the International Contests between the Army and Navy, was a complete victory for the Army. The winner of last year's race, Lieut. T. J. Koenig, Army Air Service, maintained an average speed of 128 m.p.h. in the LePere airplane which was forced out of the race this year. A year's development on Observation airplanes shows, therefore, a gain of about 11 miles per hour in speed over last year's record.

October's bright blue weather prevailed on the second day of the Races, and an interested crowd was on hand early in the day to witness various impromptu aerial exhibitions by the Army and civilian flyers. The civilian flying contest for the Trophy presented by the Aviation Country Club of Detroit absorbed the attention of the crowd in the forenoon. The event was for combined speed and efficiency, and was confined to commercial airplanes. It was won by L. E. Aitchison in a Bellanca model with a 95 h.p. Anzani motor, who averaged a speed of 94.28 miles an hour over the triangular course of 155.34 miles. Again P. Hutton and C. S. (Casey) Jones figured in the prize money, for the former finished second with an average speed of 87.03 m.p.h., and the latter third with a speed of 82.69 m.p.h.

In the afternoon the Army flyers maintained their supremacy over the Navy in the Race for the Merchants' Exchange of St. Louis Trophy, this event being confined to large capacity freight or passenger-carrying planes. The Army entries in this Race were four Martin Bombers and the T-2. The modified Douglas airplane being built for a cruise around the world, originally entered in this contest, was not available, and the Breguet was withdrawn from the Race. The Navy entries were two Douglas Torpedo airplanes, equipped with 550 h.p. Wright engines, and one Martin Bomber, flown by a marine pilot. The two Douglas planes were reputed to be the fastest entered in the Race, and indications prior to the contest were that the Navy would at least win first and second places. The Army Martin Bombers, however, flown by 1st Lieuts. H. L. George and Leigh Wade, had been streamlined to a degree and were in excellent flying condition. They were required to carry a dead load of over 1600 pounds during the Race, while the weight for the smaller Douglas planes was between 1100 and 1200 pounds. The Army adherents, therefore, were basing their hopes of success upon a performance of these two airplanes. Both Army and Navy entries met with misfortune. One of the Douglas planes was forced down during the first lap due to trouble with the stabilizer, while engine trouble forced the landing of the Martin Bomber flown by Lieut. Wade prior to the comple-

tion of the Race. During the first lap the Navy Douglas plane was apparently leading the field with the Army Martin, flown by Lieut. George, second. On the second lap, however, just prior to turning the "Home" pylon, Lieut. George passed the leader and held his lead throughout the race. The average speed of the winning plane was over 150 m.p.h., the Navy Douglas getting second place and the Marine Corps Martin Bomber coming in third.

The Army victories of Thursday and Friday were celebrated in proper fashion in St. Louis and vicinity on Friday night. The Army Air Service contingent were evidently determined to indulge in jollification while the celebrating was good, for they had no hopes for the morrow, the belief being pretty general that the fast Navy speed planes built especially for the Pulitzer Race would, barring any unusual accident, easily outdistance the old Army planes which made world's records last year and the year previous.

The last of the aerial contests were held on Saturday. In the morning considerable interest surrounded the race between air mail airplanes flown by air mail pilots for the Detroit News Air Mail Trophy. All planes entered in this race were DH-4B's modified in accordance with air mail specifications, and the speed of all these planes indicated that there is very little difference in the performance of the Liberty motors with which they were equipped. This fact speaks well for the high standard of production attained during the manufacture of this wonderful aviation engine.

Sixteen ships were entered in this race over a 300 kilometer course (186.42 miles) and twelve finished. Air Mail Pilot J. F. Moore, stationed at North Platte, Neb., won the trophy, flying at an average speed of 124.98 miles an hour. Second and third places were very closely contested between D. C. Smith, of Omaha, and Pat F. Collins, of Cleveland, the former's average being 120.83 miles an hour and the latter's 120.09.

Following the air mail trophy race, practically all the airplanes on the field took the air and indulged in what one newspaper termed a "stunting orgy".

The International air speed classic for the Pulitzer Trophy was the final event on the program and was started at 2:30 p.m. A crowd of over 85,000 persons were on hand to witness the contest. The two Navy Curtiss Racers, recent developments and refinements of the Army Curtiss airplanes, which won the Trophy last year, were entered in this classic and, in addition, two Wright Fighters, equipped with high compression Wright engines. These four Navy entries, the two Army Curtiss Racers in which Lieuts. Maughan and Maitland broke all existing aeronautical speed records last year, and the Verville-Sperry monoplane, equipped with a Curtiss CD-12 motor, flown by Lieut. Alexander Pearson, comprised all the entries.

Lieuts. Williams and Brow of the Navy were assigned to fly the new Navy Curtiss Racers; Lieuts. Gallaway of the Navy and Sanderson, of the Marine Corps, the Wright Fighters, and Lieuts. Miller and Corkille, Army Air Service, the two Army Curtiss planes. The race was run in heats, the first one being between Lieut. Corkille and Lieut. Sanderson. For the four laps of the Race, Lieut. Sanderson averaged over 231 m.p.h., while the year old Army Curtiss plane attained an average speed of about 214 m.p.h., an increase in both cases over the speed records made last year at Detroit over a fifty kilometer closed circuit. Upon completion of this heat Lieut. Sanderson ran out of gas and had a forced landing off the main field, completely wrecking his airplane but, fortunately, without any injury to himself.

The next heat was started between Lieut. Williams and Lieut. Pearson. Speed tests prior to the Race had indicated that the speed of over 250 m.p.h. could be attained in the new Curtiss Racer on a straightaway, and it was rumored that the Verville Sperry could do nearly 230 m.p.h. Unfortunately, just after crossing the starting line, Lieut. Pearson was forced to land and withdraw from the race, due to an improperly balanced propeller which set up vibrations in his plane and made it impossible to control at high speed. Lieut. Williams piloted the Navy Curtiss over the four laps of the Race at an average speed of over 243 m.p.h.

The final heat between Lieut. Brow, Lieut. Gallaway and Lieut. Miller was started as soon as Lieut. Pearson was forced to withdraw from the Race. It was obvious that the old Army Curtiss Racer would be easily outstripped by both the new Wright and New Navy Curtiss Racers. Aside from the accidents to Lieuts. Sanderson and Pearson, no other accidents occurred to mar the Race, and the final results indicated that Lieut. Williams had broken all existing world's airplane

speed records with an average speed of over 243 m.p.h. Lieut. Brow of the Navy finished second (over 241 m.p.h.); Lieut. Sanderson, third (over 231 m.p.h.); Lieut. Gallaway, fourth, (over 230 m.p.h.); Lieut. Miller, fifth, (over 218 m.p.h.) and Lieut. Corkille, sixth, (over 214 m.p.h.).

It is interesting to note that each of the contestants of the Pulitzer Race broke all world's records for a closed circuit, and that the highest speed attained by the Navy Curtiss Racer of over 243 m.p.h. exceeded the phenomenal speed made by Lieut. Maughan a year ago of 205.8 m.p.h. by 37 m.p.h. This large gain in speed is an indication of the rapidity with which aeronautics is developing. The speed attained by all these high speed airplanes is such that, according to a statement issued by Lieut. Williams, he was at times during his pylon turns in a state of semi-unconsciousness, due to the action of the centrifugal force on his nervous system. At the conclusion of the races, high authorities in aviation expressed the opinion that there were no mechanical limitations upon the high speed which might be attained by airplanes, but they felt that the point would soon be reached where human endurance could not stand the strain of flying at such terrific speeds.

A brief review of the results of the International Air Races for this year shows America far in the lead of all other countries of the globe in the development of the science of aeronautics. A speed of about 12 m.p.h. has been added during the year to our Observation type airplanes. The speed of bombers has not changed, but our bombing development is represented by the largest airplane in the world (the Barling bomber) weighing over 20 tons and capable of carrying a bombing load of over 10,000 pounds.

The refinements in speed airplanes made this year by the Navy can undoubtedly be further developed and more speed attained during the succeeding year. Four years ago the highest speed attained by airplanes was about 156 m.p.h., and it is only reasonable to assume that straightaway tests with the present Navy Racers will result in a speed of over 256 m.p.h. being attained this fall, thus making an increase in speed of high speed airplanes of about 25 m.p.h. for each of the last four years.

Ed. Note: It should be remarked here that none of the figures stated in this article on the speed performances of the various entries are official, being merely the roughly calculated figures given out by the officials in charge of the races shortly after the conclusion of same. As soon as the official records are reported they will be embodied in a forthcoming issue of the NEWS LETTER.

BELGIUM AGAIN VICTORIOUS IN INTERNATIONAL BALLOON RACE

The ill fated Gordon Bennett International Trophy Race this year, which proved to be a tragedy this year instead of a sporting event, due to the death of five of the contestants because of unfavorable weather conditions they encountered during flight, was won for Belgium for the second consecutive time by Lieut. E. Demuyter, the pilot of the winning balloon last year. Lieut. Demuyter, piloting the balloon "Belgica", landed in Sweden, covering 1155 kilometers after remaining in the air 21 hours. Another Belgian balloon "Prince Leopold", piloted by Veenstra and Quersin, finished second; and the "Helvetia" of Switzerland, piloted by Armbruster and Dr. Bachman, finished third.

A torrential rain fell just prior to the start of the race, but the officials of the Belgian Aero Club permitted the contest to start for the reason that the precise texts of the rules governing the race prevented a postponement.

ARMY PILOTS ESTABLISH EIGHT WORLD'S RECORDS

The Federation Aeronautique Internationale, on October 3rd last, announced that it officially accepted the flight and distance records made by Lieuts. Lowell H. Smith and John P. Richter, U. S. Air Service, on August 27th and 28th at Rockwell Field, San Diego, Calif. In addition to the duration record of 37 hours, 15 minutes and 14-4/5 seconds, and the 5300 kilometer long distance flight, the Federation has recognized six speed records from 2500 kilometers to 5,000 kilometers, viz:

2500 kilometers	-	17 hours, 32 minutes, 44-4/5 seconds.
3000	"	21 hours, 11 minutes.
3500	"	24 hours, 37 minutes, 8 seconds.

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ing at the time of the first two attempts to negotiate the endurance flight, an auxiliary course was laid out as follows: Pylons Nos. 1 and 2, same as in 50 kilometer course; Pylon #3 on Silver Strand, 10,186.64 meters from Pylon #1 and 6,549.14 meters from Pylon #2.)

Before the plane had left the ground, a schedule for refueling was prepared so that the crews on the ground and the plane in the air would know beforehand just what to expect and could make preparations accordingly. The schedule of refueling was as follows: 10:00 a.m. - 90 gallons gasoline; 12:00 noon, Food; 2:00 p.m., 90 gallons gasoline; 4:00 p.m., 90 gallons gasoline; 4:30 p.m., 15 gallons oil; 5:30 p.m., 90 gallons gasoline; 6:30 p.m., as much gasoline as they would take.

If this schedule had been adhered to they would have received a total of 15 gallons of oil, 365 gallons of gasoline, and two hot meals. This allowed a 40 gallon overlap in the gas, as they could not possibly have used more than 423 gallons of gasoline during the time they were in the air.

A schedule for the next morning contemplated refueling as follows: Daybreak - 90 gallons gasoline; 7:00 a.m., Food; 8:00 a.m., 90 gallons gasoline. And then if they decided to remain up over the second night, the schedule of the preceding day would have been adhered to.

From the experience of the preceding flights it was deemed most advisable to have two refueling ships for use instead of one. Accordingly, two ships were prepared and manned as follows:

Plane No. 1 - Lieuts. V. Hine and F. W. Seifert.

Plane No. 2 - Captain R. G. Ervin and Lieut. O. R. McNeel, O.R.C.

Actual contacts with the endurance plane were made as follows:

9:25 a.m. Plane No. 2 - Took seat cushions to endurance plane.
10:05 a.m. Plane No. 1 - 90 gallons gasoline
12:10 p.m. " " 2 - Lunch
1:48 p.m. " " 1 - 90 gallons gasoline
3:53 p.m. " " 2 - 94 gallons gasoline
4:53 p.m. " " 1 - 15 gallons oil
5:13 p.m. " " 2 - 38 gallons gasoline
6:15 p.m. " " 1 - 48 gallons gasoline

As the endurance plane only took 38 gallons of gasoline on the 5:13 p.m. fueling trip and 40 gallons of gasoline on the 6:15 p.m. fueling trip, it was assumed that they had taken sufficient gasoline to completely fill their tanks, as follows: Reserve tank, 32 gallons; main tank, 142 gallons; refueling tank, 50 gallons; total 224 gallons.

This amount of gasoline should have run them from the time they were last refueled until 5:30 a.m. without any difficulty whatsoever, so that refueling was figured for the following day with the idea of making a contact as soon after 5 o'clock as possible.

It was noted that during their day's flight they were having a certain amount of difficulty with their engine, as there would be an occasional period when the engine would cut out almost completely. Further, this cutting-out continued at intervals during the night. The flight was made harder also on account of a fog coming in from the ocean about ten o'clock which obscured the full moon. This fog, however, remained at an elevation of about 800 feet, so that at dawn on the morning of August 28th there was an 800 foot ceiling available for refueling operations. Refueling on the second day was accomplished as follows:

5:02 a.m. Plane No. 2 - 82 gallons gasoline
5:43 a.m. " " 1 - 15 gallons of oil
6:25 a.m. " " 2 - 90 gallons gasoline and breakfast
11:10 a.m. " " 2 - 88 gallons gasoline
1:26 p.m. " " 2 - Lunch
1:51 p.m. " " 1 - 8 gallons oil
3:45 p.m. " " 2 - 67 gallons gasoline

From the above figures it is seen that the refueling planes transferred to the endurance plane 687 gallons of gasoline, 38 gallons of oil and four hot meals.

From time to time during the flight notes were dropped from the endurance plane and notes were sent to them from the ground. The notes from Lieuts. Smith and Richter indicated that their motor trouble was continuing, but they seemed to have found a method of eliminating the trouble by hitting the Lunkenheimer valve with a wrench at the time the engine started to miss. This seemed to indicate that the strainer was becoming clogged. Upon inspection of the plane after

landing and the Lunkenheimer valve, it was found that the strainer was completely coated with a black powder which caked so as to prohibit any gasoline passing thru. This accounts for the fact that when the Lunkenheimer valve was hit with a wrench the gas supplied to the carburetor was restored. This strainer with the sediment still on it was forwarded to McCook Field for analysis to determine, if possible, its origin.

At 12:00 noon a message was dropped by Lieut. Smith stating that they would stay up until 6:30 p.m., at which time they would have broken all records, so that refueling arrangements were made accordingly, as can be seen above. For instance, on the 3:45 p.m. trip they only took 67 gallons of gasoline.

With a view of completing the flight with the minimum amount of fatigue on the part of Lieuts. Smith and Richter, a formation of four airplanes went up at 5:30 p.m. and escorted the endurance plane around the course on the last two laps. The plane formation was piloted by Major H.H. Arnold, Capt. R.G. Ervin, Lieuts. V. Hine and F.W. Seifert.

After rounding the pylon at the Marine Barracks at the end of the 106th lap at 6:12 p.m., Lieut. Smith flew towards Rockwell Field and landed at 6:19:32 p.m. August 28, 1923.

During the flight the following records were broken and made:

50 Laps -	2500 Kilometers,	17 hours,	30 min.	32-3/5 sec.	88.83 miles
60 "	3000 "	21 "	8 "	44-2/5 "	88.10 "
70 "	3500 "	24 "	37 "	4-4/5 "	88.05 "
80 "	4000 "	28 "	6 "	48 "	88:50 "
90 "	4500 "	31 "	36 "	29 "	88:50 "
100 "	5000 "	35 "	4 "	28 "	88:75 "

Total elapsed time - 37 hours, 15 minutes, 14-4/5 seconds; average speed, 88.5 miles an hour; total distance, 5300 kilometers (3,296.26 miles); time the plane completed the 50 kilometers in 96.42 miles per hour.

After landing the gasoline, oil and water in the endurance plane was checked up with the following results:

Gasoline, main tank, 37 gallons; center section gravity tank, 33 gallons; reserve tank, 4 gallons; total 74 gallons. Oil - Main tank, 9 gallons; Reserve tank, 1 gallon; total 10 gallons. Water - Radiator, 14 gallons; Reserve tank, 4 gallons; total 18 gallons.

The pilots upon landing were found to be in excellent physical condition. The engine was functioning perfectly for the last six hours of the flight and the plane was mechanically in first class condition. There was sufficient gasoline and oil available in the plane for an additional flight of 3-1/3 hours."

ZR-1 PAYS A FLEETING VISIT TO DAYTON

The big dirigible ZR-1 passed over Dayton, Ohio, at about eight o'clock in the evening of October 1st on its way from Lakehurst, N.J., to the Air Races at St. Louis. The searchlights from Wilbur Wright Field and McCook Field played upon it as it passed over the city, and thousands of people saw it. The radio station at Wilbur Wright Field was in communication with the ZR-1 for several hours during the afternoon and evening, the report being that everything was O.K. on board.

The ZR-1 was christened the "U.S.S. SHENANDOAH", meaning "daughter of the stars" by Mrs. Edwin Denby, wife of the Secretary of the Navy, at Lakehurst, N.J., on October 10th, in the presence of Secretary Denby and prominent officers of the Army, Navy and Marine Corps, among them being Major General Mason M. Patrick, Chief of Air Service, and Admiral Wm. A. Moffett, Chief of the Bureau of Aeronautics, U.S. Navy.

CELESTIAL EMPIRE A HOT PLACE

Our Correspondent from Camp Nichols, Risal, P.I., reporting the return of Captain Thomas J. Hanley, Air Service, from detached service in China, states that Capt. Hanley reports seeing many amusing and curious things and that he was unable to keep cool, especially at Peking and Shanghai. The temperature at those places was over 100°F, and even palm beach suits were too heavy. When he finally came back to the Philippines he had to wear a heavy serge suit to keep warm.

The laurels are passed to China for the hottest place in the Orient.

88th SQUADRON GOES ON A HIKE

The 88th Observation Squadron, stationed at Wilbur Wright Field, Fairfield, Ohio made a trip to Norton Field, Columbus, Ohio, recently, and returned several days later. The boys in the squadron called it a hike, but it was one of the new fangled hikes, as all the pilots traveled by air and the rest of the squadron traveled by motor truck, no one journeying on foot as in the good old infantry hikes. The purpose of the trip was to place the squadron on record as being able to move on short notice from one flying field to another. The 88th Squadron is a perfectly self-reliant and self-contained unit and carries with it, by truck and by airplane, everything that it needs, including Quartermaster supplies as well as Air Service equipment.

DAYTON STRIVES TO LAND AIR RACES FOR 1924

Dayton is making a bid for the Air Races for 1924. A branch of the Aeronautic Association has been organized in Dayton with Orville Wright, the inventor of the airplane, as President. Mr. Wright and about a dozen other prominent citizens of Dayton left for St. Louis for the races with the avowed purpose of bringing the annual aerial classic to Dayton in 1924. Among others in the delegation were Congressman Roy G. Fitzgerald, Mayor F.B. Hale, and H.W. Karr. Mr. Frederick B. Patterson, President of the National Cash Register Company, which is Dayton's largest industry, is also a member of the Committee, and he was elected President of the National Aeronautic Association on October 1st.

GIANT BARLING BOMBER FLIES TO ST. LOUIS RACES

The largest airplane yet constructed in this country, the Barling Bomber, was the object of much interest to the thousands of spectators who witnessed the airplane races in St. Louis the first week in October. The big plane was flown from its home station, Wilbur Wright Field, Dayton, O., by Lieuts. Harold R. Harris and Muir S. Fairchild. The Bomber, which has for many months been under construction at Wilbur Wright Field, was after many vexatious delays finally made ready for its maiden trip on the afternoon of August 22nd. The first flight of this heavier-than-air Leviathan was a marked success, being carried out in masterly fashion by the two pilots above mentioned, assisted by Mr. Douglas Culver. Mr. Walter H. Barling, the designer of the Bomber, in a special article written for SLIPSTREAM, the McCook Field monthly, has this to say regarding the initial flight of his big creation:

"The evening of the 22nd proved to be an excellent one for the flight, although the pessimistic element was not lacking with the explanation that such a huge ship could not possibly take off without the help of a strong head wind. Several photographers, too, seemed to be particularly that good life-like pictures of all occupants be snapped before the 'flirt with death' was taken. Even the 'important widows-to-be' came in for the foray of camera men, but the subjects persisted in ruining the setting by persistent cheerful smiling.

But after all, it must be said an optimistic feeling predominated amongst those present to witness the flight.

You can perhaps imagine my thought when after these many years of intense study, repeated discouragement, worry, nervous tension, hopeful expectation, to hear at last an almost dreamlike voice, the cheery call of Lieut. Harris, 'Let's go!' As I climbed the ladder into the aperture of the big fuselage, I was indeed the happiest man existing. Suddenly the engines began to drone and the atmosphere of the affair was quite similar to that which accompanies the drawing in of the gangplank at the departure of a great ocean vessel. As I felt the big ship moving forward in its taxiing journey to the take-off point at the south portion of the field, I might have readily imagined myself aboard a big liner making its way down the channel of the harbor to open water. From my lofty perch some fifteen feet from the ground I felt quite small and insignificant, while the absence of pronounced 'lumps' typical in the taxiing of a smaller plane gave the impression of gliding along on water.

I sensed no anxiety with respect to the ship's ability to fly. It has been observed that the engine mounts were absolutely rigid even at low engine speed which tests this feature better than high speeds. We know, too, from previous tests that the wing structure and fuselage could be relied upon for strength and rigidity.

With these points to its favor the only question of uncertainties lay in the controls and landing gear. As for the latter, I had great faith in the oleo legs.

In order to get the best possible position to observe the plane in flight, I stationed myself in the rear upper gun cockpit. From this point I could see each of the engines, the wings, fuselage and tail. We made the turn at the take-off point. I could not but marvel at the ease with which the great ship made the turn. She can turn on the ground on an axis inside of a wing tip and almost on one undercarriage. I was a bit worried, however, that the abrupt turn would injure the skid.

The great moment had arrived. Before us stretched the broad, open field with a slender line of gaudy colors along the edge marking the presence of spectators who had assembled to witness the event. I looked across, too, where hidden among the tall weeds and undergrowth stood the tumble-down shack where some few years ago the Wright Brothers worked so intensely upon the first successful flying machine. There in that neglected shack among the weeds was written, as Kipling terms it: 'The first verse in a chapter of endless possibilities.'

From my lofty aerie I surveyed the structure of my gigantic plane and was glad that I had been given the part to write one of the future verses in this romantic manuscript of human accomplishment. My reverie was suddenly broken by the increased whirr of the powerful engines, and, before I was fully aware of it, we were taking off. Again I experienced the sensation of gliding along on water. Faster, faster the surface of the ground moved along beneath me until, joys of joys! I had that half unconscious feeling of riding free of the earth - flying. She got off in thirteen seconds from the standing start or in eight seconds of full engine burst; I estimated about a 120-yard run. She climbed well at fairly high air speed until an altitude of some 2,000 feet was reached. Lieut. Harris then made the first bank and turn - a very flat, gently turn. At this point I left my position and went forward to see how the pilots and Mr. Culver were getting along. Culver was all business. There before him were the electric pumps singing merrily under his charge, while the overflow gauges registered the plentiful supply of gasoline in the gravity tanks. The temperature of the engines was high - the radiators small. The electric tachometers were functioning excellently.

On the descending leg of the flight the ship glided at about 93 miles per hour, passing over the length of the flying field, where another turn was made with a normal bank. We settled down gradually and with the grace of a huge bird. The landing was perfect and an experienced observer would not have been able to time when contact with the ground was made except by closest observance."

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The following article, giving the impressions of our McCook Field Correspondent on this monster of the air sometime prior to its initial flight may be of interest to our readers:

"This is entirely an untechnical and unofficial story. We are off our dignity and speak strictly from the point of view of the layman, for it was our imagination the imagination that used to believe in fairies and houses whisked through the air, that was first affected, rather than the purely impersonal and scientific side of our mind, which we are aware should dominate the writer on aviation topics.

We went from McCook to Wilbur Wright Field to visit the Barling Bomber yesterday.

Freed from her scaffolding, at last, she stands with her fore front well out of the hangar that has housed her these many months, the outer portions of her wings and all her six engines in place. As we stood beneath her, looking up, the mass seemed to us rather like that of a two-story house, with a cockpit instead of second-story windows; not at all like a thing that would presently lift its heavy bulk from the earth and, to the tune of spinning motors, fly away.

A rear-lateral, slant view likewise took our breath. Standing near the empennage, we had to remind ourself that the planes before us were not the wings. Those we saw in the distance, some sixty feet down the fuselage. These were merely the elevators and stabilizers, but they form two planes 25 per cent larger than the main wings of the DH4 airplane, so our first misconception may be understood.

Presently we went round to her port side and at the invitation of her designer, Mr. W. H. Barling, we climbed a ladder some ten feet into the air, stepped through a parachute door in the left lower curve of her fuselage and found ourself in her vast "innards".

"You may step wherever it is painted gray", emphasized our host, drawing our attention to walkways, forward and back in the direction of the distant and diminishing tail. From his tone which was anxious, we judged that vandal feet had, during the months of erection, borne too heavily now and then through fabric and plywood, entailing much extra work and delay. We were very careful, but we could not suppress a thought of what great fun small boys would have running down one side, across at the rear, where the open bomb doors showed the drop to the ground below, and up the other side to the nose of the fuselage, stepping only where it was 'painted gray'. It would make a jolly runway. However, retaining a semblance of editorial dignity, we moved forward toward the nose.

Again the impression of large proportions assailed us; again that impression of house-likeness, of something built solidly for the earth.

The nose of the fuselage is indeed like a cross-section of a small three-story house. In the bottom, or first story sits the bomber on his bicycle-like seat, bomb sight to his left, bomb release and safety release handles to his right. The window in front affords a splendid view, forward, up, vertically down and to a very decided angle in back of the vertical. Through a hole in the ceiling of his little room, the bomber may reach up and communicate with or signal to the two pilots who are in the second story, should he not care to use the automatic signalling device provided, which has a lever in his coop and an indicator before each of the pilot's wheels above. Behind him lying at full length on the floor, a gunner may pot away with the aid of two floor guns at any enemy beneath, who for the moment proves pestiferously annoying.

In the second-story room, a little to the rear of the bomber's position, the two pilots sit behind their wheel controls, side by side, a well-equipped instrument board before them. To the right of each pilot is an engine control knob. When pushed forward this knob opens the throttles of all the engines. A backward movement closes them. A lateral movement opens the throttles of the engines on one side of the airplane only. By a diagonal movement, the engines on one side are partially throttled, while those of the other side are kept full open, this latter combination being extremely useful in accomplishing power turns. There are two pilots arranged for, not only that one may be at his post in case the other is disabled, but that they may relieve each other on long flights, for true to her appearance, the 40,000-pound Baring will be no object to be carried lightly on a stray summer breeze and the pilots will undergo a bit of strain in keeping her up.

The third story is a front gunner's loft, where standing half out of the cockpit or with only his head exposed, the gunner will have a splendid view of the heavens in all directions and will be answerable for enemy aircraft encroaching within the provinces of that view.

There however, our analogy to the three-story house cross-section ends, the rest of the interior forming one long, circular-walled room, with walkways making each part easily accessible to the other. To the rear of and to right and left of the pilot's compartment, to be read by an engineer, riding face forward are two engine instrument boards, by which the functioning of the six engines may be individually controlled, mixtures adjusted, throttles checked or thrown full open, or the engine cut out altogether.

In back of the pilot's room, in the center and on the same level, is a crate-like map case, with a chair anchored at each side. One of these is for the navigating officer, the other for the radio officer, whose controls are just beneath and to the front of the map crate.

The next objects of furniture to be encountered are the bomb racks, braced above trap doors, which will yawn open at a touch of the controls, allowing the long venomous bombs to pass through. Above these is the 2000-gallon gasoline tank, from which fuel is pumped to the gravity tanks in the wings.

Passing down the fuselage toward the tail a little farther, is the rear gunner's cockpit, a fine breezy position, up a ladder and through a circular hole in the roof. At the top of the platform, conveniently at hand, are ammunition holders. Indeed, these neat box-like structures are placed in positions of convenience for all gunners. It is in the lower side curve of the fuselage beneath this platform, to the right and the left, that the parachute openings are situated. Still further back toward the tail is a center walkway, along which a gunner may lie and shoot out through two openings in the floor, which correspond to the floor openings at the front of the fuselage. ✓

Indeed by using that imagination, by which at the beginning of this article we confessed ourself ridden, it was not so difficult to picture this ship-shape structure in battle.

The enemy city doomed for bombing would lie below. Forward there, the bomber his eye at the sighting instrument, one hand on the bomb release handle, would with the other be signalling the pilot the proper angles of turn to bring the plane over the desired objective. We could picture the officiating pilot, every muscle tense, in his efforts for perfect cooperation. Anti-aircraft guns and guns of small worrying pursuit planes would crack dully through the rear of the motors. The top front and rear gunners would be at their posts, shoulders within the protection of the fuselage as the offensive smaller planes soared above, their bodies flaunting up into the open, as the planes dove below. The floor gunners, hastening to uncover floor openings, would fire. Perhaps a shell would rip singing through the fuselage tail, without harm to the plane. Perhaps the navigation officer would run panting along the runway, where it is 'painted gray', to take the place of the rear floor gunner, whose head seems oddly motionless on the floor ----

We climbed down the ladder and stood locking up once more. We were told that the U.S. Air Service insignia painted beneath the wings and measuring 82 inches in diameter was the largest ever painted on any airplane. By being thus statistical we hope to prove that we recovered from our spree of the imagination.

We also hope, that since we must have bombing planes, the Barling will prove a rattling good one."

Shortly before the trial flight of the Barling Bomber new wheels, equipped with special Goodyear Aircraft Cord tires, 54 x 12, recently developed by the Engineering Division as standard wheels for large airplanes of this or similar type, were substituted for the old wheels, 60 x 12, which were originally built in England five years ago, this change having been made to eliminate any possibility of failure in the undercarriage. The six Liberty engines were tuned up and declared to be in perfect condition. It is of interest to note that while the four tractor engines are equipped with two-bladed propellers, the two pusher engines have been equipped with four-bladed propellers, the selection of such type being infrequent today, though popular and in common use by the British in the early days of the war. During the final weighing and balancing of the big plane, the mechanics worked through the night until 5:30 a.m. with the aid of two 1000-candle power incandescent lamps furnished from the McCook Field Laboratory.

Several days before the initial flight, the plane, with Lieut. Harris as pilot was taxied up and down the field several times and several hops were completed, all controls apparently proving satisfactory. The stability and ruggedness of this huge plane is amply demonstrated in the fact that for the last three months it stood out in the open air, no hangar at Wilbur Wright Field being large enough to hold it. It was securely tied to the ground at various points by stout ropes and tackles affixed to iron stakes driven deeply into the ground. Under these conditions it successfully weathered several severe windstorms which proved disastrous to other aircraft in the vicinity, notably the airship TC-1, which was entirely wrecked, and a Martin Bomber which was rescued only by the herculean efforts of the field personnel.

The Barling Bomber, otherwise known as the NBL-1, was given a coat of paint and thoroughly groomed preparatory to being taken to St. Louis Races. The words "United States Army" were painted in large letters on its side.

Touching on the very successful flight made over Dayton and vicinity on Sunday evening, Sept. 30th, our Wilbur Wright Field Correspondent states that the big bomber "takes-off" easily and is as much at home in the air as the ducks that are now flying southward.

HOW LONG IT TAKES TO MAKE A MOSAIC

A very interesting and instructive experiment was conducted at Kelly Field by Capt. Giffer of the Photographic Department in respect to the actual hours required to make a mosaic, complete the prints and have same in the hands of the 2nd Field Artillery Brigade, Camp Travis, Texas. Time was as follows:

Time of take off from Kelly Field to landing	2 men	2 hours
Time required to develop film	2 men	2 hours
Time required for printing	3 men	6 hours
Time required for laying down control	1 man	3 hours
Time required for laying down mosaic	1 man	11 hours
Time required for lettering and placing of Tuds	1 man	4 hours
Time required for Copying mosaic (est)	1 man	2 hours
Time required for printing 20 copies (est)	1 man	2 hours
TOTAL	12 men	48 hours

The area photographed was Camp Travis and Bullis covering approximately ninety square miles; the previous map in use by troops in maneuvers was found to be inconvenient in a great many cases, particularly as to location of landmark hills, woods, etc.

LEST WE FORGET

AVIATION for Sept. 24th contains an editorial which urges that some recognition be given the early pioneers in the realm of flight who have gone to the Great Beyond. These men were really and truly pioneers when we pause to consider the tremendous strides that have been made in aviation since their time, especially in the general improvement of the airplane as a safe and reliable transportation agency. In their days it was not safe to fly a plane on a windy day. Many years ago one of these pioneers, who was employed by the Wright Brothers as a flying instructor, told the writer that his actual work in the air was performed only before sunrise and at sunset, when the wind was calmest. Today air pilots fly through all kinds of weather, not barring snow storms either.

The editorial above mentioned reads as follows:

"During the recent war the Army Air Service had the commendable thought of honoring several pioneers of aviation, as well as some prominent Air Service pilots who had been killed in action, by naming flying fields after them. It is suggested that this practice be continued, not only in the case of Army flying fields but also with regard to municipal and other airports.

Among the early American pilots there were a good many whose fame was not confined to this country and who have been too quickly forgotten. To mention but a few of them, there was John Moisant, the first man to fly from Paris to London; Archie Hoxey and Ralph Johnstone who established several world's records at a time when the mastery of the air was beginning to slip from America to France; Calbraith Rodgers, the first man to fly from coast to coast; the Janus brothers, flying boat pioneers of the Middle West; and Lincoln Beachy, the peerless stunter and also the first skywriter.

This list could be considerably enlarged, as it only includes those who ^{were} particularly in the limelight. Among other early pilots who should be honored by naming fields for them may be mentioned Phil Parmalee, Eugene Ely, John Frisbie, C.K. Hamilton, Charles Walsh, Tod Shriver, Al Welsh and Cecil Peoli. The work done by these men in popularizing the airplane, which in those days often involved very serious risks, deserves to receive lasting recognition.

In the domain of lighter-than-air craft similar recognition should be given the work of the pioneers. To mention but the most prominent, the names of John Wise, Capt. Thomas Baldwin and Melvin Vaniman should be given to balloon and airship stations, so the memory of these men may live among those who follow the steps of the pathfinders."

NOTES FROM AIR SERVICE FIELDS

KELLY FIELD, SAN ANTONIO, TEXAS, Sept. 8, 1923.

The Wing Operations Hut has reached completion and was occupied September 1st. The two Group Operations huts are practically completed and will soon be in operation. The shortage of space had been a serious handicap, it being next to impossible to properly carry on the work required from these offices. In the past maps were not as accessible as they should be, and, in short the space available was such as to seriously affect the proper functioning of the various activities. Ample space however, is now available and every effort is being put forth to make the offices a store house of useful information for all of the flying personnel.

Captain Houghland recently joined the 3rd Attack Group and took over the Operations Office of that unit. Captain and Mrs. Voss left for Panama this week, and the Adjutant's office formerly headed by him has been taken over by Captain W.F. Kraus.

TENTH SCHOOL GROUP

Major H.M. Hickam left Kelly Field Sept. 6th on a cross-country flight to Ft. Leavenworth and to St. Louis. This trip will take about one week to complete. Arrangements for an aerial demonstration at Ft. Leavenworth after the Pulitzer Races are to be made. Major E.A. Lehman is Commanding Officer and acting Assistant Commandant during the absence of Major Hickam.

CADET DETACHMENT: During the past week one group of cadets made cross country trips to Houston, Sanderson and Laredo, Texas. On all trips save the last one, logs were prepared by the observers. The purpose of the log is to assist a pilot while flying over the course. Accurately prepared logs can be used instead of maps, for at a certain place and at about a certain definite time from the starting point, they will give such information that the pilot is able to recognize the surrounding country and towns.

Work in aerial observation continued during the past week for another group of cadets, consisting of visual reconnaissance missions and ground school work in artillery contact, aerial photography and machine guns. On the visual reconnaissance missions the cadets are acting as pilots; the observers are officers, some of whom are commissioned in the lighter-than-air branch of the Air Service.

Two cadets are taking pursuit training at this time. During this week they received some training in Spads, consisting mostly of formation flying and aerial combat.

TWENTY SECOND PHOTO SECTION: During the past week work was performed on the drying rack, which is a home made affair, and very satisfactory results have been secured.

Due to the inclement weather not much work was done in the dark rooms or printing rooms, as such work requires fair weather.

Three men have been painting Building No. 50 and soon we shall be quartered separately and the men will be but a few yards from their barracks to their work, instead of a quarter of a mile as formerly.

Lt. Cronau and Pvt. Womack made arrangements during the past week to undertake the flight to Tallulah, La., ordered by the Chief of Air Service, to work in conjunction with the Department of Agriculture.

FORTY FIRST SCHOOL SQUADRON: Despite the fact that during the major part of this week there was an over cast sky, portending and frequently giving light showers, cross-country flying was pursued by students with, if possible, added vigor. This, it is surmised, is the result of the knowledge that they are completing the cross country stage of training and are desirous of finishing before the close of the present week. Flights were made by the students to Houston, Bay City, Sanderson and Laredo.

FORTIETH SCHOOL SQUADRON: The students receiving instructions in Martin Bombers are doing solo flying now and are proving to be very aggressive in handling them. A short course of instruction in Ignition, Gas system and control wires of the Martins is being conducted for the student officers by the personnel of this organization who specialize in those subjects.

Very little activity was carried on during the past week, due to the rains and the holiday.

One Martin Bomber was received from the S.A.A.I.D. where it had been undergoing repairs.

FORTY SECOND SCHOOL SQUADRON: On August 31st, Major Burwell made a cross-country flight to Dallas, Texas, returning September 4th. Lieut. Chapman also made a

flight on the 31st to Bay City, Texas, returning the same day. On the 4th, Lieut. Chapman also made a cross-country flight to Houston and return. Lieut. Wagner made a cross-country flight to Sanderson and returned on the 5th.

Due to the holiday and some rainy weather during the past week only 109 hours and 5 minutes flying time was turned in for officers and cadets flying with this squadron. Routine flying was performed by all officers assigned to the organization.

The Squadron has 22 ships in commission and flying daily.

FORTY THIRD SCHOOL SQUADRON: Flying for the past week consisted of test and training flights in Spad's, SE5A's, DH4B's and Sperry Messengers. Formation flights were made in SE5A's by students. There were a few transition flights in Sperry Messengers and the students did some transition work in Spads. Combat work was done in SE5A's and DH's with the DH's acting as the enemy plane. Two new Sperry Messengers were received during the week and everyone is taking great joy in flying them. Cross country flights were made to Galveston, Texas, over the week end in Spads and DH's. The men are having plenty of work at present in keeping all of our ships in commission, as we now have seventy planes and several different types at that.

SIXTY EIGHTH SERVICE SQUADRON: Eight Liberty and 2 Wright motors are now undergoing overhaul in the Motor Overhaul shops of this organization. Two Liberty motors are now being tested and will soon be ready for assignment.

Three Liberty motors were assigned to Squadrons of the 10th Group.

A new compressed air device is now undergoing construction for use on the test blocks of the Motor Overhaul. This will benefit the functioning of the test blocks a great deal. As soon as a motor is tested, it is placed in position for a "washing", and from there it will be placed in storage for assignment.

The machine shop is constructing a few wrecking truck, similar to the one now in use by this organization. This work will be completed very shortly. Work is also progressing on a fire truck which will be mounted on a White Observation chassis.

The Aero Repair Department turned out one DeHaviland 4B which was constructed for the use of Major Hickam. A similar type of job is now in progress for Colonel Howard.

THIRD ATTACK GROUP

THIRTEENTH ATTACK SQUADRON: Lieut. Zettel, with Private Jackson as passenger, made a cross-country flight to Galveston, Texas, August 29th, returning on August 30th.

Two new DH4B planes were received from the San Antonio Air Intermediate Depot during the past week, making a total of nine planes of this type assigned to the Squadron.

EIGHTH ATTACK SQUADRON: Operations during the week were composed of practice formation and test flights. A four plane group-formation was flown, using two planes from this organization, to Galveston, Texas, on August 29th, returning the following day.

On the Airways mapping flight made by Captain Davidson and Lieut. Clark, the total man-miles was 3380, and the total flying time 38 hours and 15 minutes, in 18 flights.

On September 1st, Lieut. Carr made a cross-country flight to Fort Clark for the purpose of ferrying Lieut.-Colonel Sayles to this station.

On September 3, Major FitzGerald with Major Andrews as passenger, made a cross-country flight to Galveston, Texas, using the 135-gallon plane recently transferred from this organization to Wing Headquarters.

In addition to the regular routine of line and hangar work, this organization has completed the painting of the numbers on the right lower wing of each plane, and is installing the new gears pertinent to the synchronized guns.

NINETIETH ATTACK SQUADRON: Flying during the week consisted mostly of individual bombing practice, using 50-lb. demolition bombs. There was also considerable formation flying with the other Squadrons of the Group.

On September 1st, the Squadron Commander inspected the barracks, mess-hall and hangars and, although available personnel is very scarce, everything was in first class condition

During the week, the squadron suffered the loss of two officers, Captain Wolcott P. Hayes and Lieut. Paul H. Kemmer. Both were detailed to attend the Communications School at Rantoul, Ill. With their departure the commissioned

strength of the organization was reduced to two officers, one of whom is now on detached service at Langley Field. Fortunately, this condition will not exist for long. Lieut. Zettel, formerly Group Operations Officer, was assigned and reported for duty on September 5th.

TWENTY SIXTH ATTACK SQUADRON: On August 30th, Lieut. Clark with Captain Davidson left Kelly Field on an Airways mapping flight, returning on the 30th. During this trip the following points were covered: Houston, Texas; Lake Charles, La.; New Orleans, La.; Memphis, Texas; Texarkana and Fort Worth, Texas; Post Field, Okla.; Tulsa, Okla.; Leanoke, Arkansas; and Drew, Mississippi.

On September 1st, Lieut. Phillips made a cross-country flight to Muskogee, Oklahoma, for the purpose of transporting Captain Hayes to Kelly Field. On the following day, Lieut. Phillips with Captain Hayes as passenger flew to Post Field, Oklahoma, at which place Captain Hayes remained and Lieut. Phillips flew to Muskogee and returned to Kelly Field on September 4th.

During the past week very little flying was done due to the inclement weather. **SIXTIETH SERVICE SQUADRON:** Lieut-Colonel Howard, Commanding Officer of Kelly Field, accompanied by Staff Sergeant Valtiera of the 68th Service Squadron as mechanic, made a cross country flight to Dallas, Texas, on the 31st, and returned September 4th. A DH4B attached to the 1st Wing Headquarters Detachment was used for this flight, which was made without mishap.

Recent news from Langley Field, Virginia, indicates that all officers from this Group who are there on detached service, will return here within the next few days.

KELLY FIELD, SAN ANTONIO, TEXAS, Sept. 15, 1923.

TENTH SCHOOL GROUP

Major H.M. Hickam returned on September 13th from an extended cross-country flight. Points visited were: Post Field, Muskogee, Kansas City, Leavenworth and St. Louis.

Lieut. FitzGerald reported on September 13th for duty at the Air Service Advanced Flying School. He just completed a course of instruction in communications at Camp Alfred Vail, and at Yale.

CADET DETACHMENT: A number of cadets are now undergoing training in the Martin Bombers. Dual instructions in flying these planes are given during the first half of the morning, while the latter half is devoted to ground school subjects, such as the theoretical study of bomb trajectories and bomb sights. The afternoon is devoted to the practical consideration of these subjects.

A new group of cadets started observation training during this week. Flying consists in piloting observers on photographic missions. Ground school work consists of instruction in Infantry and Cavalry liaison and practical instruction in Artillery contact on a miniature range. This instruction is primarily for the officers taking the course in aerial observation, but the cadets are attending the classes and lectures in order to facilitate the work while on the aerial missions.

Cadets taking pursuit training were engaged in formation flying and aerial combat work in MB's and Spad's during the past week.

TWENTY SECOND PHOTO SECTION: First Lt. R.T. Cronau, with Private Womack as photographic observer, left Monday for Tallulah, La., where they will photograph a 100 sq. mi. area. This work is being performed for the Department of Agriculture.

Four K-5 cameras and one K-2 camera were installed in photographic planes, for instructional purposes. In addition to the above, the regular routine photographic work has been performed.

FORTIETH SCHOOL SQUADRON: Considerable activity was in evidence in the hangars, rounding into shape the Martins stored therein. There are now 22 students enrolled in the class, and every effort is being put forth to get all the planes in commission. Due to shortage of spare parts and accessories, it will be impossible to get them ready for some time.

Talk is being circulated around the squadron of organizing a foot-ball team. There is an abundance of prospects available and the team, if organized, should have plenty of beef and speed, that will tend to make this organization loom up as a strong contender to the championship of the Field.

This Squadron has now only one DH4B airplane, the rest being transferred to another organization. This was done to make hangar space for the Martins and also to fill out the crews of the ships.

FORTY-FIRST SCHOOL SQUADRON: Activities were confined to repairing ships during the past week, with a few Airdrome flights of minor importance.

FORTY-SECOND SCHOOL SQUADRON: Flying time for the past week totaled 113 hours. Cadets served as pilots for the lighter than air Student officers, who are undergoing a course of instruction in aerial observation and photographic work. The period of training will last five weeks.

School for the Student Officers is being held in the hangars each afternoon with the exceptions of Wednesday and Saturday. Under the supervision of Master Sergeant Rickliff, they are learning starting, servicing and the general upkeep of airplanes.

Lieut. Paul T. Wagner, with Staff Sgt. Welling, left for St. Louis, Mo., Wednesday morning, stopping over night at Eldorado, Arkansas. Lieut. Wagner participated in the St. Louis races as alternate for Lieut. Larson.

FORTY-THIRD SCHOOL SQUADRON: Flying for the week consisted of test and training in the following types of ships: SE-5A's, Spads XIII, MB-3A's, DH-4B's, Fokker DVII and Sperry Messenger. The students did transition to Spads XIII, MB-3A's and Fokker DVII. Biplane attack, combat work, altitude flying and formation was also done by students and their instructors. Due to bad weather conditions this squadron did not do a great amount of flying.

After a very thorough inspection several MB-3A's and SE-5A's were put out of commission, due to several minor defects. No cross-country flights were made this week. The engineering flight find themselves busy in trying to keep all of the ships repaired and in a condition to be flown.

SIXTY-EIGHTH SERVICE SQUADRON: The Motor Overhaul Department of this organization received three Liberty motors during the past week for overhaul. Eight Liberty and two Wright E Motors are now undergoing complete overhaul. Two Liberty motors are now being tested. The SAAID sent two Liberty motors to this department for assignment.

Work on the Fire Truck for the 10th School Group is progressing very nicely. This truck with a White Staff Car Chassis will be the "Last Word" in Fire Trucks, as there are quite a number of new and efficient parts being placed on it.

A new type air pump has been installed in the test blocks of the motor overhaul and is now in use. As soon as a motor is taken off of the test block it is completely washed and cleaned by this apparatus and then placed in storage.

Staff Sergeant Chester F. Colby (2nd Lieut. ASORC), of this organization, will go to Brooks Field as a dual instructor. Sergeant Colby has been with this organization since it was organized, and has been used as an instructor at this post during the class of 1922. Although only placed on detached service, Sergeant Colby will be greatly missed by a large number of the members of this squadron.

NINETIETH ATTACK SQUADRON: Very little flying was done during the past week by this squadron. On Saturday, Lieut. Andrews made a cross-country flight to Uvalde, Texas, leaving in the afternoon and returning at sundown of the same day.

The weather was very poor for bombing, but the usual formation flying was carried out by all pilots of the organization.

Lieut. Byron E. Gates returned to the Squadron from Langley Field, Va.

SIXTIETH SERVICE SQUADRON: Lieut-Colonel C.C. Culver, Air Officer of the 8th Corps Area, with Private Holland of this organization as mechanic, left on a cross-country flight to Camp Alfred Vail, N.J.

The return flight will be made by way of the Model Air Route to Scott Field, Illinois. From Scott Field they will return to Kelly Field. It is expected that the round trip will require a period of fifteen days.

TWENTY SIXTH ATTACK SQUADRON: On September 8, Lieut. Robinson, with Sergeant Marsh as passenger, made a cross country flight to Crystal City, Texas. The week end was spent there hunting and fishing, and they had quite a lot of luck at both. The return flight was made on Sunday, the 9th.

On September 8th, this squadron, in connection with the other organization of the group, was inspected by the Group Commander.

Due to the inclement weather very little flying was done during the past week. On September 13, the officers of this organization participated in a machine gun attack on simulated enemy troops at Camp Stanley, Texas, using the new type of Browning tourelle guns.

EIGHTH ATTACK SQUADRON: Operations during the week consisted of practice formations individual bombing and regular test flights.

All planes which are equipped with the full attack equipment are being re-equipped with mounts for the new synchronized guns, and the new type front cock-pit bomb release.

On September 8, all planes and hangars of this squadron were inspected by the Commanding Officer.

THIRTEENTH ATTACK SQUADRON: Lieut. Wheeler with Sgt. McKinney as passenger, made a cross-country flight to Del Rio and Ft. Clark, Texas, leaving September 6, and returning the 8th.

Lieuts. Jones, Wheeler and Heffley participated in a group formation on Sept. 11th.

Several test flights were made from this squadron during the past week.

First Lieut. J.A. Woodruff returned to the Squadron and assumed command during the absence of Lieut. Jones who is on a 6-day leave.

BROOKS FIELD, SAN ANTONIO, TEXAS, Sept. 24, 1923.

The outstanding feature of the past week was the first social affair attempted since the arrival of the new class. A dinner dance was given at the Japanese Garden on the Gunter Roof, plates being laid for 275 officers, ladies and guests. After the dinner many more guests came and joined in the dancing. The uniform was the order for the evening, and the weather man produced a perfect night for the event. The hotel management did everything possible to make the party a success in the way of decorations, service and the menu. All in all, it was a wonderful success in every way.

All the flying has now started. The officers have been flying during the past week, while the cadets had only ground school. Today, however, saw all the students at the stages for flying.

Cross-countries were made during the past week-end by Lt. McCormick to Del Rio and return, Lieut. Umstead to El Paso and return, and by Staff Sgt. Mitchell to Gonzales and return.

The baseball season is drawing to an end, but the interest in the league is still maintained. On Wednesday the 47th Squadron defeated the 62nd Squadron by a score of 4 to 2, and on Saturday the Headquarters team defeated the 62nd Squadron 13 to 5. The Headquarters team, augmented by Lieuts. Roland, Whitson and Meyers of the new class, proved to be a very strong aggregation. Wednesday will see the last game of the league, when the 47th Squadron and Headquarters meet.

Constitution Week was observed at this post Friday afternoon, when all the troops, cadets, and officers were assembled, and listened to addresses by various officers.

BROOKS FIELD, SAN ANTONIO, TEXAS, October 1, 1923.

The past week saw the end of the baseball season. On Wednesday the 11th Group Headquarters won its final game, defeating the 47th School Squadron 19 - 2. That ended the league schedule, leaving the 46th School Squadron and the 11th School Group, Headquarters Detachment, tied for first place, each team having won all but two games.

On Sunday morning the officers and cadets played the enlisted men, the latter winning in a well played game 6 - 3. All baseball equipment has now been turned in and football season starts today. Lieut. Davidson is in charge of the squad and Lieut. Ott is acting as manager. The new class contains a large percentage of football men of note, and Brooks Field should be represented by the best team in this vicinity. An effort is being made to arrange games with all the colleges in Texas, and with all the neighboring army camps, as well as with the civilian teams from the city.

Friday night the Officers' Club was the scene of the regular monthly dance. A large crowd attended and the dance was a complete success in every way.

Cross-countries during the past week were as follows: Lieuts. Umstead and Wolfe to Corpus Christi and return; Captain Sturcken to Kennedy and return, and to Bandera and return; Sergeant Hefling to College Station and return, stopping at Smithville coming and going; Major Royce, Captain Bock, Lieuts. Breene, McCoy and Williams to Laredo and return.

Last Friday Mrs. Walton, the mother of Captain Hart, enjoyed her first ride in a plane. Altho 74 years of age, she asked for and enjoyed all the various acrobatics, and experienced no ill effect, -in fact, being able to enjoy a very hearty meal at the Officers' Club fifteen minutes later.

CAMP NICHOLS, RIZAL, P.I., AUGUST 8, 1923.

Captain Thomas J. Hanley, Jr., Air Service, who has been granted thirty days leave of absence, is now on detached service in China.

When the weather permits, the polo squad continues to work out, under the direction of Lieuts. Brophy and Hicks.

Because of the inclement weather our "cub" reporter was unable to sally forth into the "Bondocs" to gather the news for this week's letter. Therefore, it must necessarily suffice to say that everything is running smoothly in all departments. In fact, things are about as usual on the Field except the atmosphere, and that is damp. On account of this dampness flying at this station was for the most part, suspended the past week, although some of the more adventurous drew umbrellas from the supply room and ventured forth, or perhaps we should say up, to dodge between the rain drops long enough to complete their flying time for the month of July. We live and hope----for better weather next week.

Lieut. Hicks successfully demonstrated this week that an expert horsemaster can dismount on his face--at full gallop. He entertained a large and enthusiastic party at the Polo Club afterwards. The guests expressed themselves as being charmed with the demonstration--adding that they hoped for several more policings soon--the sooner the better.

CAMP NICHOLS, RIZAL, P.I., AUGUST 11, 1923.

The 6th Photo Section spent the past week in testing different filters and cameras, at their various speeds and stops, as to light conditions. The weather not permitting, no aerial photography was done. Private Meham, of the 6th Photo Section, returned from his hunting pass, and advises that if a man wants to go out after game, he had better consult the weather man before doing so.

The 42nd Air Intelligence Section contributes:

"Lieut. Hicks and Lieut. Walker may be seen any balmy afternoon doing much alleged riding on the alleged mounts furnished by Headquarters Philippine Department. These animals are quite temperamental, combining an irascible disposition with an unseemly propensity for leading wrong, bolting, and surreptitious kicking. They police you and kick afterward with child-like candor - all this you understand, with intense gravity.

Camp Nichols has been nominated and elected the wettest spot in the world - reports of the weather bureau to the contrary notwithstanding."

Symptoms indicate that Camp Nichols is not yet immune from a possible attack of "Typhoonitis", there being no less than three storm centers in the near vicinity of Manila at the present time. In spite of the rain, our flying field is in ideal condition - for seaplanes; and members of the 66th Service Squadron who are on duty with the Utilities Section, perhaps more readily recognized as the "Bull-gang", are in constant dread lest the reports of the contemplated erection of a Transport Pier on the parade ground early next week prove more than a rumor. It is expected that Water Polo will bid fair to become one of the most popular of all sports at this station, providing the rain continues. However, we have not given up ALL hope of ever seeing the Sun again ---- yet.

CLARK FIELD, PAMPANGA, P.I., AUGUST 27, 1923.

Orders have been received from the Chief of Air Service to ship all D.H.4A airplanes and serviceable spares from this station to the U.S. for conversion into D.H. 4B's. As there are about forty airplanes to be recreated and a total of eighty-one to be shipped, the training schedule was suspended on August 3rd and all personnel stationed here put to work getting above mentioned planes ready for shipment on the transport Meigs sometime in September.

A number of officers at this station who had requested permission to go on the Southern Island trip were badly disappointed. The transport "Merritt" sailed at noon, August 24th, and the only names of officers at this station included in the passenger list were Capt. J.H. Houghton and 1st Lieut. J.I. Moore; the rest were notified that transportation was not available.

The rainy season is on in full blast and it has been impossible to fly during the week of August 20th - 26th. The road between here and Manila has been under water since July 1st, and it is doubtful if it will be passable for automobiles for another month. Railroad traffic has not been impeded, but some of the old timers have prophesied that if the rain did not let up it would soon go out of commission.

In respect to our late President the personnel of Clark Field participated in a parade held at Camp Stotsenburg on Friday, August 3rd,

While at the swimming pool last week, Lieut. E.C. Batten suffered a broken finger on his right hand due to falling and striking his hand on the concrete.

Several officers at this station have not as yet taken their 609 examinations, due to the fact that there is no Flight Surgeon here and it is necessary for the officers to fly to Camp Nichols to take same. The weather has been rainy, the field at Camp Nichols muddy or typhoon signals have been raised, thereby causing cross-country flights to be called off.

HDQRS. 2nd DIVISION, AIR SERVICE, MARFA, TEXAS, SEPTEMBER 24, 1923.

Following the actual period of preparation, discussion, conference and orders connected with the movement of troops in to the field, the Twelfth Observation Squadron and First Photo Section motor trucks, in charge of First Lieut. Guy H. Gale, A.S., left Fort Bliss, Texas enroute for the Marfa Airdrome on Wednesday morning, September 19th. The Squadron Train, consisting of its motor transportation and equipment, made the trip in two and a half days without trouble other than experienced from roads that are not suited to the wear of heavy transportation. The personnel and equipment arrived in good condition.

The following officers will arrive on September 23rd ferrying the Squadron ships, - Major Heffernan, First Lieuts. Morris, Douglas, Sullivan, Weddington and Second Lieut. Evert. Capt. Bender preceded the Squadron personnel, arriving at the airdrome September 20th for necessary preparation and arrangement for the arrival of the Squadron.

The maneuvers are looked forward to with interest and the friendly rivalry between the opposing forces is evident and keenly appreciated. The territory selected for the maneuvers is highly advantageous for the work of the air force, being fairly level ground and having little cover that can be utilized in masking the ground forces from air observation.

WILBUR WRIGHT FIELD, DAYTON, OHIO, OCTOBER 1, 1923.

Seven DeHaviland planes stopped at Wilbur Wright Field for a few days on their way to the St. Louis Air Races. They carried officers and enlisted men from the Marine base at Quantico, Va. The officers flying the airplanes were Captains A.H. Page, F.P. Mulcahy and R.A. Pressley, and Lieuts. E.F. Ward, Robert Holderby, C.F. Schilt and W.T. Evans. They left for St. Louis on October 1. Accompanying them were some expert enlisted photographers who expected to take a number of pictures of the Races. The Marines reported having an enjoyable time at Wilbur Wright Field, and it is hoped that they may stop here on their return from St. Louis.

Among the officers from Wilbur Wright Field who have gone to St. Louis are Capt. and Mrs. E.E. Adler, Lieut. and Mrs. E.R. Page, Lieut. and Mrs. F.P. Kenny, Lieut. and Mrs. O.O. Niergarth, Capt. Henry Pascale, Lieuts. G.E. Ballard, W. Hanlon, and G.V. McPike. The Commanding Officer, Major A.W. Robins, is expected to leave on the 5th. Some of these officers travelled by automobile and some by airplane. It was originally intended to have the races on Oct. 1, 2 and 3, but owing to heavy rains in St. Louis they were postponed until Oct. 4, 5 and 6.

On September 29th, Major and Mrs. A.W. Robins entertained with a buffet supper at Hangar #6. All of the officers of the Post and their families and a number of guests from Fairfield and Dayton were entertained. All of the visitors who cared to take a flight were given the opportunity, and this was the first time that the wives of some of the officers had flown. For the benefit of those persons who were not connected with the Air Service, and who were not entitled to a ride in the Government aircraft, a plane from one of the commercial flying fields was on hand.

Major-General Mason M. Patrick, Chief of Air Service, made a brief visit at Wilbur Wright Field last week on his way to the Races at St. Louis.

Captain Henry Pascale is in charge of the airways route between Wilbur Wright Field and St. Louis. The airplane service between the two points will be continued until after the Races.

Captain F.F. Christine returned to this Field after a month's leave of absence in Pennsylvania.

Information Division
Air Service

November 2, 1923.

Munitions Building
Washington, D.C.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE November 5, 1923.

✓✓ SELECTING A LANDING FIELD IN CASE OF TROUBLE ✓
By Captain H.J. Houghland, Air Service.

The alert pilot "cut the gun", nosed the plane over and yelled to the mechanic in the rear cockpit who was holding a tail skid in one hand, a set of landing gear wires in the other, while on his lap he held a Liberty tool kit and a spare tire around his neck. "Where did that goof say he landed?"

"In the field one'n a half miles north of Billing's Crossing," shouted back the mechanic.

"Is'nt that Billing's Crossing down there?"

"Yes sir. But that don't mean nothin'. We'll have to find him ourselves."

Sure enough, there was Billing's Crossing below them surrounded by good landing fields but no sign of an upturned plane or any other kind of a plane could be seen near the location that had been telephoned to the airdrome by the luckless pilot.

The mechanic thumbed a dirty slip of paper from his shirt pocket and shoved it forward in a clinched fist to the pilot who verified the location, "gave 'er the gun" and started circling the crossing, gradually increasing the diameter of the circles, for he, like the mechanic, knew that success in locating forced landings was not attained by looking for them in the places in which they are reported to be.

Improved and unimproved roads were scattered freely about the crossing and, had the forced landing been properly maneuvered the plane should be near one of the roads; however, a hurried survey of the fields adjoining the roads to the north and east of the crossing only proved that another blunder had been made by the pilot.

"There he is!" yelled the mechanic, as he drew back his chin and hung his head over the side of the cockpit and nodded toward an object on the ground then hidden from the pilot by the lower right wing of his plane. "Set 'er down right in the middle of the biggest weed patch in forty states. Must be acquainted with someone in that house."

The pilot lifted the stick a bit, slipped his left foot against the rudder and uncovered with the right wing the familiar sight of an airplane buried up to its nose in weeds and the inhabitants of the countryside winding their way across fields and along fences toward the farmhouse that was to be the center of interest for the next two years.

Selecting a field near the one on which the forced landing had been made, the alert pilot circled it twice at an altitude of about two hundred feet, taking particular notice of its surface when viewed from the side opposite the sun so that depressions of dangerous size would throw a shadow that could be seen from that altitude. He brought the plane in at its slowest flying speed and set it down fairly heavy just over the fence and it stopped rolling near the center of the field.

Leaving the motor running with the mechanic in charge he crawled over a rail fence, crossed a small apple orchard and wended his way through the gimpsum weed patch to where the unhappy pilot stood in earnest conversation with the farmer who owned the land and dead pigs which, in spite of their spiney backs, were laying scattered about the patch with their legs in the air like so many upturned tables.

"For the love of Mike, what coaxed you to land in this cane brake," asked the alert pilot, "when there is a prairie a half mile away on three sides of you?"

"A prairie?"

"Yes, a prairie. One of those things they put schooners on. I'll admit that you couldn't get gas, oil and hangar space on it, but you could have taxied back home. What went wrong with the plane anyway, or were you just looking for green apples?"

"I have not been able to find out yet just what is wrong with the engine. The old gentleman here seems to doubt the sincerity of my landing and inability to get off again and consequently will not let me get back in the plane to investigate. Must be a clogged gas line though, for I was sailing along beautifully when the engine suddenly spluttered and cut out entirely. The weed patch here looked nice and square and as level as a pool table and, being directly under me, I knew I'd have no trouble getting into it. I really didn't see the pigs until I cleared the fence and then it was too late. I had to go on. I was hoping all of the time that they would get out of the way when they heard me coming but they were too indifferent for that and didn't seem to be studying me a bit. I'll swear I didn't mean to hit them though."

"Did you break anything about the plane?"

"Yes. The tail skid is broken and the fabric on the lower wing here is torn, and I think I broke a landing gear wire." He knew that he had.

He goes on around the plane naming one fractured, strained or broken thing after another in a slow and deliberate way, breaking his sentences up with mild surprises as newly discovered fractures turn up during the inspection. He would have been willing to take off again with a broken spar if he thought that he could have gotten back to the airdrome before anyone noticed it.

"Better get your report blanks out and make arrangements with the owner of the land and dead pigs for the payment of all claims, and don't let him kid you into believing that those runty porcupines are blooded Poland-China stock. I'll get the mechanic and repair the plane so that you will be able to fly it back to the airdrome."

It is the same old story. Pilots off on a lark go sailing along without a forethought as to what they would do or where they would land in case of motor trouble. To be continuously on the lookout for suitable emergency landing fields is not the most pleasant kind of day dreaming but such efforts will some day award the pilot for his precaution and save him from many embarrassing experiences which a lack of forethought would not do.

Most of us have heard the story of the army officer who forced his way to the head of the column of tacticians by continually applying his knowledge of tactics to the different sections of terrain that appeared before him during his daily work. Even when traveling on a train he was fighting imaginary battles with imaginary forces over the different sections of country that lay before him. Such mental training in that line of work enabled him to make sound decisions and proper and effective disposition of real troops in maneuvers and pushed him to the front as a tactician. Similar efforts on the part of pilots when flying across unfamiliar territory will enable them to readily select suitable landing fields which is a virtue of but few and a Mecca for all.

If the pilot is not familiar with the character of the ground immediately below his plane he should never attempt to effect a safe landing on it. But unfortunately it is a point that most of the new pilots attempt to reach, for in flying over rough or rolling country if there is any spot at all that appears level to the pilot it is the ground immediately beneath his plane.

Outlying fields when viewed from an angle all reveal their rough spots while the ground below the plane looks as smooth as a table and as inviting as an airdrome. These illusions maintain until the plane drops into its final glide and then its true character is revealed. If it is a forced landing it is too late to attempt to alter the flight. The plane must be allowed to glide on into the field, the pilot hoping for the best while the adjacent fields taunt him with visions which make them appear like airdromes in comparison to the field he has selected.

Selecting a landing field to be used in case of emergency should be done as methodically as inspecting a plane before flight. Before the pilot leaves the airdrome he should ascertain the approximate distance to his destination, the character of the country to be traversed and the lines of communication between the two points. A forced landing made within thirty or forty miles of an airdrome should be made as close to the main road as possible. This will assure transportation to the airdrome for both pilot and plane in case it is necessary to haul it in. A forced landing beyond the forty mile limit should be maneuvered as closely to a railroad or navigable waterway as possible, for at such distance from the airdrome it will usually be more economical to return by rail. This, of course, will not hold if there are excellent landing fields at a distance from

these arteries of communication which can be easily reached by a plane, and when the cause of the forced landing is of such nature as to admit of its being readily repaired and the journey continued. Therefore, up until a pilot has passed the forty mile point his eyes should be practically closed to all possible landing fields that do not border on the main highways. Beyond that point his line of sight should be shifted toward railroad facilities.

Landing fields should be selected as the plane approaches within gliding distance of them. This is approximately one mile to each one thousand feet of altitude. No attempt should be made to fly over them for during the period that they are directly below the plane the pilot is hampered by poor observation due to both the position of the plane and the illusion caused by a vertical view of the field.

As the prospective landing field passes from the right front to the right rear or left front to left rear the pilot obtains a continuous and sufficiently horizontal view of it from different angles and enables him to see all obstructions in the field so that in case he is forced to land in it he can maneuver the plane around them.

Before allowing the field to pass beyond gliding distance to the rear another field should be selected to the right or left front within gliding distance of the plane, and these efforts carried on until the destination has been reached. An advantage can be gained if the field can be viewed from the side of the field opposite the sun as all depressions and hillocks will then throw a shadow which will be visible to the pilot.

Very few pilots fear the results of a forced landing even in very rough country where they know that their plane will undoubtedly nose over for there have been any number of such accidents without the pilot or observer sustaining the slightest injury. It is only in cases where the controls of the plane get locked, flying speed is lost or some vital part of the plane is torn loose which causes it to dive or spin into the ground that pilots and observers are injured and such accidents are usually fatal. Such landings, however, are not forced landings, as the plane strikes the ground completely out of control.

There are places in the United States where a forced landing is a nightmare to all pilots. Those places are among our eastern and western mountain ranges and among the canyons in the southwestern part of the United States. Forests do not hold a bed of roses for the luckless pilot but, unless his duties require his presence over them, he can usually avoid them or steer a course where landing possibilities such as bodies of water and clearings can be reached. Landing in such places usually mean a wrecked plane but, when they are viewed by a pilot experiencing engine trouble, they loom up as oases or a new lease of life.

In navigating mountainous country such as that between Washington, D.C. and Columbus, Ohio, where the crows refuse to fly without parachutes and an extra tank of gas, a pilot holds all of his luck in one hand while he uses the other two on the throttle and stick. Nevertheless, there are places among these mountains where landings can be made without incurring the slightest damage to personnel or plane, but these places are few and far between. About the safest way for a pilot to make a landing in these mountains when nothing but mountain ridges covered with trees and underbrush extend the invitation is to yell 'Man overboard' and then grab a parachute and do all within his power to prevent the report from being a false alarm.

There are hundreds of miles among the mountainous country where there are no landing fields at all, yet there is no place among them where a pilot cannot land. The main difficulty will be his inability to get up and walk away after he has landed. In case a pilot is forced to land in such rough country he should select a very steep mountain ridge within gliding distance, nose the plane over to gain sufficient speed to enable him to zoom up the side of the ridge and drop the plane over in the tree tops or on the side of the ridge when it is near the top of its zoom. The steeper the ridge the more perpendicular will be the zoom and the lighter the fall providing the plane strikes the ground near the top of its zoom. If the slope of the ridge is less than thirty degrees from the horizontal it should be approached head-on the same as any landing field. If the slope is more than thirty degrees it should be approached at right angles and its surface followed in the upward zoom by skidding into it. When the plane has reached its maximum altitude it can be dropped over to the right or left onto the hillside.

The speed of our service planes can never be reduced below fifty miles per hour except in a zoom. If an attempt is made to 'squash' it into the tree tops or on to the mountain side it will strike the trees or ground at fifty miles per

hour plus that speed due to the attraction of gravity and but little hope for a satisfactory landing should be expected.

Occasions will arise when a pilot will be forced to land in a section of the country where he will have to hurriedly choose between a poor landing field and a body of water. Most of our lakes and rivers are bounded by a beach or cultivated fields which can be easily maneuvered, but there will be times when such advantages may not be had and a bath will be preferred to a rough and tumble landing in a field full of hillocks and stumps. Neither landing however improves the condition of a plane but as it is a choice between two evils one should always choose the lesser.

In landing in the water the landing should be made parallel to the shore or bank and about fifty feet from it so that just before the plane loses its forward movement through the water it can be turned in toward the bank by rudder and tail skid. Such landings should be maneuvered so that the plane will stop at a place accessible to transportation such as bridges, fords, ferries, or gentle slopes leading to the water edge.

Often it will be necessary for a pilot to fly all or part of his cross country trip above the clouds. This however, should never be done when the clouds are a thousand feet or more above the highest point of land on the course. If a pilot in crossing a mountain range above the clouds is forced to land on account of engine trouble the feeling of anxiety that he will experience while descending through the clouds will cure him of all such future attempts to fly above them.

In flying above clouds over rough or rolling country that is new to the pilot the main disadvantage that he will experience will be his inability to select a landing field until he has passed downward through the clouds on his glide to whatever happens to be below him. If he flies below the clouds all along his course he will have all available landing fields behind him definitely located while those to his right and left and those in front of him will have been within his view long enough to enable him to decide immediately which one will be the most practicable.

When flying above unbroken clouds the compass is about the only thing that the pilot has to guide him to his destination or over parts of the country where emergency landing fields may be found. On very hot days there are great thunderheads or voluminous cloud banks heaped up a thousand feet or more above the normal layer of the clouds in the vicinity or over large cities. These are caused by the heat rising from the factories and buildings and may be used as a 'cloud mark' to mark the location of a city below which usually means landing facilities also. A depression in the normal layer of clouds usually marks the vicinity of a body of water. Such markers however cannot always be relied upon but since a pilot above the clouds is 'at sea' anyway there can be no further harm done by hugging the cloud banks and shunning the depressions unless a bath is preferred to a rough landing.

MILITARY AIRPLANES AT ST. LOUIS RACES

A total number of 177,325 miles were covered by military airplanes traveling from various sections of the country to St. Louis, piloted by aviators who were either participants or spectators, according to a report submitted by Major H.M. Hickam, Air Service, Operations Officer of the Races. Three planes which came from Crissy Field, Presidio of San Francisco, Calif., covered the longest distance - 2300 miles each. One plane from Rockwell Field, San Diego, Calif., covered 1800 miles. Kelly Field and Brooks Field, San Antonio, Texas, jointly had the largest representation at St. Louis, there being a total of 46 planes from these two fields. McCook Field and Wilbur Wright Field, Dayton, Ohio, came next with a joint representation of 36 airplanes. Altogether a total of 178 military airplanes were flown to St. Louis. The following tabulation will prove of interest:

Home Station	No. of Planes	Distance to St. Louis	Mileage
Kelly and Brooks Field, Texas	46	850 miles	39,100
Aberdeen Proving Grounds, Md.	4	1150	4,600
McCook and Fairfield, Ohio.	36	525	18,900
Fort Riley, Kansas	4	400	1,600
Rockwell Field, Calif.	1	1800	1,800

Home Station	No. of Planes	Distance to St. L.	Mileage
Crissy Field, Calif.	3	2300	6,900
Chanute Field, Ill.	15	250	3,750
Langley, Quantico and Polling, Va.	27	1100	59,400
Selfridge Field, Mich.	13	650	8,450
Mitchel Field, N.Y.	15	1350	20,250
Schoen Field, Ind.	1	325	325
El Paso, Texas	2	1350	2,700
Pope Field, N.C.	2	1150	2,300
Maxwell Field, Ala.	4	500	2,000
Post Field, Okla.	5	650	3,250
Total	178		177,325

The flying time of the above ships while enroute to St. Louis totaled 1895 hours and 30 minutes. The flying time of these ships since their arrival at St. Louis totaled 679 hours and 25 minutes, making a grand total of 2574 hours and 55 minutes.

EXPERT PISTOL SHOTS IN PANAMA

A report just received from France Field, Panama Canal Zone, indicates that when it comes to pistol firing the Air Service personnel on the Isthmus crook a wicked trigger finger. The conclusion of the Small Arms Firing Competition at France Field recently developed that the seven organizations stationed thereat obtained an average qualification of 92.5%. Three organizations, the Headquarters 6th Composite Group, 12th Photo Section and the 40th Intelligence Section, with strengths of 34, 20 and 5, respectively, qualified 100%. The 63rd Service Squadron, 7th Observation Squadron, 25th Bombardment Squadron and 24th Pursuit Squadron, with strengths totaling 182, 154, 152 and 147, respectively, qualified with the following respective percentages: 90.1, 89.6, 85.5 and 82.9. Of the entire personnel firing, 26.5% qualified as experts.

Of the officers firing the course, 29 or 80.6% qualified as experts, 4 or 11% as sharpshooters and 3, or 8.4% as marksmen. No officer failed to qualify for one of the above three grades. Officers who qualified with an average above 90% were as follows:

Name	Aggregate Score	Average Percent
Clark, John M., 1st Lieut.	432	96.5
Quinn, Orlo H., Captain	417	94.6
Minter, Hugh C., 2nd Lieut.	415	94.4
Albrook, Frank P., 1st Lieut.	412	93.4
Barker, John D., 1st Lieut.	407	92.7
Watson, Arthur G., 2nd Lieut.	410	92.2
Bradley, Follett, Major, Comdg.	411	91.2
Hildreth, E.E., 1st Lieut.	405	91.1
Sloan, Kellog, 1st Lieut.	391	90.2
Carter, Warren G., 1st Lieut.	409	90.1

The 25th Bombardment Squadron holds the distinction of qualifying all its officers as pistol experts.

Warrant Officer H. Billingsley and Staff Sergeant Florer tied for first place on the field with aggregate scores of 445 and percentages of 99.1. Both men made possible scores at all ranges except fifty yards slow fire, where both took 67. Second place was nailed down by Lieut. John M. Clark with an aggregate score of 432 and a percentage of 96.5. Fifth and sixth places were taken by Captain Orlo Quinn and Lieut. Hugh C. Minter with averages of 94.6 and 94.4.

France Field feel free to claim first place in pistol shooting for all Air Service stations and a high place among the top notchers of all other branches.

AERIAL CARNIVAL AT MITCHEL FIELD POSTPONED

By our Correspondent

Just as the final plans were completed for what Mitchel Field hoped to make the greatest Aerial Carnival yet staged by the Air Service, telephonic instructions from Hqrs. 2nd Corps Area, indicated that the War Department had acceded to the request of a Mr. H. L. Bowley, of the Lord's Day Alliance, and directed that the demonstration not be held on a Sunday.

With less than forty-eight hours to act, the widest publicity was given to the postponement of the demonstration to Election Day, November 6th, but in spite of this several thousand persons journeyed to the field, many from a distance of over a hundred miles. The newspapers in three States had devoted columns to the carnival, and upon such short notice it was impossible to reach all. To say that these persons were disappointed expresses it rather mildly.

Conservative newspaper editors, judging the demonstration from the publicity it had received and the interest it had aroused, estimated our possible attendance at seventy-five thousand, and it is believed that this figure would have been reached. Whether it will be possible to again stimulate interest in the demonstration to that degree remains to be seen. Mitchel Field means to make a mighty effort to put the demonstration across, and it feels that behind it it has the entire Air Service. To do this it will require new attractions. Those that we expected have been discussed by the press to a point where they are no longer of news value.

The Barling Bomber is almost a necessity. With something new to talk about and the continued cooperation of the press - and its editorial comment seems to favor the Air Service in the question at hand - we will get off to another flying start. For the 21st our advance sale of boxes alone was \$2,500.

In order that the public might be familiar with the reason for the postponement, the following statement was issued by the Commanding Officer immediately upon receipt of the instructions from the War Department:

"The action of the Lord's Day Alliance has injured a worthy charity that is very close to the hearts of service people. The Army Relief Society, which cares for the widows and orphans of the men who die in line of duty, will suffer unless those persons who believe that any day is a good day for charity make a point of attending the demonstration when it is held on Election Day. In order that we may fulfill our part of the contract with the good people who have supported us in this worthy cause we have already made arrangements to give even a bigger and better demonstration than that planned for October 21st."

IMPRESSIONS OF THE PULITZER RACE By Captain Aubrey I. Eagle, Air Service.

One hundred and forty years have passed since Montgolfier was borne aloft by his gas bag, amazing an astonished world, and twenty years ago the thing lifted itself for the first time by its own bootstraps. So it goes on, and it is not yet ended. Thirty, sixty, one hundred and twenty and now two hundred and forty miles in sixty breathless minutes. Much has been accomplished in the past at a rapidly accelerating pace and as quickly passed into weary acceptability.

Significant of many things was the gathering at St. Louis, but of none more than the expectation of beholding the unexpected. Hundreds of aircraft were concentrated in the vicinity of St. Louis, each piloted by a human unit, presumably having his own thinking apparatus. Therefore, all must have been actuated by definite purposes. The writer with some twenty other old vultures was sitting on a tier of boxes watching the pilots warming up for the big race. Two chickens came by casting impish glances upward. Someone solemnly announced "Let us prey". At that juncture the Chief of Air Service came by and, observing one among us, said: "Young man, how did you manage to be here!" - or words to that effect. The "prey" were forgotten for the moment and reluctantly disappeared while the Vultures arose and stood at attention.

The rule was established that no aircraft should leave Scott Field for Bridgeton later than 9:30 a.m. to avoid interference with practice flights of contestants. This was an especially severe and unjust ruling on all those who had had a hard night, and like five of the ten virgins at the marriage feast had largely burned out their lamps. Yes, Scott Field was an adequate watering place for the birds who flocked in at dusk and buzzed away during the morning hours.

One should not forget the flight to Bridgeton - the broad Mississippi sweeping around as if to avoid the skyscrapers huddled in the city's center, the factories and the usual smoke. It was easy to find the flying field. There were no less than three converging roads, each a solid line of black, like beetles in single file.

Below and to the right clouds of dust from whirling propellers indicated the field, which on this day was the center of interest of a whole onlooking

would. In these rapid days comes a day of ultra speed, and so the people have come. Here they present little gray knots, there scattered dots, and then the mass becomes most dense toward what later proved to be the grandstand opposite the square domine pylon. Here, too, are the black beetles marshalled in mass formation, and three solid lines steadily oncoming. It appeared as if the whole field would be overflowed. The glistening of wings below, broad circling, a straight glide, and the dust cloud, to prove a landing, and then slowly and apparently painfully it waddles up to swell the great flock of lazy outspread wings.

To such lengths had we remained aloft that we were reminded of a shortage of gasoline, a lack of sky hooks, and that the law of gravitation is still operative.

Here many people meet many other people, and first they must get the stock salutation off their chests - "Well, who's going to win the race today?" And the answer is the answer. There are wise mechanics who hint darkly that they know what they know. Over in the Navy hangar the discussion grows warm between two old men, while their two old women listen in gape mouthed wonder, whether or not the little blue streak Curtiss or the red streak Wright would show the greater speed. It was finally determined that since a blue streak represented the ultimate in speed the Curtiss ought to win, and so the prophecy stood. We suggested to the old boys that they ought to get rich playing the horses, but they did not seem to understand the force of the suggestion.

We help Lieut. Pearson strike a dignified pose while some newspaper man from Chicago snaps his picture in front of that pudgy winged thing he is going to fly in the Race. But latent grins proved too much for him, and the picture-taking man moves away ominous of countenance. Now down by the starting line Admiral Moffet showed most ostentatiously that he could look right through a camera and several spectators and clearly discern a cow over in a pasture of a remote rural district. He is the only living man I ever saw who, while having his picture taken, could look as if he might be saying "Yes, we have no bananas", and mean every word of it.

Major Hickam was there - well, not exactly, for he was here and there, and too tired to smile. I believe he was the castor oil officer. He saw that everything operated, that is, everything but Lieut. Pearson's motor. It had the colic, or something.

There was nothing new in civilian aircraft, unless, indeed, one speak of the little Farman mass of wings and cross wires and struts and wide gap and reverse stagger and combination skid-and-wheel landing gear. There were any manner of old wartime Curtiss Jennies, a few Orioles, a Breguet, a Salmson or two, and two old Thomas Morse rotaries. I should be seized with nameless forebodings were I asked to fly them. They lined the eminence overlooking the field, four deep, for more than a quarter of a mile beyond the hangars, like swaybacked old jades, retaining none of the fire but all of the pride of youth. The need of a speedy, economical craft for general purposes, instead of winged automatons fallen into long overdue dotage was never more apparent.

In a mountain village of Idaho I once saw a match between two miners who had fallen into dispute in a barroom over personal prowess in general, ending it in this manner: They are growling indignant epithets. In the midst of the embroilment appears Incongruity facing battle, his leathery, wrinkled face seamed by the impingements of years. He challenged all, and particularly the two principals. Before he could get between the two, arms flying this way and that, he was seized by his two stalwart sons, a little less saturated, and led away stiff legged, like a reluctant, pugnacious old rooster. As they rounded the last bend of the trail on the mountain side above, I heard a faint, screechy "Whoopee". And so the old craft on the eminence of Bridgeton Field preened themselves - probably their last annual preen.

To such purpose passed this October day in red dust and the noise of motors. Some lady with feet strapped to the top wing of her plane stood erect, striking attitudes, while the pilot looped-the-loop a few fathoms in the air. Lieut. Brookley entertained the receding human flood most acceptably by excellent acrobatic evolutions and maneuvers in the same Curtiss pursuit plane that sprinkled oil on Lieut. Maughan over in Wyoming.

At sunset the craft began leaving, we literally blowing the dust from old Number 4 an hour afterward, the earth smiling not on us as in the morning, but a sea of lights and a bleared waste beyond. The more overjoyed one may feel at

cross-country flying in daylight the more keenly, it seems, is the chagrin of piloting an uncharted way over fields of glimmering, winking illumination. The plane becomes a bridleless, runaway steed, rushing at breathless pace toward nothing so certain as the unknown. Thus we struggle against doubt and cast away all calculations, except one hundred and twenty degrees of the compass, for some thoughtful moments.

But someone at Scott Field remembered, and the great searchlight beam grew up like Jack's Beanstalk into the clouds, "with habitations and adventures on it".

"How far that little candle sends its beam into the darkness,

So shines a good deed in a naughty world."

So vanished haste and bewilderment. An uncertain landing in the spotlight, and we remark nonchalantly to a passerby: "A beautiful sight, flying over St. Louis."

The Race? Oh, yes, the Navy won that.

A POPULAR NATIONAL GUARD AIRPORT.

Wilbur Fagley Field, Kokomo, Ind., the home of the 113th Observation Squadron, Air Service, Indiana National Guard, is becoming widely known throughout the Air Service for its service and hospitality to the Regular Army fliers. Ships plying between Wilbur Wright, McCook, Chanute and Selfridge Fields make it a regular landing place on their schedule.

The latest arrivals were Capt. Dixon and Lieuts. Johnson, Maddox and Blackburn of the First Pursuit Group stationed at Selfridge Field, who stopped at the field enroute for their home station after attending the Air Races at St. Louis. The four MB-3 planes were part of the flight of 13 planes, headed by Major Spatz, commanding Selfridge Field, which stopped at this station on September 30th enroute to the Races, and requisitioned the four permanent duty men to service their ships.

Shortly after the four planes from the First Pursuit Group landed, a flight of three DH's, led by Lieut. Bissell, with Capt. W. F. Donnelly, Federal Instructor of the 113th Observation Squadron, piloting the second ship, accompanied by Sgt. Roma Stevens of the 113th, and Lieut. Peck of Kelly Field in the third ship, appeared at the field on their return flight from the Races.

In addition to Captain Donnelly in his DH, the 113th sent three other ships to the St. Louis Races. These planes, of the JNS type, were piloted by Captain Lee M. Brutus, Lieuts. John L. Wamsley and John W. Ziegler, and carried Lieut. Raymond E. Williams and Sgts. Matt Carpenter and L.M. Johnson as passengers. Lieut. Ziegler, who is Assistant Operations Officer, took Instruction Sergeant Johnson to Chanute Field, Rantoul, Ill. for a course of two weeks' instruction in the Parachute School, and Ziegler returned on October 2nd. He was the only member of the local unit who got a peep at the ZR-1. The remaining officers returned Thursday, Oct. 4, after seeing the trials for the Pulitzer Races.

While at the St. Louis Field the local officers saw a Kokomo man, Ralph Lockwood, a former pilot of the 113th Observation Squadron, encounter a peculiar airplane accident. Lockwood, who was an Army pilot during the War and is now a civilian test pilot at McCook Field, had a narrow escape from death when the Sperry Messenger which he was taxiing along the ground in the wake of the Barling Bomber was caught in the blast from the propellers of the giant ship when its pilot suddenly gave her the "gun". The Sperry was turned over several times, receiving a broken propeller and wing. Lockwood, fortunately, was unhurt. The locals said they expected to see him picked out of the wreckage dead after the little Messenger had been sent spinning by the sudden blast of air.

The entire permanent duty staff of four men "flew" to St. Louis in "Top Kick" Maher's "Detroit Four", and report a bumpy trip. The men who "Forded" the distance with Maher were Master Sergeant Caldwell, Sergeant Ralph Gordon and Supply Sergeant Matt Carpenter. This quartet of mechanics were "picked off" by the First Pursuit Group to aid them in servicing their ships at St. Louis for the Races.

All sections of the unit are functioning nicely in their weekly classes. The two-week's session at Wilbur Wright Field put the men on edge, and most of them are taking advanced work. The section receiving, perhaps, more publicity than the others is the Communications Section, in command of Captain Ray I. Dieden and Lt. Waldo George, which has hooked up a radio transmitting set through which programs broadcast on Monday night, the regular meeting night, have been heard far and wide. Letters have been received from several stations within a hundred-mile radius stating the programs of phonograph music and talks on the Air Service

had been clearly heard.

FLYING TIME AT BROOKS FIELD

The flying time at the Air Service Primary Flying School at Brooks Field, San Antonio, Texas, for the month of September, was 1564.15 aircraft hours, and a total of 2743.10 man hours, or approximately 22,388 man miles. There are at present under instruction 78 Regular Army Officers, 79 flying cadets, two enlisted men, three National Guard officers and 21 Reserve officers. There are quite a few cadets still awaiting vacancies at the flying stages.

DOG MAKES AERIAL JOURNEY

Lieut. Greenlaw, stationed at Brooks Field, San Antonio, Texas, left his dog at El Paso, Texas, for some reason or other. He wanted to have said dog with him at Brooks, but the question of transporting him by rail being a doggone difficult proposition he waited until two flyers from his station made a cross-country trip to the border city. Eventually Lieuts. McCormick and Howard flew to El Paso, and on their return trip brought said dog with them. This animal, a police dog and a splendid specimen of his type, showed a little nervousness at the start of the flight but appeared, after a few moments, to enjoy the flight through the air thoroughly. A stop was made at Marfa, Texas, for gas, and when the motor was again started the dog crawled back into the fuselage of his own accord.

AIR SERVICE TOPICS FROM BOSTON

Captain L. R. Knight, who has been on duty with the Air Service Tactical School as Instructor for the last three years is now the Air Officer for the First Corps Area, relieving Captain Edwin B. Lyon, who has been Air Officer for the last two years. Captain Lyon is seeking higher education and is taking this year's course in the Air Service Tactical School at Langley Field.

1st Lieutenant R. C. Moffat, flew from Boston to St. Louis as the representative of the First Corps Area Air Office at the Pulitzer Races. He made the trip in twelve hours' flying time, without trouble. Lieutenant Moffat leaves this station, where he has been on duty for the past four years as assistant air officer and instructor to the National Guard and Organized Reserves, for station at Selfridge Field with the First Pursuit Group.

1st Lieutenant A. E. Jones, who has been on duty in the Office Chief of Air Service, Supply Division, for the past four years, has been ordered to Boston to take command of the Boston Air Port, and as instructor to the National Guard and Organized Reserves.

The Boston Air Port, which is in Boston proper, invites all Air Service Officers while on cross country trips to visit it. The field is plenty large to accommodate all service types of ships and is easily distinguished from the air by landing "T's", 1500 feet each direction, covered with cinders, which makes it good in all kinds of weather. A radiogram to the Corps Air Officer with reference to the weather will be promptly answered. Air Service enlisted personnel as well as all kinds of supplies are available at the field.

TO HOLLISTER AND BACK

During the late war when a party of young flyers from one of the many aviation fields in this country took advantage of the Saturday afternoon holiday and paid a visit to the adjacent city or town, you could generally depend on it that said party would not be a dull one and that there would be "something doing". There seems to be something in this flying game that produces a superabundance of "pep", which must naturally find an outlet at some time or another. The waggish aviator of war times who has become a member of Uncle Sam's Regular Army is now generally a staid, serious-minded individual as befits his position. Naturally, we cannot expect this transformation in disposition to hold true in the case of the reserve officer, in whose mind there still lurks the experience of war days and who just aches every once in a while to fall into the spirit of those days. It is not to be wondered, therefore, that they cut loose whenever the opportunity presents itself.

The story that follows here was submitted by a member of the 440th Observa-

tion Squadron, Organized Reserves, which has its flying field at San Jose, Calif. It tells of the doings or misdoings of a party of flyers from this squadron when the organization was invited to stage an aerial exhibition in the California town of Hollister, some 80 miles or so south of San Francisco. The story goes thusly:

"We first got wind of this event about two months previous to its being pulled off. Several weeks before the date of the affair we were allowed to purchase the winning ticket on a "Star" car that was to be given away on the second day of the celebration. We then knew that we were in for a wonderful time, for when Major Sykes and Hollister get together all doubt immediately vanishes in thin air.

The affair, known as the "Spanish Fiesta", was sponsored by the American Legion Post of Hollister, for the purpose of starting a fund for a Memorial Building, and the Hollister business men and organizations got behind it and put it through to a most successful finish.

Plans were made whereby we were to make a start from our field about ten o'clock on Saturday morning. In order that we would encounter no delay, we went up to Crissy Field, flew back Friday afternoon to San Jose, and gassed up for the morning.

Everything was carried out as scheduled. We got off on time and flew down in two 3-ship formations, being followed by Major Sykes in a DH. Led by the DH we circled around the town several times and then made for the field which we had located by the "T" placed in one corner. The gas wagon was waiting and we all got set for the afternoon's work. The Legion had procured a guard for the ships, so we were all taken to town for noon. We were told that everything was free to us, which was entirely correct, and proceeded to get in line for the barbecue. There were several hundred in line ahead of us, which did not highly appeal to the Major, so we were taken over to the front of the line and served immediately and without cost. This was the first taste of the courtesy which was to follow for us.

At two o'clock we were to report back at the field for a little practice flying and stunt work for a couple of hours. Lieut. Cruse and Sgt. Fowler did the stunt work. In the afternoon six DH's from Crissy Field blew in to augment our group. Among the arrivals were Col. Gillmore and Major Brett. At about four o'clock we all went back to town to spend the evening and were to report back at the field at nine o'clock the next morning.

We were in need of some devilment and, to help matters along, one Tommy Fowler proceeded to sell some chances on a plow to a certain superior officer who was sold (or bit) and, feeling that he got stung, swore vengeance. As a result of various infractions the said T. Fowler and two other officers were incarcerated in the country Hoosgow. The officers (I can't remember the names) got more or less peeved at the reception and proceeded to get rough with the Sheriff who placed them in the dungeon. There were so many of the rest of us pleading for them that it was difficult for the Sheriff to separate us, and at one time he locked up one of his undersheriffs with the prisoners. I understand that he suffered a beautiful punch in the face during his incarceration. Tommy apparently got wind that something was up, as it was some time before the authorities could lay hands on him. When at last they did get him (it took four to handle him) we again proceeded to plead for him as long as we were in earshot of him. One Lieut. pleaded so vigorously that the Sheriff threatened to lock him up also.

After we got away from the jail, each of us was supposed to go at a different interval to offer consolation to the prisoners until 11 o'clock that night when we were to hold court (Kangaroo) and decide upon the innocence or guilt, etc., and punishment. The plans being all prepared, everything went off lovely until the prisoners began to wreck the jail. Fowler used up all his ammunition breaking the windows. The Sheriff got anxious about his jail and finally persuaded Major Sykes to smooth things over and let them out. The officers were some time getting back to normal in spirit and Tommy took it as a good joke. Everything was going fine by supper time. The specific charge was to be Flying over town at an altitude of less than 200 feet, according to the Sheriff.

The Fiesta took place in the court house square. The booths were placed at the outside of the square facing to the center in the Spanish style. In the court or plaza a 60-piece band made wonderful music under the direction of Lt. Sorenson. It was a combined band from the Presidios of Monterey and San Francisco, I believe. At the booths you could buy candy, flowers, chickens, Spanish fancy

work - in fact, almost anything one could wish for. Built around the court house and jail, which was at the middle of the court, was a dance hall and barroom - a regular saloon, that is, pre-Volstead kind - wild man in a cage, 7-legged calf and fighting cockpit. We were all invited to take in the side shows and dances without cost to us and we sure made the best of it. The cock fight was not pulled off on account of the objection of the humane society, a representative having come from Sacramento to stop it, it is said. Upon hearing this Lieut. Bremmer gave an eloquent discourse on the sound policy of the Humane Society in prohibiting the fight. He showed that the cocks had been placed in barrels opposite each other so that they could make faces at one another, the result being that their nervous systems were badly upset and they could not eat to the best advantage, and what they did eat would not be assimilated properly on account of their upset nervous system. He clinched his argument with the statement that he was a neurologist and knew what he was talking about. Anyway, there was no cock fight.

We were told to go to any cafe and order what we wanted and sign our name to the check and in the evening we could come to the Pageant and Cascaroni Ball. We did, and still without cost to us. At the ball there were many kinds of entertainment presented, including dancing (fancy) of various kinds and singing. After this was over the evening was given over to the Cascaroni Ball, the music being furnished by the band under Lieut. Sorenson.

The next day we did some formation work in the morning and came back after dinner to fly back home. The interval between flying was spent in making the rounds of Hollister.

When leaving we felt 100% convinced that Hollister knew how and that words could not express our appreciation to Major Sykes for the opportunity he gave us to be present.

AIRWAYS OPERATIONS.

Lieut. C. E. Crumrine, chief of Airways Branch at McCook Field has put himself on record as stating the most immediate needs of the "Airways". Lt. Crumrine says: "Our objective is regular and reliable operations night or day regardless of weather with a maximum amount of safety at minimum cost.

The Air Mail, a unit of expert pilots, backed by a highly organized ground force has accomplished a tremendous amount along this line. Last year their percentage was 96, an almost incredible figure, when one considers their relative infancy. Now let us see just how the Air Mail achieved these amazing results.

Six first-class pilots, with 2000 hours or more experience, operate continuously over one section of the route, back and forth, week in, week out. They know this route as well as the average man knows his own back yard, and it is well for them that they do, or there would be times when they would never reach their destinations. Often the clouds lie so low over mountainous sections that the pilots are forced to fly up through them. Checking on his time and the speed of the ship, he has a fair idea when the mountains have been crossed and he can come down through the clouds without the risk of leaving his plane and himself a tangled mass. Then foggy weather may force the pilot to fly practically on the ground - the most dangerous type of flying. It then becomes necessary for him to thread his way up canyons and around mountains, narrowly missing tree tops and cliffs, finally picking up a familiar telephone line and following through.

Checking these methods with other types of modern travel, one is not impressed with the safety of aviation. Therefore if we are to operate commercially and in competition with the successfully used modes of travel, there are certain outstanding needs which must be met. These are:

- a. Engines with greater reliability.
- b. Airplanes which will carry greater loads with lower landing speeds.
- c. Electrical altimeters which warn the pilot of an unseen mountain peak or high building
- d. Radio direction finder for guiding through fogs.
- e. Gyroscopic control to relieve the pilot in moments of uncertainty as it has been demonstrated that a gyroscopic control will keep a plane stable in many instances when a pilot is uncertain.
- f. Earth inductor compasses, which will be more dependable than our present type.
- g. Aerial maps.
- h. Better radio service."

NOTES FROM AIR SERVICE FIELDS

Brooks Field, San Antonio, Texas, October 8, 1923

The training of the present class is progressing very satisfactorily and every day sees more new solo men at the flying stages. Several of the students who reported early for flying training, have already passed their tests, are now engaged in formation work, and will shortly start their cross-countries. Gunnery ships in storage since the last class are now being groomed for resumption of that work.

The work of painting the hangars and other Air Service buildings will soon be finished. One coat of green and two coats of white are being applied, and this will help the appearance of the post a great deal.

During the past month 4 officers and 11 cadets were released from flying instruction. At present there are 100 ships in the hangars, and on the line, of which 88 are in commission and 22 in storage or out of commission. There are now 29 dual instructors of which 20 are officers and 9 enlisted men holding reserve ratings.

During the past week cross-countries were made by the following members of this command: Lieuts. Taylor and Wimsatt to Fort Worth and return; Lieuts. Umstead and Woolsey to Muskogee and return; Sergeant Colby and mechanic to Fort Sill and return, and Sergeant Mitchell and mechanic to Gonzales and return.

During the week Major McGrath, F.A. ORC, reported for flying training at his own expense. Major McGrath comes from Austin, Minn., and seems very much interested in flying.

With the reallocation of the hangars to the stages, two of the stage houses have been moved. The south stage house has been moved along side of hangar No. 3, and the hangar stage has been moved from Hangar No. 11 to Hangar No. 8.

There were three crashes during the past week at this field. Cadet Donovan in a JN-5 ran out of gas and landed just back of the hangar line, wrecking the plane badly when he ran over a road and then into a ditch. Lieut. M.J. Smith tore out the undercarriage of a plane of the same type when landing at one of the auxiliary fields. Lieut. Patrick and one of his students in a TA-5 landing on the main air-drome fractured one of the landing gear bolts and did some little damage to the plane.

The flying field was covered with mesquite a year ago, and the thorns are still causing considerable trouble, although all the mesquite was cut and cleared away. Tires and casings do not last long, and nearly every morning there are about 15 tires flat with slow leaks. The radiators which have done service for five and six years, are just about on their last legs, and they are constantly in need of repair, or are in such bad shape that they have to be salvaged.

The football team has started its practice, and plays its first game next Saturday with the freshman team of the Short Horns from the University of Texas. The game will be played in San Antonio.

The new tennis courts are now in great demand, and every spare moment during the day finds the courts occupied by the officers and cadets.

The next social event to be given by the field will be the regular monthly dance, Friday, October 26th, and the Officers' Club has voted to turn over the funds derived therefrom to the Army Relief Society. Every effort is being made to make this a notable affair, and it is quite probable that, due to the lack of space at the Officers' Club, this dance will be held some place in the city.

Kelly Field, San Antonio, Texas, September 22, 1923.

TENTH SCHOOL GROUP

First Lieut. Maughan reported for duty with the 10th School Group and was assigned to the 43rd School Squadron (Pursuit).

Second Lieut. Lawton received orders transferring him to Ft. Adams, Narragansett Bay, R.I.

Lieut. Jordan left on a short leave upon the completion of the Special Observation Course, prior to sailing for the Philippines.

Major Hickam and Lieuts. Dunton and Raley left on cross-country Sept. 21st for Fort Leavenworth and Scott Field.

The Special Observation Class will complete its work during the next week. Artillery missions with the Second Artillery Brigade have been arranged for the benefit of these students during the coming week.

FORTIETH SCHOOL SQUADRON: Rain, rain and more rain. It looks as though the whole Gulf of Mexico were falling on Kelly Field. Flying was rather scarce in the past week due to the muddy field.

A number of the new students of the Martin Bomber class are doing solo work now and seem to be progressing very rapidly. Some of them are doing Camera Obscura work. Preparations are being made for some bombing practice in the near future.

Several men of this organization have put in their names for the Post Football Team and the prospects of a greater team look better.

FORTY-FIRST SCHOOL SQUADRON: The line personnel has been busily engaged during the past week in putting all ships in condition. Due, of course, to the continual wear and tear of the flying equipment incurred in the steady flying during the past three months, many minor faults developed in ships, despite the great care exercised and persistent effort put forth to keep them in perfect trim. The lull in flying during the past two weeks has enabled crew chiefs to do more work on their ships. At this writing all craft of the organization, with the exception of three ships undergoing special work, are in commission.

Students assigned to this organization for flying are at present engaged in Bombing Missions.

FORTY-SECOND SCHOOL SQUADRON: The flying time last week totaled 65 hours and 45 minutes. Owing to the inclement weather the flying personnel was unable to participate in aerial activities early in the week. Eight ships scheduled to make the trip to St. Louis have been reconditioned in order that more conveniences might be had. In view of this fact the school, which has been held in Hangar #4, was temporarily discontinued so that this work could proceed with the utmost rapidity. Some of the Student officers have expressed their appreciation of the advantages gained as the result of this school. Master Sergeant Rickliff has the commendations of the student officers for his many helpful suggestions which will invariably prove beneficial in emergencies that may occur on cross-country trips.

Lieut. Wagner, alternate for Lieut. Larson at the races, has already reached St. Louis. He has the well-wishes of the officers and enlisted men of this squadron.

Staff Sergeant Separevich, who has been assigned to the Philippines, left for his new post last Friday. Staff Sergeant McGhee is now Hangar Chief in the former's place.

FORTY-THIRD SCHOOL SQUADRON: Flying for the week consisted of test and training flights in Spad's XIII, SE-5A's, MB-3A's, ^{DM-4B's} Sperry Messengers, and JN-6H's. Formation flights in Spads and SE-5A's, and transition flights in MB-3A's. The students had bombing practice in SE-5A's and also camera combat in SE's. All Spads and SE-5A's are now in good condition and are getting in quite a bit of time, while the Sperry Messengers are doing overtime flying. Everyone seems to like this ship and it certainly does its share of flying. No cross-country flights were made this week. There has been quite a bit of bad weather this week resulting in curtailment of flying.

Lieut. Cannon left for St. Louis, Mo., to act as alternate pilot for the Verville Sperry in the races.

Capt. McDaniel, Lieuts. Aldworth, Strickland and Maughan left to attend the races.

CADET DETACHMENT: Flying instruction in Martin Bombers was continued during this week. This is the second week of flying Martin Bombers by the cadets in the Bombardment Section. Ground School work consists of theoretical study of bombs, bomb racks and camera obscura.

The group of cadets, working with the officers taking a special course in aerial observation, have been piloting these officers while on artillery contact problems, same being worked out on the puff target range preparatory to working the problems on the artillery range.

Cadets undergoing pursuit training have been doing formation flying and aerial combat work during the past week. In the aerial combat work, camera guns are being used to record the shots fired.

TWENTY-SIXTH ATTACK SQUADRON: On September 15th, Lieut. Robinson, with Sgt. Marsh as passenger, made a cross-country flight to Crystal City, Texas, returning to Kelly Field the next day.

On Monday, September 17th, First Lieut. Latha A. Smith, who has been on detached service at Langley Field, assumed command of this squadron, relieving Lieut. J.E. Duke, Jr..

On September 17th First Lieut. C. McK. Robinson returned to duty with the squadron. He has been on Special Duty at Headquarters, 3rd Attack Group as Group Adjutant during Lieut. Gaffney's period of detached service at Langley Field, Va.

The officers of the squadron, during the past week, participated in machine gun practice, formation flights, attack problems, and training flights.

Work on the lawns and grounds surrounding the hangars has progressed satisfactorily and everything is in good condition.

EIGHTH ATTACK SQUADRON: During the past week flying operations were composed of practice attacks and formation flights.

During attack flights the planes were equipped with the Browning guns, tourelle and synchronized.

Captain Houghland, with Captain Hopkins as passenger, made a cross-country flight to Laredo, Texas, flying a plane from this squadron. On Sept. 17th he was assigned to this organization for flying duty.

Lieut. P. E. Skanse returned from Langley Field, Va., where he has been on detached service taking part in the bombing tests and training.

Lieut. Harbeck has assumed command of the squadron during the illness of Captain Davidson.

Capt. Bubb, with Master Sergeant Deckman as passenger, left Kelly Field for Washington, D.C. on Sept. 20th, where they will receive further orders relative to the airway mapping flight from that point.

SIXTIETH SERVICE SQUADRON: An XBIA was received by this squadron from the SAAID last week. It is the only one of its kind in this squadron at present, all others having recently been shipped to the SAAID.

This organization's football team played its first practice game of the season, Sept. 19th, defeating the South San Antonio High School team by a score of 19 to 7.

NINETIETH ATTACK SQUADRON: Flying activities for the past week consisted of machine gun practice with the 3rd Attack Group, using the machine gun targets at Camp Stanley, Texas.

On September 15th the Group Commander held a dismounted review of the Group, followed by an inspection of quarters and hangars.

Lieut. Zettle flew cross-country to Crystal City, Texas, Sept. 16th, returning the same day, with Sergeant Marsh of the 26th Attack Squadron as passenger.

THIRTEENTH ATTACK SQUADRON: Practically all flying done by this squadron during the past week was machine gun practice with the Browning flexible Tourelle guns. The range at Camp Stanley, Texas, was used for this purpose.

Lieut. Gaffney, with Lieut. Aldworth of the School Group as passenger, flew cross-country to Crystal City, Texas, on Sept. 15th, returning the next day.

Two planes from this squadron were placed in shape for the trip to the races at St. Louis, Mo., by Lieuts. Jones and Wheeler.

Kelly Field, San Antonio, Texas, Sept. 29, 1923.

TENTH SCHOOL GROUP

CADET DETACHMENT: Flying was suspended from September 27th to October 8th, due to the presence of many of the instructors and ships at the races at St. Louis.

The cadets taking observation piloted observers on the artillery range at Camp Stanley, Texas. These observers are working out artillery contact problems in cooperation with several batteries of Field Artillery.

Pursuit work for the Cadets during the week consisted mostly of formation flying and aerial combat work. Camera guns are being used to determine which pilot gets in the first effective shot.

A number of Cadets taking bombardment training have soloed the Martin Bomber. Practice in the use of bomb sights for the dropping of bombs is given by the camera obscura method.

22nd PHOTO SECTION: This section has been developing mosaics received from Lieut. Cronau, now at Tallulah, La., of the country infested with boll weevil. Regular routine work has been done in the Hut here.

Staff Sgt. Joseph A. Duprey returned to duty from the Base Hospital where he was a patient for two weeks. All the men are glad that he is back among them.

40th SCHOOL SQUADRON: During a squadron meeting last week an athletic and recreation club was formed for the purpose of deciding on the recreational activities and formation of the various teams to compete in athletics.

A large percentage of the men interested in football turned out to make a team possible in this organization. Judging from the material the prospects for a victorious team appear bright.

Lieut. Frederick made a cross-country trip to Seguin, Texas, in a Martin Bomber returning in the evening.

FORTY-FIRST SCHOOL SQUADRON: With Lieut. Peck off for St. Louis this morning, the last of the pilots flying ships of this squadron have left for that city where they will view the air meet.

Lieut. Raley, flying ship #30, started for St. Louis on the 20th but a storm encountered a few miles out forced him to turn back; he again started the following day and from all accounts made a successful flight to his destination.

FORTY-SECOND SCHOOL SQUADRON: Flying time last week totaled 76 hours and 50 minutes. The student officers and cadets have been regulating artillery fire at Camp Stanley, and they will continue this work for a few more days, when all flying will cease until the return of the ships from St. Louis. Six more of our ships left for St. Louis, making a total of nine ships away on cross-country. The shortage in ships made it necessary to borrow some from other squadrons so that the student officers and cadets might continue their work without interruption.

FORTY-THIRD SCHOOL SQUADRON: Flying for the week consisted of: Test and training flights in Spads XIII, SE-5A's, MB-3A's, Sperry Messengers and DH-4B's. Work this week consisted of bombing in SE-5A's, camera, combat, and formation in SE-5A's, transition to Sperry Messengers, formation and acrobatics in MB-3A's, camera combat in DH-4B's, also regular practice flights in all the different types of Pursuit ships now in this squadron. This week a formation of SE's performed exhibition flying at the Seguin Fair, this work being done by Student Officers and their instructors in the afternoons. No cross-country flights were made this week. The next ten days will be spent in getting the ships in first-class condition for the new class in pursuit training.

68th SERVICE SQUADRON: The Aero Repair shops of this organization, after having worked overtime, have completed the building of three DH-4B's. One of these ships was assigned to Lieut.-Colonel Howard, Commanding Officer of Kelly Field, another to Major Hickam, Commanding Officer of the 10th School Group, and the third to Lieut. Walter R. Peck. All three of these ships made the trip to St. Louis for the races. Upon completion of the above work, arrangements were immediately made to repair Major Fitzgerald's SE-5 and Lieut. Walker's DH-4B.

The Motor Overhaul shops of this organization are now completely overhauling and repairing 8 Liberty Motors and 2 Wright "E" motors. Three Libertys and 1 Wright "E" are now on the blocks undergoing rigid test. Five Liberty motors were removed from storage and assigned to squadrons of the 10th School Group. Two Libertys were received for repair.

THIRD ATTACK GROUP

TWENTY-SIXTH ATTACK SQUADRON: On the 22nd Lieut. Duke with Sgt. Payne as passenger made a cross-country flight to Kerrville, Texas, returning the next day.

During the past week the officers of this squadron participated in training flights, attack problems, bombing, and machine gun practice.

EIGHTH ATTACK SQUADRON: Flying operations consisted of practice attack and formation training as well as test flights of the recently installed Nelson gears for the fixed guns.

On September 26th, Lieut. Harbeck with Captain Buckner of the Medical Corps as passenger, made a cross-country flight to Houston, Texas.

Word has been received from Captain Bubb and Sgt. Deckman of their safe arrival in Washington, D.C.

THIRTEENTH ATTACK SQUADRON: A three-plane formation was flown from this squadron each morning during the past week.

Lieut. Gaffney with Sergeant Martin as passenger made a cross-country flight to Crystal City, Texas, on September 22nd, returning Sept. 23rd.

Lieut. Woodruff made a cross-country flight to Houston, Texas, and returned on September 26th.

NINETIETH ATTACK SQUADRON: Flying activity this week consisted mostly of machine gun practice with the Group, using the machine gun targets at Camp Stanley, Texas.

On Sept. 22nd the Post Commander held a dismounted review of the entire command, after which the Group attended an address on the Constitution.

Lieut. Zettle with Private McCormick made a cross-country flight to Crystal City, Texas, returning Sept. 23rd.

On Sept. 23rd Major Burwell with Private Wyatt as passenger, made a cross-country flight to Marfa, Texas.

This squadron participated in bombing attacks in group formation upon the targets at the Camp Stanley range.

SIXTIETH SERVICE SQUADRON: On Sept. 20th Major Burwell, with Sgt. Williams as mechanic, made a cross-country flight to Dallas, Texas, returning the same day.

On Sept. 21st Major Brereton, with Pvt. Webb of this squadron as passenger, left on a cross-country flight to Washington, D.C. Word was received from the Major at Scott Field, Illinois. The return flight will be made on or about Oct. 22, 1923.

Clark Field, Pampanga, P.I., Sept. 1, 1923.

The work of packing, crating, and shipping airplanes and their spares still continues. Every available enlisted man is busy either swinging a hammer, using a saw or packing airplane parts. The Philippine Air Depot Hangar resembles an airplane factory working overtime trying to keep the supply equal to the demand in an active campaign. To date 65 crates have been shipped, 32 are ready for shipment now and 88 more crates have to be built.

The transport "Meigs" is due September 5th and all these crates must be in Manila to be shipped back to the United States at time she is due to leave.

Flying for this month consisted of 104 man-hours and 237 flights. Most flying was performed in flying between here and Camp Nichols for purpose of taking 609 examination.

The flight surgeon has started to swing his axe during the 609 examinations and Lieuts. J.R. Drum and J.H. Wilson were taken off flying pending a waiver due to eye troubles. Lieut. St. John was taken off temporarily due to a low Schneider Index. Five officers have yet to take their examination.

The weather has been perfect for flying this week, which is a great relief after last week's steady rain when the sun did not shine nine straight days.

Clark Field, Pampanga, P.I., Sept. 8, 1923.

The work of packing, crating, and shipping DH-4 airplane fuselages and spares still continues. One hundred crates, each containing one fuselage, have been shipped, in addition to eighteen crates containing wings. Altogether sixty-two car loads of crates have been shipped. Work is still being rushed so as to have this material at the dock when the freighter "Meigs" sails for the United States. The sailing date is still uncertain due to the fact that the "Meigs" has been ordered to transport food and medical supplies to Japan.

The Philippine Air Depot at this station is starting to appear empty except for a miscellaneous collection of wings, ailerons, and landing gears. In one corner is piled 121 boxes, each containing one Liberty 12 engine, while on the opposite side are twenty more uncrated.

Capt. J.H. Houghton and 1st Lieut. J.I. Moore returned from the southern islands this week and report a very enjoyable trip. They visited Zamboanga, Jolo, Tocluban, Cebu and Sandaken, Borneo.

Lieut. W.S. Gravelly and wife, and Mrs. A.E. Waller, wife of Lieut. Waller, left for an extended visit to points of interest in China.

Flying for this week consisted of official cross-country trips to Camp Nichols, and one plane assigned for practice flying.

Camp Nichols, Rizal, P.I., August 18, 1923.

The 28th Bombardment Squadron is blooming. The Squadron insignia (A Mohawk Indian with one feather), is being painted on all the ships assigned. It takes nearly all the colors of the rainbow to complete his majesty, "The Indian".

"Old Sol", who has been conspicuous by his absence for the past month, re-appeared at occasional intervals the past week and, as a result, everyone is a bit more cheerful excepting perhaps the brilliant young Edison who designed the "Detachable Pontoon" for use on beds and lockers.

All officers of this station are attending school from Noon until One O'clock each day. Trap-shooting has been the program during the past week, owing to the fact that the apparatus necessary for the course of training in Radio has not yet been installed.

From the 42nd Air Intelligence Section:

"Tripe, in large quantities, makes quite a noise when falling. As a literal statement the foregoing is open to debate, for it is the hitting and not the falling which constitutes the noise. But we aren't striving for too much logic. The effect of a ton of tripe hitting a slab of concrete, after falling some thousand or so feet, will suggest the manner in which the 42nd landed a crime last week.

Briefly - the body of Adriano Lopez was found in a state of putrefaction near the south steel hangar. The head gave evidence of having been severed from the body by a bolo. The Filipinos have quaint customs in the use of said bolo, so nothing unusual characterized the crime,

Sgt. Haberlin adjusted his Sherlock Holmes cap to the most effective angle, put on the linen duster, the shoes that walk backward, and lit the pipe. After mature deliberation the sleuth decided that the man was dead, after which a skilled embalmer sprayed the deceased with lysol - from a squirt gun.

And that is all of interest which occurred."

Camp Nichols, Rizal, P.I., August 25, 1923.

Capt. Thomas J. Hanley, Jr., returned from leave in China and resumed command of the 28th Bombardment Squadron, relieving 1st Lieut. E.E. Aldrin.

With the arrival of the transport "Merritt", from the States, last Sunday, the personnel of the 66th Service Squadron was strengthened by the addition of one Officer, 1st Lieut. Milc McCune, and four enlisted men.

Although the Weather Man's forecast is, "Yes, there will be no rain today", occasional drops of moisture continue to gather in the skies - and come down by the barrel-full; however, can we afford to let such trivial matters worry us when the latest arrival in the Department hasn't but a year, eleven months and twenty-nine days to spend in the Tropics? We'll say we can't.

From the 42nd Air Intelligence Section:

"Heavy rain and wind have somewhat cramped the technic of this Organization, both internally and externally. It is hoped that atmospheric conditions improving, the various chiefs of this Section will again linger in the barrio for the good of the cause.

Pvt. Mortenson, Chief of the Assignment Squad, is troubled with his

eyes, which are at present dilated to unseemly proportions. Just what he saw to provoke such a condition he will not state. It must have been good. However, it is hoped that his eyesight will improve when the sun again permits him to take his place in the arena.

Wind and rain together can cause much trouble. But the limit is reached when rain changes to black India ink. This may sound like bunk. It isn't. This is somewhat the sequence - A drafting table, a bottle of India ink resting on a masterpiece of pencil and pen. Lieut. Hicks, working on the Historical Records of Radio Property next to the table. A strong gust of wind, (very sudden) an overturned ink bottle, a ruined masterpiece and the dripping ink caught by a new gust of wind splattered all over Lieut. Hicks. Imagination do your stuff!"

San Antonio, Texas, Air Intermediate Depot, Oct. 3, 1923.

Wednesday evening, Major Frank D. Lackland and his mother, Mrs. Dorwin Lackland, entertained Lieut. and Mrs. Charles E. Branshaw and Lieut. and Mrs. Lewis A. Dayton, at dinner. Captain and Mrs. C.T.C. Buckner came in after dinner and the party enjoyed an evening at bridge. Earlier in the week they entertained Lieut. and Mrs. Barney M. Giles at dinner, after which a number of officers and ladies came in for cards.

Under the direction of Major Frank D. Lackland, the Commanding Officer, a committee of employees, consisting of Messrs. E.J. Briggs, W.J. Downey, F. Ester, M. Jordahl, T.L. McClanahan and E. L. Mobley, planned and arranged the details of a first annual picnic for the officers and employees. The picnic was held on Saturday at Covington Park, a fifty-acre grove of large oaks on both sides of the Salado River, about five miles from San Antonio. A big fat steer was barbecued under the supervision of Mr. W.J. Downey. Two hundred and fifty loaves of bread, several gallons of pickles, seven kegs of near beer, one hundred gallons of coffee, and twenty-four cases of soda were served to the one-thousand employees and members of their families who were present. The ladies brought several hundred pies and cakes and many crocks and jars of salads. Tugs of war were held and sack races, potato races, three-legged races and relay races were run between the different departments. Broad jumping, high jumping, base ball throwing, apple eating, pie eating, and water drinking contests between individuals chosen by their departments were held. Clerks of the course (C.O. Wetherell and E.W. Hailey) kept accurate records of all events. Appropriate prizes were given to the winning contestants. Swimming, boating, baseball, and dancing were enjoyed by all after a bounteous oper-air dinner under the great oaks. Mr. Louis R. Witt and the Kelly Field thirty-piece band entertained the picnic guests with a number of well rendered selections, and in the evening played delightful waltz, fox-trot and two-step music for the dancers in the large screened pavilion. Lieut. Myron R. Wood, who was in charge of the transportation, brought the large crowd to the park and returned them to their homes late in the evening, tired but safe and sound.

The Engineering Department of this Depot, during the latter half of September, overhauled, remodeled, and repaired 7 DH-4B's, 3 DH-4B1's, 1 JN-6-1, 2 MB-3A's, 1 NB-S1, 1 SE-5A, 1 Spad-13E, 15 Liberty 12-A engines, 2 Wright I's and 2 Wright A-2's. In addition to this work, a large quantity of spare parts for airplanes and engines have been remodeled or restored because of obsolescence or deterioration in storage. The extremely warm weather of the long hot summer has greatly moderated and the employees are working with a new interest and renewed energies.

Lieut. Edward M. Powers, flying a DH-4B-1 plane built in the Engineering Department of this Depot, left Sept. 24th for the Air Races at St. Louis, Mo.

Lieut. Ivan G. Moorman, also of this station, flying a remodeled DH-4B, left for the Air Races Friday morning. Lieut. Moorman was one of the participants in the Porto Rican Flight less than a year ago.

Rockwell Air Intermediate Depot, Coronado, Calif., Oct. 5, 1923.

The duck season opened up with a boom Monday morning, October 1st, and from the reports from the various lakes and reservoirs in the mountains of San Diego County, everybody had good shooting. The officers of the Rockwell Air Intermediate Depot made an early morning attack on the fowl at Barrett Dam and had they been equipped with anti-aircraft guns instead of shot guns and airplanes instead of boats the kill would have been tremendous. There were plenty of ducks but

they were high flyers and several families of the Air Service Officers had to postpone their duck dinner until the birds have been trained to fly low and slow. The Adjutant's office was flooded Tuesday with alibis, but nobody flooded the office with ducks, and it is hoped that in the near future a better showing can be made. There is also another advantage in waiting until later as the market will be well supplied and prices will drop.

While 1st Lieut. Lowell H. Smith, Chief Engineer Officer at this Depot is in St. Louis trying to break a few World's Records for the Air Service, his wing mate, 1st Lieut. John P. Richter, is getting things ready here for a border to border flight. Authority was received October 4th from the Chief of Air Service, to make the flight and Lieut. Richter lost no time in getting things under way. At present writing no date has been set for the take-off.

Deer season opened up in this section on September 16th, but to date our Aviator Sportsmen have brought home no deer. "Hunters Luck, No deer, No duck," but look out for a report from the Jack Rabbit drive which is scheduled to be made this (Friday) afternoon at 2:00. The Army and Navy will start at the north end of North Island and there should not be a jack left if the combined forces of the Naval Air and R.A.I.D. follow the instructions as laid out by Captain W.M. Randolph, Chief Gunner and High Gun of the R.A.I.D. Gun Club.

Under authority of the Chief of Air Service, Lieut. Mark H. Redman, A.S., McCook Field, Dayton, Ohio, reported at this Depot for temporary duty in connection with the Radio Station.

Captain Thomas Boland, 16th Squadron, Air Service, Fort Riley, Kansas, is spending a few weeks visiting friends in and about San Diego. Capt. Boland is one of the old-timers on North Island, having served as an enlisted man during the early struggles of the Aviation Section of the Signal Corps.

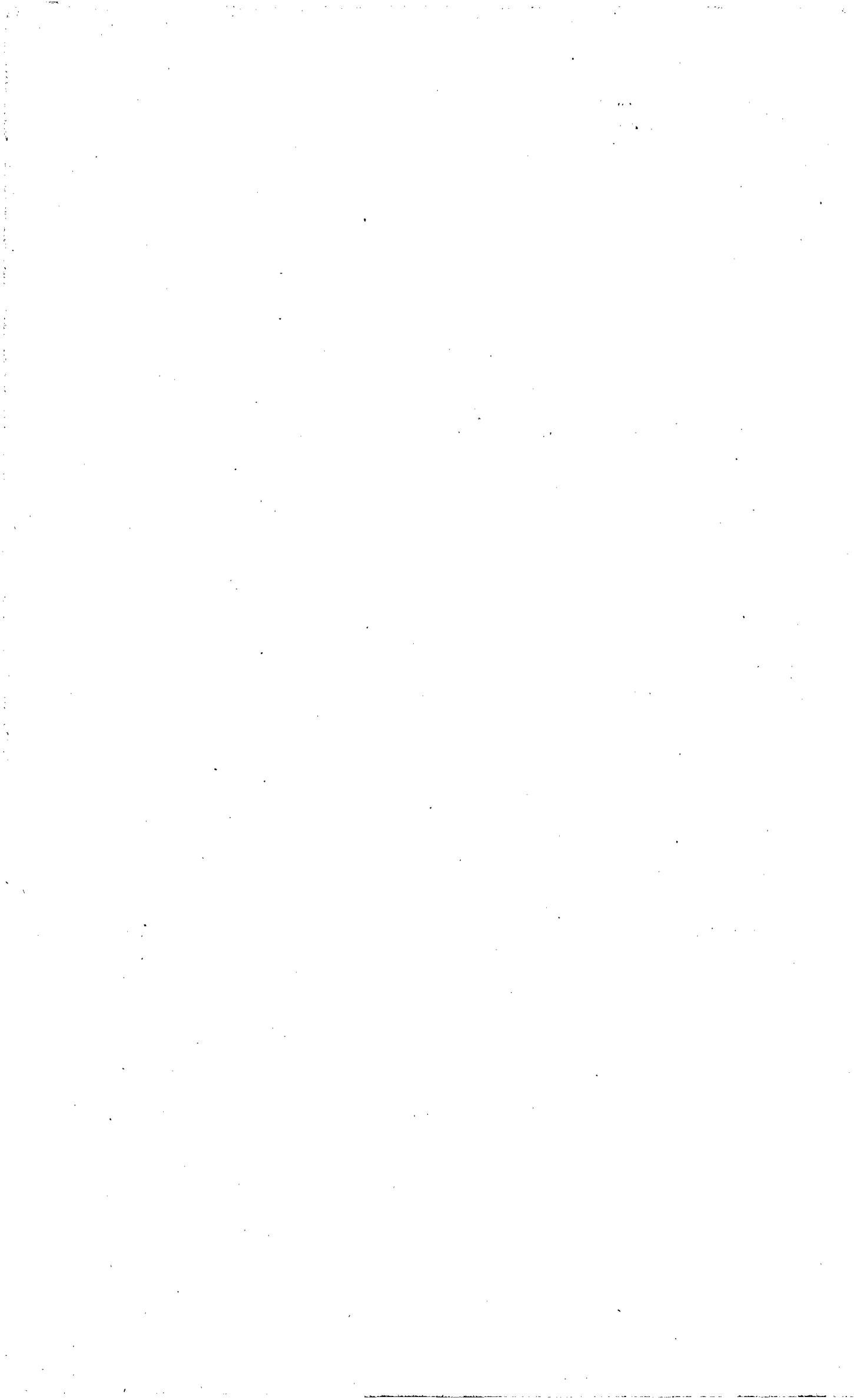
France Field, Panama Canal Zone, October 6, 1923.

The recent arrival on the Chateau Thierry of Major Henry Abbey, Jr., Lieuts. U.G. Jones, John M. Gardner, Edgar E. Glenn, Chas. T. Skow, Walter B. Hough and Evers Abbey increases the commissioned strength of France Field to a total of 47. When all officers on orders have arrived, the total strength will be 56.

During December, January, February, March, April, and May, the "Old Guard" will move out in a body. Lieuts. Perry Wainer and John D. Barker, both four-year men, will leave in December. Lieut. Barker claims to have been a member of the reception committee that welcomed Balboa. Perry Wainer arrived shortly after that important event. Lieuts. "Prim" Albrook and Odas Moen will take off during February; Lieut. Arthur Foster in March; Captain Orlo "Bum-Bum" Quinn and Lieut. John "Polo" Clark in April, and Captain Harrison "Flick" Flickinger in May. Major Raycroft Walsh, the Department Air Officer, is due for return to the States in February.

Last week the officers of France Field were hosts at a dinner at the Washington Hotel. The guests of honor were Major Walsh and Bradley, old and new commanding officers, respectively. Captain "Chink" Rust acted as toastmaster. Interesting talks were made by both the old and new commanding officers. The dinner was a decided success. After the dinner the entire party returned to France Field to witness a minstrel show and the formal opening of the new auditorium. The local talent minstrels played to a capacity house and well deserved the patronage. The show was an agreeable surprise to everybody. All officers came in for their share as the target for jokes. Immediately after the show a dance was staged.

The new auditorium is 120 ft. by 120 ft. and has a seating capacity of 3500. It is the most complete playhouse in the Army. It was selected recently for the Departmental boxing bouts. Each station on the Zone was assigned a section of seats. In the finals the crowd was estimated to be between 3500 and 3800. The dance floor and basketball court are all that could be desired. Boxes around the edge of the floor are provided for Officers, N.C.O.'s. and families. The enlisted men are seated on step seats rising from the immediate rear of the boxes. The moving picture installations are of the very latest.



Information Division
Air Service

November 22, 1923.

Munitions Building
Washington, D.C.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE November 26, 1923.

VIEWING AMERICA'S SCENIC WONDERS FROM ALOFT

It is not likely that Lieuts. A. W. Stevens and John A. Macready, Army Air Service, following their aerial photographic expedition through Scenic America, will be hankering for a vacation to see the scenic wonders of Europe, unless it should be for purposes of comparison only. After reading the official report of their trip, one is forcibly reminded of the slogan "See American first", which has become a byword at various tourist agencies throughout the country.

First of all, the above-named officers achieved the distinction of being the first airmen to fly through the Yellowstone National Park. Numerous aerial photographs were made of this so called "America's Wonderland", using Pocatello, Idaho, as their base of operations. To secure these photographs, it was necessary for the pilots to make a round trip of 450 miles in one flight. Finishing up with Yellowstone Park, photographs were then secured of Mt. Adams, Mt. Hood, Mt. Jefferson, Mt. Washington, The Three Sisters, Mt. Theilson and Crater Lake.

Subsequent scenic wonders to fall under the eye of the camera were Mt. Shasta; Mt. Lassen, the only active volcano in the United States; Yosemite Park, including the huge Half Dome, El Capitan, Yosemite Falls and Vernal Falls; Sequoia National Park; Mt. Whitney, the highest mountain in the United States; Death Valley; Mt. Charleston in Southern Nevada; the Grand Canyon of Arizona; the region of the Cliff Dwellers, and the Painted Desert of Arizona.

It should be stated that this photographic undertaking was not confined alone to picturizing America's scenic splendors, but the primary object was to photograph reclamation projects in various arid regions. Needless to say, the airmen did full justice to this part of their task, and the value of their work in this connection cannot be over-estimated.

In all, over 1700 photographs were taken, and some of the outstanding photographs in this big collection will no doubt be published in the near future in the foremost magazines of the country. Lieuts. Stevens and Macready covered approximately 8,000 miles on their trip in 87 hours of flying. Once more the famous Liberty engine upheld its well-known reputation as the "old reliable", for aside from the breakage of one distributor brush no engine trouble was encountered throughout the trip.

The official report covering this long flight, which in point of mileage covered is exceeded only by the "Around the Rim" flight of Lt. Col. Hartz and Lt. E. E. Harmon, from July to November, 1919, and the flight from New York to Nome, Alaska, and return, headed by Capt. St. Clair Streett, from July 15 to August 24, 1920, is a very interesting document, and same is quoted below as follows:

"Complying with Special Orders No. 122, Headquarters McCook Field, dated August 23, 1923, Lieutenants A. W. Stevens and John A. Macready left Dayton, Ohio, August 23rd, at 7:30 a.m., landing at 12:30 p.m. at Iowa City, Iowa. From that point westward to Rock Springs, Wyoming, the Air Mail route was followed, stops being made at Omaha, Nebraska, North Platte, Nebraska, and Cheyenne, Wyoming. At Rock Springs the Mail Route was left, the next stop being Pocatello, Idaho.

From Rock Springs until Holbrook, Arizona, was reached on the return flight, with the exception of the trip from Los Angeles to San Diego, which was over water, the entire distance flown was over mountains, forests, canyons, and other forms of rough country, one of the purposes of the expedition being to get pictures of the unusual and scenic features of the United States.

The landing field at Pocatello, Idaho, was very poor, being criss-crossed by deep ditches several feet across. It is very fortunate that one of these ditches was not encountered in landing. The population of Pocatello was very

much interested in aviation and our projects, and the Chamber of Commerce, working in connection with civic organizations of the city, took it upon themselves to put the landing field in excellent condition. Several days were required for this, during which time the Mayor of the city and many of the principal citizens, together with several teams, tractors, and graders turned out in overalls to work. The field is now in excellent condition and is large enough for any type of airplane to either take off or land.

Yellowstone and Snake River Projects

For several days after landing at Pocatello the weather was extremely bad, and it was impossible to take pictures of the Yellowstone National Park. Pocatello is the nearest available open spot to Yellowstone and was being used as our base for these pictures.

Feeling that the time was getting rather short to enable us to reach San Diego by September 10, we flew to the Yellowstone National Park on a day when there were numerous thunder storms. For this reason it was impossible to get some of the pictures of the Yellowstone National Park, but nevertheless a large number of very valuable views were obtained through the breaks in the clouds; and, in addition to the views of Yellowstone Park, we obtained on this trip pictures of the reclamation projects of the upper Snake River. After leaving Pocatello we continued down the Snake River, getting still more of these projects, some of which were completed and others were merely contemplated.

Columbia River and the Mountains of Washington

Our next stop was Boise, Idaho. From Boise we continued over the mountains of western Idaho and eastern Oregon to the Columbia River, down which we flew to Vancouver, Wash., our next landing. That same afternoon we again took off and flew above the clouds to Mt. Ranier, but were unable to get good pictures of the mountain because of the dense clouds which covered it. However, some excellent photographs of Mt. Adams were obtained. The next day a flight was made up the Columbia River to the east of "The Dalles", and pictures of this beautiful scenery were taken.

Oregon and California.

On September 4th Vancouver was left and the flight continued down the Sierra Nevada range from Mt. Adams in Washington to Mt. Shasta in California and over the intervening peaks between these two high mountains. Pictures were taken of Mt. Adams, Mt. Hood, Mt. Jefferson, Mt. Washington, The Three Sisters, Crater Lake and many other natural scenic beauties. The landing was made in a strange field at Red Bluff, California, as it was found that the regular forest patrol landing field had been plowed up and abandoned.

Leaving Red Bluff the next morning we flew to Mt. Lassen and took a number of pictures of the only active volcano in the United States. Although the volcano was not active at this time, we flew directly over its top, extremely close above the crater and obtained pictures down in the crater itself. Our next landing was in Sacramento. From Sacramento we went over the California forests to the Yosemite Valley. This was an extremely cloudy day, and although the majority of the pictures of Yosemite Valley are good, the thunderstorms and shadows caused some of them to be rather dim. We continued our flight over the high mountain ranges to Los Angeles, arriving on September 6th. Several flights were made in the vicinity of Los Angeles and pictures taken of the moving picture studios and the outstanding features of the city and surrounding country.

The Solar Eclipse at Ensenada, Mexico.

On September 9th we left for San Diego, and that evening repaired the plane so that it would be in condition for the eclipse the next day. On arising at North Island on September 10th, we observed that the surrounding country was covered by a low fog which came almost to the ground. This fog was watched with great anxiety during the morning. Occasionally the low fog would lift and then would settle in again, but there was always one or two strata of heavy clouds above this fog.

Ensenada, Mexico, was directly in the path of totality of the eclipse and was at the point in this path where the period of totality would be of the longest duration. We were standing by the ship during the morning with everything ready to start, waiting for eleven o'clock to come, as this was the hour that we intended to take off, the eclipse occurring at Ensenada at 1:05 p.m. Ensenada is about 65 miles southeast of San Diego, and it was calculated that, allowing 40 minutes for the flight to Ensenada, we would be allowing an abundance of time in which to reach the ceiling of the plane and remain at this ceiling

for a considerable period, as all airplanes, no matter what their climb, will reach their ceiling in approximately 60 minutes.

We took off a few minutes before eleven o'clock and flew low over the water to Ensenada. At times this fog would be so low that there would be difficulty in observing the shore line, but we felt very much pleased when on reaching Ensenada we found a break in the low clouds surrounding this small Mexican village. We went up through this break and were enabled to keep our course directly over Ensenada on our climb until we reached 6,000 feet, when we passed through another strata of clouds but were still able to occasionally locate the town through breaks in this second strata as we went on upward. At 13,000 feet we encountered more clouds and went on upward into them. These were heavy rainclouds, and the moisture caused the wings to be continually dripping and annoyed us slightly because of the water getting on our goggles.

We reached the ceiling of the plane at about 16,000 feet while in these clouds and remained at this ceiling for considerable time, hoping that a break would occur which would permit us to see the sun. There was nothing we could do. We could not come down and start over again, as one place was just as good as another to try. We could make the plane go no higher. We did what we considered the best thing under the circumstances; fly at the ceiling of the plane and pray for a break which would permit us to see the eclipse. While in these clouds, the eclipse took place.

Action of the Compass.

We were ordered, in addition to taking photographs, to observe the action of the compass. It was impossible to observe the compass for two reasons: first, because there was no stationary point on which to point the nose of the plane to observe the movement of the compass while flying in a straight line; and second, because the atmosphere became so dark that we could not see the instruments in the cockpit, the change being so rapid from light to dark that we could not adjust our eyes to see the radiolite on the compass. Flying was extremely difficult during this period, as it had been necessary to fly entirely by instruments in the clouds and slight loss of control of the plane was noticed when we could not see these instruments.

Air Service Airplanes.

We were greatly disappointed and returned to San Diego, hoping that some other Air Service pilot might have obtained pictures at another locality. Although a large number of planes which had flown from Crissy Field, San Francisco, were also in the air at their extreme ceiling, none of them, nor the planes at Rockwell Field, which were also attempting to observe the eclipse, obtained any views or pictures of the total eclipse. To my knowledge, no Army Air Service planes at San Diego saw the total eclipse, although a large number had gone up with that intention.

Sequoia National Forest, Mt. Whitney and Death Valley.

We returned to Los Angeles from San Diego. On September 19th we left on the return trip. Our first objective was the Sequoia National Forest, of which we obtained excellent photographs. Next we flew over the top of Mt. Whitney, the highest mountain in the United States, and from there over Death Valley, the lowest point in the United States. This was a practically unphotographed region, and the pictures, which are excellent, should be of popular interest. Mt. Charleston in southern Nevada is a practically unknown mountain but one of the highest and most beautiful mountain peaks in the United States. We obtained some remarkable views of this rugged mountain peak and landed on the desert at Las Vegas, Nevada.

The Reclamation Projects of the Grand Canyon.

The citizens of Las Vegas were intensely interested in the projected dam sites, power and reclamation projects of the Colorado River, and we spent considerable time in studying the various engineering phases of these immense dam sites, and through this study obtained a very comprehensive idea of what the Government was attempting to accomplish and the individual positions of the various states with respect to the projects. The next day was spent in taking photographs of everything which would be of value to the reclamation service in connection with the damming up of the Colorado River. We took pictures of the four contemplated dam sites, and with each one obtained the sources of water supply which would come into the impounding basin, photographed the region which would be included in the immense impounding basins and, in addition to this region about the dam and the dam itself, we obtained very good pictures from the air of the broad expanse of land below the dam which would

be put under irrigation by the reclamation project.

Value and Possibilities of Grand Canyon Reclamation Projects.

It is believed that these pictures will give in something of the form of a map a remarkably complete idea of the relative merits of the four possible dam sites, as all phases of the country affected are brought out in the pictures. We were told by the engineers in Las Vegas that the projected dams were to be at least 650 feet high, that the water would be backed up by these dams for a distance of 90 miles, that the country to be irrigated would be an entire empire in itself, and that the total cost of the project would be far more than the total cost of the building of the Panama Canal.

We were also informed that the value of the project, when accomplished, would be enormous, amply justifying all expense; in fact, this value was considered of such importance that power companies then on the ground were not only willing but anxious to privately build this dam if the Government would permit them to do so and for this privilege would finance the entire proposition, would turn over all water to the Government for irrigation projects, and would also give the Government a portion of the power which they would obtain from the work, retaining a certain amount of the power for themselves as payment for the cost of construction.

Three purposes would be fulfilled by this dam: (1) a tremendous amount of very fertile desert land would be reclaimed by irrigation, (2) a great amount of swamp land would be reclaimed and farms and cities along the river and in Imperial Valley would be safeguarded and protected. Some consider the protective features the most valuable, and (3) an inestimable amount of power would be obtained.

Pictures of Grand Canyon.

The next day, September 21st, we left Las Vegas and headed indirectly over the Grand Canyon for Holbrook, Arizona. We had been sending telegrams to Holbrook for several days regarding the landing field. The answers to these telegrams were favorable. We understood that there had been heavy cloudbursts and rains in this vicinity, but were advised that the ground should be sufficiently dry. It was cloudy when we left Las Vegas. We intended to get all possible pictures of the Colorado Canyon and vicinity on this leg of the flight, and during this trip we flew down into the Canyon; flew to the north of it over the high plateaus and forests of northern Arizona, and also flew at extreme altitude high above it. Although the day was slightly cloudy and we were following in the wake of cloudbursts on the desert, the pictures, considering this haze, came out remarkably well. Views of this great sight, by no other means obtainable, were photographed.

Indian Reservations and Painted Desert.

At the junction of the Colorado River with the Little Colorado River, we turned southwest, flying across country about 30 or 40 miles to the east of the Little Colorado River. The Hopi and Moqui Indian Reservations were crossed and pictures in the region of the Cliff Dwellers and of the Painted Desert of Arizona were taken.

Landing at Holbrook.

Before reaching Las Vegas we had obtained all possible data on landing fields in the vicinity of our next stop and were advised of a very good field at Winslow, Arizona, which was on a dry lake. We found several feet of water over the surface of this dry lake. On arrival at Holbrook, we observed the field and though it did not look especially good, there appeared to be enough room in which to land if a careful, slow landing was made. There appeared to be a pool of mud across the southwestern part of the field which it would be necessary to avoid. There was brush on the northeast portion of the field. The pilot flew low twice over the field and then came in for the landing, leveling off to set the plane down. A few feet before the plane was ready to land, the axle hit a small mud gas mound, which was covered with brush, and the landing gear was given a bump which bounced the plane into the air. It was levelled off with power, but the landing gear had been weakened, could not sustain the weight, and collapsed when the wheels next touched the ground. Although it is possible that the plane might have been repaired at Holbrook, it seemed best to send it to Dayton by freight.

Maintenance of Engine and Plane.

Approximately 8,000 miles of distance were covered on this trip in 87 hours of flying. This was an average of 6 or 7 hours of flying during the days of actual travel. The new 12-volt ignition system was used and functioned satis-

factorily throughout, it being necessary to change but one fuse during flight. One distributor brush broke, but aside from this no engine trouble was encountered through out the trip. This was extremely fortunate, as the majority of the distance flown was over rough forest or mountain territory. Practically the same engine inspection and maintenance was observed as during the flights of the T-2, the pilots working on the assumption that if a Liberty engine is originally mechanically all right, there is small chance of trouble if the minor details of care and inspection are maintained.

Major parts of an engine rarely fail; the small details bring the ship down in distress. With this in mind, the Liberty engine was checked over and inspected in every way before starting on the long flight, and during flights the pilots after each landing would immediately start work on the engine, checking over and oiling the valves, cleaning the distributors, pouring all gasoline through a chamois, changing the oil after every eight hours of flying and the water every three or four days during flight. Care with oil and gasoline and extreme cleanliness with them and with the distributors, combined with lubrication where needed, were some of the primary causes for lack of engine trouble. No one was permitted to work on the engine or fill the gas tank but the pilots.

Value of the Trip.

Over 1700 pictures were taken, and it is believed that these pictures will be of great value to the Air Service. All reclamation projects from the source to the mouth of the Snake River were photographed, in addition to many others. All main landing fields of the Air Mail Service from Iowa City to Rock Springs, Wyoming, were obtained, in addition to a great number of Air Mail emergency fields. Enough pictures were obtained of the great scenic sights of the United States to supply Air Service Magazines for considerable time and provide Air Service propoganda that can be used to advantage. It is the intention, if permission is received from the Chief of Air Service, to write various articles for magazines, such as National Geographic, the Saturday Evening Post, etc., illustrating them with the outstanding pictures of the expedition. From the standpoint of the pilots, however, the big outstanding feature of the mission was the obtaining of pictures in connection with the largest reclamation project of the United States Government, the damming of the Colorado Canyon, and the reclaiming of the desert in the lower regions below.

Cost.

The cost of the trip was very low. There were no mechanics used in connection with the project, all work of maintenance and upkeep of the engine and plane being done by the pilots.

A. W. STEVENS,
1st Lieut., A.S.
JOHN A. MACNEADY,
1st Lieut., A.S.

WHEELER FIELD, H. T., STAGES FLYING DEMONSTRATION.

One of the most successful events of "Schofield Week", October 1st to 6th, inclusive, was the Aerial Exhibition held at Wheeler Field, Wednesday morning, October 3rd. Among the distinguished guests present were United States Congressman and Mrs. McLafferty of California, Acting Governor and Mrs. Brown of the Territory, Mayor and Mrs. Wilson of Honolulu, Major General and Mrs. Charles P. Summerall, Major General and Mrs. Charles T. Menoher, Brigadier General and Mrs. Grote Hutcheson, and Brigadier General and Mrs. R. P. Davis. The Honolulu Ad Club attended in a body, several hundred strong, in full regalia of straw hats, white shirts, trousers and shoes, broad yellow sashes and yellow leis on hats and around their necks.

The object of "Schofield Week" was to bring the civilian and army population of the territory into closer and more cordial relations with each other. The fact that over seventeen thousand civilians came from Honolulu to Schofield Barracks, a distance of more than twenty miles, to witness the flying demonstration is the best proof of the success of this event.

The combined personnel and equipment of both Luke Field and Wheeler Field were used during the morning, and all types of service planes in the Hawaiian Department were flown in formation review before the spectators.

One of the outstanding features of the Flying Demonstration, and which exhibited the efficiency and high morale of the 17th Composite Group's personnel,

was the erection of thirty sets of bleachers to accommodate spectators. This feat was accomplished as follows: Commencing at 5:30 a.m., Wednesday morning the bleachers were taken down at the Post Athletic Field, loaded on trucks, transported to Wheeler Field, a distance of over two miles, and set up by nine o'clock the same morning. At 1:30 p.m. these bleachers were again taken down, reloaded and transported back to the Post Athletic Field and set up in their original positions. By 4:45 p.m. this work was done and the personnel back at Wheeler Field. In addition to this, all ships had to be placed on the line before the demonstration and returned to the hangars and serviced before night. Only one hundred and sixty enlisted men of the 17th Composite Group were available for this work.

BUT HE GOT THERE.

An interesting story is told of a "gypsy" flyer who undertook to fly his plane from a little Texas town to the Pulitzer Races at St. Louis. With high ambitions to fly through to the big event and cop one of the big prizes in the civilian races the youngster took off with his nose headed north.

Misfortune was hard on his trail, however, and ere he was beyond sight of his home town troubles began. First one thing and another went wrong and emergency landings were an almost hourly occurrence. In one of these all too rough landings one of the landing gear wheels was broken. Time was getting short if he expected to get to St. Louis and enter a race. Funds, too, began to run low and finally it was necessary to part with various articles of the brand new flying togs which he had bought especially for the big occasion; goggles, helmet, fancy fur lined moccasins - all were sacrificed to buy repairs and fuel. The broken wheel was finally replaced by robbing a second-hand "flivver" and a last hop off was made successfully.

When the plane at last showed up over the St. Louis flying field the race which the pilot expected to enter was already in progress. But the worst was yet to come - upon landing he was immediately arrested by the officials for flying while the race planes were in the air. He was duly confined in the guard-house to nurse his woes.

Penniless and discouraged the poor pilot had about come to the conclusion that the flying game was a hard life, but once his story was told it quickly gained the sympathy of the prosecutors. Others hearing of the flyer's plight took immediate steps to aid him and it was not long until the battered old plane was patched up spic and span and the pilot given full leeway to show what he could do. Although the flyer was not eligible for the prize award, it is generally reported that this late arrival was all that prevented his getting in on the money.

However, when he headed his pet toward Dixie's Land the next day he was traveling with a full stomach and a full tank of gas. - Slipstream.

ARMY AIRPLANES TO VISIT CENTRAL AMERICAN COUNTRIES

Shortly after the new year a flight of Army airplanes will proceed from France Field, Panama Canal Zone, on a visit of courtesy to the various capital cities of Central America, with the object of interesting our southern neighbors in American aviation and giving added impetus to commercial aviation. An Air Mail route, for instance, connecting the countries of Central America with the U. S. Air Mail would be a tremendous step forward in the development of an international air mail system.

During the course of this flight photographs will be taken of such places as may present possibilities for suitable landing fields, it being the purpose to map out an airway, modeled along the line of the airway in the United States. Copies of these photographs and data collected on this proposed airway will be presented to the different Central American countries to enable them to make a proper start towards the development of same. Thus far but few Pan American countries have availed themselves of the courtesy extended by the Army Air Service to send selected officers to Air Service schools for flying training. It is hoped that the heightened interest in American aviation which is expected to follow this visit of courtesy will result in a more general advantage being taken of the opportunity afforded these countries to have their young men thoroughly trained as flyers.

Three airplanes will comprise the Central American flight, a Martin Bomber and two DeHaviland planes. The DeHaviland planes will be used for all missions in connection with airways charting, whereas the Martin Bomber will transport three enlisted mechanics and will carry such radio equipment as may be needed to maintain communication between the DH4B planes while out on airways charting missions.

The officers assigned as members of the Central American flight, with assignment of duties, are as follows:

Major Raycroft Walsh, flight commander: Correspondence, diplomatic contact, coordination.

Major Follett Bradley, assistant flight commander: Airways report.

1st Lieut. Perry Wainer, flight communication officer: Flight log and history.

1st Lieut. L. W. Miller, flight photographic officer: Publicity.

1st Lieut. F. P. Albrook, flight engineering officer: Preparation of materiel, spare parts and supplies.

1st Lieut. Levi L. Beery, flight navigation officer: Personal equipment.

1st Lieut. John M. Clark, advance agent.

Lieut. Clark has already departed on a trip over the contemplated itinerary of the flight to make detailed arrangements for handling supplies, preparing landing fields, obtaining governmental cooperation in the various countries, etc.

THE BORDER TO BORDER REFUELING FLIGHT

By our Rockwell Field Correspondent

"Yes we have some real flyers"--Did any reader of the "Weekly News Letters ever stop to think of eating breakfast on the Canadian border and dropping down to Mexico for an early supper? Well, that is what was done October 25th by Rockwell Field's bachelor officers, Lieutenants Lowell H. Smith and John P. Richter, in the DeHaviland 4B-Special, which was used by them in breaking the endurance record on August 27th and 28th of this year.

The Border to Border trip was started at Sumas on the Canadian-Washington border at 6:27 A.M. October 25th, and contact was made by Lieutenants Virgil Hine and F. W. Seifert above Eugene, Oregon, at 10:05 A.M., when 50 gallons of gasoline were given the racing plane in less than a minute. A few minutes later another contact was made and 25 gallons more of the volatile fluid were emptied into the emergency tank, Lieutenants Hine and Seifert returning to Eugene, preparatory to leaving for Crissy Field. Thirty-five hundred feet over Sacramento they took aboard 75 gallons of gasoline from the refueling plane piloted by Captain R. G. Ervin, assisted by Lt. O. R. McNeel, who, after completing this task, returned to Mather Field.

Lieutenants Smith and Richter continued their south-bound journey without incident and circled over the Customs House at the Tia Juana line at 6-42-40 P.M., completing the 1280 mile trip in 12 hours 13 minutes and 40 seconds. Approximately 275 gallons of gasoline were used by the Liberty 12-A during the trip.

CIVIL WAR VETERANS WITNESS AERIAL MANEUVERS

The United Confederate Veterans, that famous body of gray-clad warriors who served under General Lee during the Civil War, held a reunion at San Antonio, Texas, the first week in October. These veterans, now in the twilight hour of life, whose ranks are sadly becoming more and more depleted with each approaching year, were afforded an opportunity to make a comparison of the war maneuvers of today with those that prevailed when they, some sixty years ago, in their golden season of life, full of youthful health and vigor, marched on the field of battle.

The Veterans assembled at Kelly Field on October 5th and witnessed a fine exhibition of aerial maneuvers staged for their benefit. A nine-plane formation, led by Captain Houghland, Acting Commanding Officer of the Third Attack Group, went through the many and varied maneuvers pertaining to an Attack Flight during battle practice under war time conditions. As the flight went from "line to column", from "column to V", from "V" to "line" and from "V" to column, many an exclamation of surprise and wonderment came from the Veterans. The climax to the flying came when Master Sergeant Ralph Bottriel of the Third Attack Group climbed to the end of a wing of one of the planes and a "pull off"

was made. The jump was made at an altitude of 3,000 feet.

During the exhibition a bombing raid was made by Lieut. Robinson of the 26th Squadron, who flew a plane carrying eight loaded bombs. When his plane was in a position over the target, the bombs were dropped on a house built for and used as a target for this purpose. A direct hit was scored and the house went to pieces in a burst of flame and a cloud of smoke.

KELLY FIELD TO BE EQUIPPED FOR NIGHT FLYING

Kelly Field bids fair to become second to none in the matter of equipment for airdrome night flying. A night signalling device is now under construction and, weather permitting, will shortly be ready for test. The former method of signalling, while better than nothing, was far from fool proof, and trouble was experienced by the pilot in trying to distinguish them from a distance. In addition, several "bugs" would develop in the switch box, usually at the most inopportune moments, when either a globe insisted on going dead or the city power line would do likewise.

The system now being installed is connected through a master switch box to three separate and independent light producing units, viz: city current, lighting truck and, as emergency, a small engine and generator. The Sperry mobile light is also connected in the same circuit and is capable of being operated direct if necessary.

The signal lights are spaced 40 feet apart and do not "blend", except at extreme distances or altitude. The signal device, Sperry landing light, which incidently is a wonder, taken in conjunction with the luminated wind cone, makes this field excellently equipped for night flying. In the near future it is hoped to obtain some wing landing lights for test, as numerous discussions have been overheard as to the relative merits of same.

SAN ANTONIO AIR DEPOT AN IMPORTANT COG IN AIR SERVICE MACHINE

The consolidated report for July, 1923, of flying time for the Air Service of the United States and its foreign possessions shows that 41 per cent of all flying performed for that month was in ships rebuilt or overhauled at the San Antonio Air Intermediate Depot.

REST CAMP FOR AIR SERVICE TROOPS IN PANAMA

Plans are under way to have a rest camp for Air Service troops in Panama available for constant use. Major Bradley, Captains Quinn and Rust, and Lieut. Albrook, all from France Field, Panama Canal Zone, recently flew to David, Republic of Panama, near the border of Panama and Costa Rico, and made arrangements for clearing and preparing the surface of a new landing field. The new field belongs to the Panamanian Government. The old field at David belongs to private parties, and free use of same in the future has been denied. The flyers, after completing business at David, spent the week end at Boquette, located at the foot of Chiriqui Volcano, twenty miles north of David. The village is five thousand feet above sea level and has a climate like early Spring in the States. Excellent accommodations are obtained at a small hotel, the proprietor of which is an American. Every effort is being made to secure permission to use Boquette as a rest camp.

SPRAYING CROPS IN THE PHILIPPINES BY AIRPLANE

At a request from the Office of the Governor General of the Philippines, a test was recently conducted at Camp Nichols, Rizal, P.I., to determine the feasibility of using airplanes in connection with the distribution of insecticide with a view to exterminating locusts which yearly infest and destroy crops throughout the Archipelago. The type of plane used was a JN4D, and the pilots were 1st Lieuts. Harry Weddington and G.M. Palmer. The type of hopper used was similar to the one used in tests conducted near McCook Field, Dayton, Ohio. It was found, with the style of hopper used, that insecticide could be dispersed over a considerable area very effectively. This style of hopper, however, was unsatisfactory, due to its large head resistance and small capacity. A new style of hopper is being constructed for installation in the front

seat of either a JN4D, Curtiss Oriole, or DH4B. This hopper is nearing completion, and further tests will soon be conducted.

FLYING THE TRANSCONTINENTAL AIRWAY

Another long distance flight performance was added to the many already recorded to the credit of the Army Air Service, this flight being made by Lieuts. Victor E. Bertrandias and Kenneth Garrett, Army Air Service. In the official report of this flight it is stated that the land miles traveled amounted to 6500. The actual flying time was 83 hours and 2 minutes.

The purpose of the flight - from Mitchel Field, L.I., New York, to Seattle, Washington, and return - which was started on September 1st and concluded on October 11th, was to prepare data describing the terrain and giving information on the status of landing fields along the route. Included in this report are descriptions of the airways between Chicago, Ill. and Milwaukee, Wis.; Milwaukee to Minneapolis, Minn.; Minneapolis to Fargo, N.D.; Fargo to Bismarck, N.D.; Bismarck to Miles City, Mont.; Miles City to Helena, Mont.; Helena to Manhattan, Mont.; Manhattan to Miles City; Helena to Spokane, Wash.; Spokane to Seattle, Wash. The above data will form the basis for future Aeronautical Bulletins which are published from time to time by the office of the Chief of Air Service.

This airway trip was originally scheduled to include San Francisco, but while the pilots were at Seattle orders were changed and they were directed to make a rapid return flight to Chicago.

From Chicago the airmen were directed to proceed to Bridgeton, Mo., the scene of the airplane races, for temporary duty.

The Transcontinental Airway Flight was accomplished with one standard DH4B-1 airplane, equipped with a 13-gallon oil tank, a McCook Field efficiency propeller, two Sperry compasses, one Air Distance Recorder, and one Bank and Turn Indicator. The propeller stood up very well, and a flight in a rainstorm showed no effect upon it whatsoever. The Sperry instruments proved very accurate. The pilots carried a regular compass on the instrument board, but for some reason or other it went dead outside of Milwaukee and was useless for the remainder of the trip. The "Old Reliable" Liberty engine, equipped with Striker Pump, performed in its usual excellent manner. The only mechanical troubles encountered during the entire trip were the changing of one voltage regulator, and two distributor heads which had developed ridges around the segments. The carburetor and Striker Pump were not changed, despite the different oils and gasoline used along the route.

Standard aviation gasoline was obtained at all stopping places, with the single exception of Miles City, Montana, where it was necessary to partly refill with commercial gas. The amount of fuel used on the trip was 1579 gallons of gasoline and 422½ quarts of oil. Weather conditions on the westward trip were generally fair.

Touching on the reception accorded the flyers at the various stopping points and the landing facilities thereat, Lieut. Bertrandias makes the following comments:

"After leaving Chicago, the flight was, as a rule, well received by the public. Interest was shown by Commercial Clubs and Chambers of Commerce of the cities where stops were made.

Lieut. Garrett and myself made every effort to talk Airways, its possibilities, the need of landing fields, the marking of same, and the marking of towns. It is my belief that if an Airway could be run through the Northwest from time to time, the Chamber of Commerce of these towns will gladly follow out suggestions made, with reference to fields and markings.

At Chicago, Ill., the Air Mail has a model landing field, with a large 'T' of cinder pathway outlined in white gravel. The system of operation, with reference to mechanical service and gasoline and oil service, is excellent.

At Milwaukee, Wis., there is a commercial field, known as the Milwaukee Air Port. This field has one hangar, gasoline and oil service, and a large white circle in center. Field rolling.

Landing field at Minneapolis, known as the Wold-Chamberlain Field, is operated by the National Guard and Aero Club of Minneapolis. The National Guard has three hangars and four enlisted men on duty at all times. The field is very easy to pick up, being an old speed-way. Aviation gasoline and oil are available.

At Fargo, N.D., a great deal of interest was shown by the Commercial Club. They also are willing to lay out a field and place proper markings on same, provided the field will be used by government planes. The activities of commercial aviation in that part of the country are so small that it does not warrant the expense of laying out and keeping up landing fields. If notified in advance, the Commercial Club will care for visiting pilots, making all arrangements for gasoline and oil.

At Bismarck, N.D., a great deal of interest was shown by the Chamber of Commerce. There is a government field available at Bismarck, this field being located at Fort Lincoln. At the present time there are no troops stationed at Fort Lincoln. The Chamber of Commerce at Bismarck is willing to keep up the field and has tried to do so but claim lack of government cooperation. If notified in advance, the Chamber of Commerce will care for visiting pilots, making all arrangements for gasoline and oil.

At Miles City, Mont., there is a small field which the town claims as a landing field, but as no government airplanes have landed there in the last two years no attempt has been made to distinguish this field from any other field in the vicinity. However, the Chamber of Commerce is willing to place markings on the field if the government intends to send planes through that district.

Helena, Mont., has a large field, which is unmarked, with two small, privately owned hangars. No gasoline or oil available on field. However, the Commercial Club, if notified in advance, will take care of visiting pilots, making all arrangements for gasoline and oil.

At Spokane, Wash., is a commercial field known as the Foster Russell Aviation Field, owned and operated by a civilian company, which is marked with large white circle. Mr. Russell has done a whole lot in that vicinity in keeping up interest in aviation. He operates four or five passenger-carrying planes, has hangar facilities, where minor repairs can be made, and gasoline and oil service is available.

At Seattle, Wash., the government operates a field known as Sand Point Field. This field, practically one way and having but one hangar, is very small and is situated among some tall pine trees which makes it very difficult to pick out from the air. The service received here was very good. There are no markers on this field.

At Manhattan, Mont., is an emergency field, with wind cone. At one time this field had a large white circle which, through being neglected, is hardly distinguishable from the air. Field has many ruts and cattle graze most of the time on it. However, a landing can be made on this field without any difficulty. Commercial gasoline is available in town.

Due to the fact that a rapid flight was being attempted, on return trip, it became necessary to fly in rain with very little altitude, between Miles City, Mont., and St. Cloud, Minn., practically eight hours."

The following tabulation gives the itinerary of the flight and other details connected therewith:

	<u>Date</u>	<u>Place</u>	<u>Time</u>	<u>Flying Time</u>	<u>Average Altitude</u>	<u>Weather Conditions</u>
Take off	Sept. 1	Mitchel Field, N.Y.	9:30 a.m.			
Landing	" 1	Washington, D.C.	12 noon	2 hrs.30 min	1500 ft	Fair
Take off	" 1	Washington, D.C.	2:05 p.m.			
Landing	" 1	Moundsville, W.Va.	4:23 p.m.	2 hrs.18 min	3000 "	" "
Take off	" 1	Moundsville, W.Va.	5:45 p.m.			
Landing	" 1	Cleveland, O.	6:55 p.m.	1 hr.10	" 1500 "	" "
Take off	" 2	Cleveland, O.	11:27 a.m.			
Landing	" 2	Detroit, Mich.	1:30 p.m.	2 hrs.13	" 1500 "	Good
Take off	" 2	Detroit, Mich.	3:30 p.m.			
Landing	" 2	Chicago, Ill.	8:15 p.m.	4 hrs.45	" 1500 "	Rain
Take off	" 4	Chicago, Ill.	2:05 p.m.			
Landing	" 4	Milwaukee, Wis.	3:47 p.m.	1 hr. 42	" 1200 "	Fair
Take off	" 5	Milwaukee, Wis.	1:00 p.m.			
Landing	" 5	Minneapolis, Minn.	4:25 p.m.	4 hrs.25	" 2000 "	Good
Take off	" 6	Minneapolis, Minn.	10:30 a.m.			
Landing	" 6	Fargo, N.D.	1:50 p.m.	3 hrs.20	" 1200 "	Fair
Take off	" 7	Fargo, N.D.	9:31 a.m.			
Landing	" 7	Bismarck, N.D.	12 noon	2 hrs.29	" 1500 "	Good

	<u>Date</u>	<u>Place</u>	<u>Time</u>	<u>Flying Time</u>	<u>Average Altitude</u>	<u>Weather Conditions</u>
Take off	Sept 7	Bismarck, N.D.	1:40 p.m.			
Landing	" 7	Miles City, Mont.	5:25 p.m.	3 hrs.45 min.	1500 ft	Good
Take off	" 8	Miles City, Mont.	12:15 p.m.			
Landing	" 8	Helena, Mont.	4:05 p.m.	3 hrs.50 min.	8000 "	Good
Take off	" 9	Helena, Mont.	11:30 a.m.			
Landing	" 9	New Port, Mont.	3:20 p.m.	3 hrs.50 min.	9000 "	Good
Take off	" 9	New Port, Mont.	3:45 p.m.			
Landing	" 9	Spokane, Wash.	4:30 p.m.	45 min.	9000 "	Good
Take off	" 10	Spokane, Wash.	12:05 a.m.			
Landing	" 10	Seattle, Wash.	3:35 p.m.	3½ hours	12000 "	Good
Take off	" 15	Seattle, Wash.	5:30 a.m.			
Landing	" 15	Spokane, Wash.	8:50 a.m.	3 hrs.20 min	12000 "	Fair
Take off	" 16	Spokane, Wash.	9:40 a.m.			
Landing	" 16	Helena, Mont.	12:55 p.m.	3 hrs.15 "	9000 "	Poor
Take off	" 16	Helena, Mont.	3:40 p.m.			
Landing	" 16	Manhattan, Mont.	4:35 p.m.	55 min.	6000 "	Rain
Take off	" 17	Manhattan, Mont.	5:55 a.m.			
Landing	" 17	Miles City, Mont.	9:05 a.m.	3 hrs.10 min	3000 "	Fair
Take off	" 17	Miles City, Mont.	10:20 a.m.			
Landing	" 17	Bismarck, N.D.	11:05 p.m.	2 hrs.45 min	1200 "	Poor
Take off	" 17	Bismarck, N.D.	2:05 p.m.			
Landing	" 17	St. Cloud, Minn.	6:30 p.m.	4 hrs.25 "	300 "	Rain
Take off	" 18	St. Cloud, Minn.	5:55 a.m.			
Landing	" 18	Minneapolis, Minn.	6:35 a.m.	40 min.	1000 "	Good
Take off	" 18	Minneapolis, Minn.	7:55 a.m.			
Landing	" 18	Chicago, Ill.	11:20 a.m.	3 hrs.25 min.	2000 "	Good
Take off	" 22	Chicago, Ill.	11:00 a.m.			
Landing	" 22	St. Louis, Mo.	2:15 p.m.	3 hrs.15 "	1500 "	Good
Take off	Oct. 9	St. Louis, Mo.	1:15 p.m.			
Landing	" 9	Scott Field, Ill.	1:45 p.m.	30 min.	1500 "	Good
Take off	" 9	Scott Field, Ill.	2:10 p.m.			
Landing	" 9	Connersville, Ind.	5:25 p.m.	3 hrs.15 "	1500 "	Good
Take off	" 10	Connersville, Ind.	7:55 a.m.			
Landing	" 10	McCook Field, O.	8:40 a.m.	45 min.	1500 "	Good
Take off	" 10	McCook Field, O.	11:35 a.m.			
Landing	" 10	Moundsville, W.Va.	1:35 p.m.	2 hours	2000 "	Fair
Take off	" 11	Moundsville, W.Va.	10:23 a.m.			
Landing	" 11	Washington, D.C.	12:45 p.m.	2 hrs.18 min.	2000 "	Fair
Take off	" 11	Washington, D.C.	2:15 p.m.			
Landing	" 11	Mitchel Field, N.Y.	4:55 p.m.	3 hrs.40 min.	1500 "	Poor

ACTIVITIES OF THE 23RD PHOTO SECTION

The Activity Report for the month of October of the 23rd Photo Section, stationed at Post Field, Fort Sill, Oklahoma, shows that with one plane equipped for photographic work the following was accomplished:

Aerial negatives made, 200; ground negatives, 50; contact prints, 2,500; enlargements, 200; mosaics flown, 3; mosaics finished, 5; mosaics in preparation, 4; hours flown for photographic work, 20.

The nature of this photographic work embraced mosaics of Fort Reno, Okla. and the Red River oil district near Wichita Falls, Texas; prints for the use of Field Artillery School classes; photographs of the Oklahoma flood district; and a mosaic of the area between rivers west of Oklahoma City for use of commission in solving flood problem.

WILBER FAGLEY FIELD PLACED ON TRANSCONTINENTAL ROUTE

Wilber Fagley Field, Kokomo, Ind., a modern flying field, with its giant white cross and circle beckoning the itinerant airman to 100 acres of safety and a chance to stretch his legs, gas up and smoke a "pill" before winging his way, has again been honored by being placed on the government maps as a field bearing the stamp of approval of the U.S. Government. This time Fagley Field was placed on the transcontinental route, on the branch from Detroit to San

Francisco, by way of St. Louis, through the recommendation of Major General Mason M. Patrick, Chief of Air Service.

The Kokomo Field has for some time been on the Model Airway, being the intermediate stop between Chanute and Selfridge fields on that route. With this recognition, the local air service authorities hope that Kokomo will soon be made a landing place on the Air Mail routes, as the field is well equipped to take care of this service.

FLYING TO THE AIRPLANE RACES UNDER DIFFICULTIES

When Lieut.-Col. John H. Howard and Major S. W. FitzGerald, of Kelly Field, landed at Muskogee, Okla., en route to the airplane races at St. Louis, the former found that he needed a new motor and the latter a new radiator. Col. Howard promptly got into communication with Kelly Field, and the next morning a Martin Bomber, piloted by Lieut. D. V. Gaffney, with Sgts. Wallace and Moorehouse and Private Thacker as mechanics, arrived at Muskogee with the needed equipment.

After installing the new motor and radiator in the disabled planes, the damaged equipment was loaded in the Bomber and the return flight to Kelly Field was started. Here it seems a whole train of mishaps was started. The Martin developed ignition trouble and necessitated a landing at Waco, Texas, and a lay over until the following day, when a DH with the required spares was dispatched to Lieut. Gaffney. At McAlester, Okla., Lieut. Wheeler and Sgt. Wiseman, who had crashed there the day previous, were picked up as passengers, also a mechanic was picked up at Dallas, so when Lieut. Gaffney returned to Kelly Field he carried, in addition to the damaged motor and radiator, six passengers.

Lieut. Wheeler and Sgt. Wiseman secured another plane and "hopped" off again for St. Louis, where they arrived safely.

Returning from the St. Louis races, Lieut. Wagner with Sgt. Welling as passenger had a rather eventful trip, being first forced down at Hermitage, Mo., due to a broken sylinder pump. The trip from there to Muskogee, Okla., was made on the reserve tank, which necessitated landing approximately every 25 minutes and draining gas from the main tank and pouring it into the reserve. Lieut. Wagner was forced to land no less than ten times between his first landing and Muskogee, a distance of 210 miles. After arriving there he was forced to wait two days for repairs, and after making the repairs was again delayed by rain for four days, eventually reaching Kelly Field on October 17th. The total flying time of the ship was 48 hours and 10 minutes.

The 42nd School Squadron, Kelly Field, furnished eight DH4B's for pilots making the trip to St. Louis to see the Races. These ships flew 41,880 man miles, in a flying time of 236 hours and 5 minutes. The Squadron correspondent believes that no other squadron furnished as many ships to make as long a flight.

LANDING FIELD ESTABLISHED ON ISLAND OF MINDORO, P.I.

A flight of DH planes, with Captain Fredk. I. Eglin, 1st Lieuts. C.C. Nutt, H. A. Halverson and E. R. McReynolds as pilots, and Sgt. Carden and Pvt. Mitchell, of the 28th Sqdn. as mechanics, recently flew from Camp Nichols, Rizal, P.I., to the Island of Mindoro for the purpose of inspecting and taking photographs of landing field near San Jose. A landing was made at the plantation of the Mindoro Sugar Company, where an excellent field had been prepared by Lieut-Col. Samuel I. Johnson, Infantry, O.R.C., Manager of the Company. The field is some 2,000 feet by 650 ft. and is well marked out by squares of lime, with a large square in the center. The flight was accorded a hearty reception and was entertained by Col. Johnson over night, returning to Camp Nichols the following day.

The Island of Mindoro furnishes a very wonderful hunting ground for any one who desires to take the trouble to get there. It abounds in deer, timarau, wild pig, ducks, snipe, etc. The Mindoro Sugar Company has one of the only two timaraus in captivity. The timarau belongs to the carabao family but is a much smaller animal with straight horns receding backward from the base. This animal cannot be domesticated. It is very ferocious and dangerous to hunt, being one of the few animals known that will attack without warning or provocation. It is said of this animal that it will lie in wait for the hunter, allow him to pass, and then sneak up on him and attack him unawares.

Col. Johnson stated that it takes two and one-half days to get to the San

Jose boat landing at Mindoro from Manila. The flying time to the landing field from Camp Nichols was two hours. This is mentioned as a comparison between these two means of transportation and the future possibilities of aviation in connection with transportation of personnel and supplies to remote or places difficult of access with any other means.

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, October 6.

During the last week a total of 27 planes left on cross country to St. Louis, Mo., to attend the International Air Races. Those who left on the 27th were Col. Howard, Majors FitzCerald, Westover and Browne, Major Rowell of the Marine Corps, Captains Crom, McDaniel and Giffin, Lts. Aldworth, Schneider, Strickland, Willis, Finn, Biggs, Chapman and Canfield. The next day the following officers left for the Races: Lts. Peck, Carr, Zettel, Moore, Andrews, Wheeler, Skanse, Duke and Maughan.

At McAlester, Okla., Lieut. Wheeler was forced down in a plowed field, resulting in a complete "washout".

Lieut. Carr's plane, forced down at Chetopa, Kansas was wrecked and burned. Lieut. Carr proceeded to St. Louis with Lieut. Zettel.

TENTH SCHOOL GROUP

CADET DETACHMENT: Another group of cadets started to take a course in aerial bombardment this week. All of the instruction to date has been ground school work, consisting of a course in bombs, bomb sights, bomb racks and bomb trajectories.

Several cadets are now taking a course in aerial observation. During this week this course has consisted of ground school work in artillery contact.

There has been no flying by cadets during the week on account of the aerial races at St. Louis, most of the instructors and many of the ships being at these races.

22ND PHOTO SECTION: During the past week regular routine work has been done by this section and mosaic taken by Lieut. Cronau at Tallulah, La., layed down. The hut and grounds have been policed each day for the inspection of the Post Commander.

Lieut. Cronau and Pvt. Womack returned from Tallulah, La., by airplane where they have been working in conjunction with the Department of Agriculture on the boll weevil project. Both enjoyed their stay but were glad to get back to Kelly Field again.

40TH SCHOOL SQUADRON: Lt. Frederick left this date for Austin in a Martin Bomber, contemplating a return the same day.

A general clean up campaign was launched in the past week and the men are striving to make this organization the neatest and cleanest on the field. "Keep Off" signs were posted around on the lawns and they are being carefully observed and complied with.

Approximately 1000 feet of wire was used up in the past week on Martins. An inspection of all the control wires was made by Master Sergeant Grant and quite a few were found to be faulty.

FORTY FIRST SCHOOL SQUADRON: Activities during the past week were confined to preparing the hangars and hangar areas for the coming inspection.

Lieut. DeFord attempted a flight to Texarkana Wednesday, Oct. 3d, planning to talk to an assemblage at that place on the establishment of an airdrome near the city. The flight as far as Dallas was made without mishap. In continuing the flight with the intention of reaching the destination the same day, numerous cloud banks and troublesome winds were encountered, finally culminating in a storm of such intensity that he was forced, at Bryan's Mill, to turn and retrace his flight as far as Dallas, where he remained overnight, returning to Kelly Thursday.

FORTY SECOND SCHOOL SQUADRON: The flying time last week totaled 75 hours and 55 minutes. In the last three days nine of our ships have made cross country trips to Dallas, Texas, and return. Lt. Cronau, who has been absent from the Post for a month, returned from points in Louisiana last Tuesday, where he had been on a photographic mission. Aside from cross country and necessary test flights all flying has been suspended.

This week the squadron has been busy policing its area, and we now have a very neat one.

Three recruits were assigned to this squadron this week, making a total of 129 enlisted men and four officers.

FORTY THIRD SCHOOL SQUADRON: Flying for the week consisted of: Training flights in Sperry Messenger. One flight of MB-3A's and Spad's did practice flying for the Air Review scheduled for Friday.

68TH SERVICE SQUADRON: The Motor Overhaul department of this organization received two Liberty Motors to be repaired during the past week. Eight Liberty motors and two Wright motors are now undergoing complete overhaul, and one Liberty motor is being tested. Two Liberty motors were taken from storage and assigned to squadrons.

The Aero Repair Department of this organization started work on Lieut. Walker's ship. After thorough examination was made, it was found that a complete re-built job will have to be done. This work will be completed at an early date.

THIRD ATTACK GROUP

Very little flying was performed during the week, most of the pilots of the Group being in St. Louis, attending the International Air Races.

Major Brereton, Commanding Officer of the Group, has been on cross country for the past two weeks. During his absence Captain H. J. Houghland assumed command of the Group.

On the 29th, the Squadrons of the Group were inspected by the Group Commander.

The better part of the week was devoted to a general police of the Group area.

Captain Houghland made a cross-country flight to Galveston, Texas, and return. Several days later he made a cross-country flight to Laredo, Texas.

Lieut. Harbeck made a cross country to Houston, Texas, on the 2nd, for the purpose of returning to this field Captain Buckner of the Medical Department, who had been on temporary duty at Houston in connection with the National Guard.

Sunday, the 30th, the 60th Service Squadron Football Team was defeated, after a hotly contested game, by the Frank Brothers Team, the score being 6 to 0, this score being made during the last five minutes of the game.

Captain Wilson, who had been on temporary duty at Marfa, Texas, since September 24th returned to the field on the 28th and left for St. Louis the 29th. Lieut. Phillips also left for St. Louis on that date.

Major Duty made a cross-country flight to Muskogee on the 4th, returning on the 6th with Tech. Sgt. McDaniel as passenger. Sgt. McDaniel was the mechanic with Lt. Carr when he crashed at Chetopa, Kansas, and after making the necessary arrangements for the disposal of the wrecked plane, had proceeded by rail to Muskogee.

Major Burwell, the Wing Operations Officer, returned to the field on the 3rd from Marfa, Texas, where he had been on temporary duty since September 24th, in connection with the 1st Cavalry Division Maneuvers, staged in the Big Bend region.

Kelly Field, San Antonio, Texas, October 13.

Major Lewis H. Brereton returned to the field on October 11th from an extended cross country flight, and is once more in command of the Third Attack Group.

THIRD ATTACK GROUP

TWENTY SIXTH ATTACK SQUADRON: Lt. Donald B. Phillips with Mr. Long as passenger returned on October 8th from St. Louis, Mo. They expressed themselves as well satisfied with their trip.

Sgt. Ashley flew to Ft. Clark, Texas, on October 8, for the purpose of transporting Pvt. Bocoock of this squadron to Brooks Field, Texas, for the flying cadet examination. After the examination Sgt. Ashley flew to Ft. Clark with Pvt. Bocoock and returned to the field at sundown of the same day.

Very little flying was done during the past week due to practically all of the officers being on detached service.

NINETIETH ATTACK SQUADRON: The flying activities of this organization consisted chiefly of return flights from cross-country.

On Thursday, October 4, Major Burwell with Pvt. Wyatt as passenger returned from Marfa, Texas.

On Sunday, October 7, Lt. Gates with a mechanic as passenger made a cross-country flight to Laredo, Texas, returning at sundown the same day.

On Monday, October 8, Lt. Moor with Sgt. Drier as passenger returned from a cross-country flight to St. Louis, Mo.

On Tuesday, October 9, Lt. Carr returned from St. Louis on a solo flight.

On Friday, October 5, the field staged an aerial exhibition for the United Confederate Veterans. This organization furnished three planes for the occasion.

EIGHTH ATTACK SQUADRON: On Friday, October 5, a three plane formation from this squadron took part in an exhibition staged for the benefit of the Confederate Veterans who were gathered on the field. Immediately following the review the Attack Group staged a mimic warfare attack on a shack in the vicinity of the bomb-pit, using front guns and terra-cotta bombs.

On Monday, October 8, Lt. Skanse and Cpl. Lutes returned from St. Louis, Mo., where they attended the International Races. The time for the round trip was 25 hours and 30 minutes.

Lt. Crocker returned to duty on October 9, having been on detached service at Langley Field, Va., taking part in the bombing maneuvers off the Virginia coast. Lt. Crocker led the formation of Martin Bombers that sunk the Battleship "Virginia" during the maneuvers. He also flew the T2 in the transport race while at St. Louis.

Lt. Carr returned from St. Louis in a plane from the 90th Squadron, having washed out his plane, taken from this squadron on Sept. 29, as a result of a forced landing in a corn field in southeastern Kansas.

On October 10, Capt. Bubb and Sgt. Deckman returned from Washington, D.C., having been gone for the past three weeks on an Airway mapping flight.

THIRTEENTH ATTACK SQUADRON: During the past week work has been progressing on the walks and roads around our hangars and barracks and at the present writing they are in first-class shape.

Captain Harvey, Commanding Officer of this squadron, who has been on leave of absence, is to once more assume command of the squadron at an early date.

SIXTIETH SERVICE SQUADRON: Lt. Col. Culver, Air Officer of the 8th Corps Area with Pvt. Holland of this squadron as mechanic returned to the field on October 8 from a cross country flight to Camp Alfred Vail, New Jersey.

Major Andrews, Executive officer of the field, with Pvt. Wallace, of this squadron, made a cross-country flight to Austin, Texas, on October 4, returning at sundown the same day.

TENTH SCHOOL GROUP

Those officers who attended the Pulitzer Races at St. Louis returned to Kelly Field on Monday, October 8th, while those who participated in the maneuvers at Ft. Leavenworth, returned to Kelly Field on October 10th.

Two planes from the 10th School Group will cooperate with the Second Division during Divisional maneuvers at Camp Stanley next week.

First Lieut. William V. Andrews, formerly of the Supply Division, Washington, D.C., reported to the 10th School Group for duty and training.

SIXTY EIGHTH SERVICE SQUADRON: Two Liberty engines were received from the S.A.A.I.D. for assignment to squadrons. Eight Liberty and two Wright engines are being overhauled and one Liberty and one Wright are being tested. Two Liberty engines were received for complete overhaul and two were taken from storage and assigned to squadrons.

Three DH4B's and one SE5 are being overhauled in the Aero Repair Department and the "re-build" work on Lieut. Walker's ship is progressing nicely.

FORTY THIRD SCHOOL SQUADRON: Flying for the week consisted of : Test, training and transition in MB-3A's and Sperry Messengers.

The men have been working on the lawns around the hangars and barracks,

and with the help of several timely rains the grass is once more in excellent condition.

FORTY SECOND SCHOOL SQUADRON: The total flying time for this week was 51 hours and 15 minutes. The student officers and cadets have reached the interesting part of their work and are very enthusiastic about it.

Captain Crom has been relieved by Captain Hopkins, who assumed command of this squadron.

FORTY FIRST SCHOOL SQUADRON: Lieut. Walter R. Peck, after a pleasant and eventful trip via air to the races at St. Louis, returned to this station October 9th. Lieut. Raley, flying one of this squadron's ships also completed his return flight the same date.

FORTIETH SCHOOL SQUADRON: Lt. Canfield and Sergeant English, who were visitors in St. Louis during the Pulitzer Races, returned to this station on the 8th. After arriving at St. Louis, Lt. Canfield and Lt. Zettle made a trip to Mount Clemens, Michigan. The entire trip was made in 32 hours. No trouble was experienced and the trip was acclaimed a success.

Major Browne and Corporal Stubblefield, who were also guests at St. Louis, returned on the 11th, after making a trip to Fort Leavenworth, Kansas, and intermediate points. A little difficulty was experienced with the engine, due to the fact that it was a new one and had been run but very little before the trip.

CADET DETACHMENT: The group of cadets, undergoing bombardment training, were given dual instruction in flying the Martin Bomber this week. Training in the use of aerial sights and bombing practice is being given by the camera obscura method.

The ground school for cadets taking the observation course at this time consists of work in artillery contact. Part of the mornings are devoted to flying on observation missions.

BrooksField, San Antonio, Texas, October 15.

Lieut. Leo H. Dawson, A.S., reported for duty, and his arrival being coincident with the arrival of the new Voughts, was immediately given a class of cadets on that type of plane in primary instruction. The Voughts are creating a great deal of interest and every one is anxious to fly them because of their excellent flying qualities.

With the falling by the wayside of a few students during the past week, and the assignment of one more instructor, all of the students are now under instruction.

Lieut. R. P. Williams, a student officer, became lost in low clouds on his first solo flight and landed about ten miles from Brooks Field to ascertain his whereabouts. Directed by a farmer to Kelly Field instead of Brooks, he landed there, and from there received directions to Brooks Field. His first solo flight consumed about one and one half hours.

There were three minor crashes during the past week. Private Henley, (2nd Lieut., O.R.C.) had a forced landing, and landing on uneven terrain, damaged the ship quite badly but was unhurt. Cadet Woolard in practicing landings rolled into a ditch and broke the propeller. Lieut. Davidson also had a forced landing and had to go into the mesquite. His ship ended in approximately the same position as his almost fatal crash of a year ago, and while the ship was a complete wash-out, Davy escaped injury.

Lieut. Corkille returned from the Pulitzer races, and had as his guest for a few days Lieut. Cover, of Langley Field, who was in San Antonio looking over the air activities.

During the week Mr. Jaynes, Lieut. O.R.C. of Forth Worth, visited the field and took some voluntary instruction.

Cross-countries during the week were as follows: Sergeant Winston A. Blizzard and Private Morris to Kerrville, Texas, Staff Sgt. Roy L. Mitchell and Sgt. Sims to Laredo, Staff Sgt. B. K. Newcomb and Sgt. Burns to Laredo, Staff Sgt. D. A. Templeman and Sgt. Kelly to Fort Worth, Lieut. J.G. Taylor and Lieut. R. W. C. Wimsatt to Loxtons Ranch, near Pearsall, Texas.

Brooks Field, San Antonio, Texas, Oct. 22.

There were several new arrivals at the School during the past week. Lieut. Dawson reported from Chanute Field for temporary duty as instructor, and was assigned to 'B' Flight, where he is commencing his training with a class of students on the Voughts. This is the first class of students assigned to Voughts at the Primary School, and every one is closely watching the test.

Mr. Ruggles arrived and commenced his work with the orientator. Nineteen cadets who have never flown were assigned to him, also seven officers who have as yet not soloed. His assistant, Mr. Hanson, has been here for some time and has four orientators in perfect shape, they being mounted on trailers and placed in Hangar No. 16. Every morning they are run out of the hangar and the students are getting very adept at that work.

The results of the recent examination for commission having been published, several new officers reported at this Field. Robert C. Ashley, who passed thru this School as a cadet eight months ago, and who enlisted in the Air Service at Kelly Field, was one of the successful ones. Ashley had been returned to this field for temporary duty as a flying instructor, and will continue on that work. Fogelsonger, a member of the present cadet class, was also one of the successful ones, and will continue with his duties as a student.

Lieut. Goddard reported back to this School from the Advanced School for more preliminary work.

Ex-Lieutenant Frost, who was with the Primary School for a long time at Carlstrom Field, was a visitor for a few days during the week.

Sometime ago authority was received to have one of the White trucks altered so it could be fitted with pneumatic tires and used as a wrecking truck. The alterations to the chassis were made at Camp Normoyle, and during the past week the truck was returned to this station. An especial body with hoist is now being fitted to it at the Aero Repair. It will soon be in condition for use.

The painting of the hangars is progressing in very good shape, and about ten of the hangars have now been completed. The contractor promises to have the visiting ship sign up during this present week.

Four of the new Voughts arrived and several others are on the way. One class has already been started but it is not expected to start another one during the present school year. It is probable that all of the students will be given some flying on this ship before graduation.

Last Saturday a practice review and inspection was held. All the ships were on the line and hangars and shops were open, ready for inspection. Adjutant's Call was sounded at 9:00 o'clock and all troops were inspected, including the provisional company of student officers. Immediately after passing in review, the students reported to their stages, and the enlisted men proceeded to their departments. The motors were started immediately, and twelve minutes after the battalion was dismissed, the ships started to take the air, being dispatched from each of the three stages in a steady line. Over sixty-six ships took the air in less than five minutes.

The football team did not fare so well in its first real game, being defeated by the Government Hill team 19 - 0. This team was composed largely of players from the Second Division and ex-college stars from the city. It was a hard fought game throughout and was a little bit too hard for such an early season game. It is hoped that a return match can be arranged for later in the season when better results should be obtained. The team journeys to Austin Thursday for a game with the Texas Shorthorns.

The following cross-countries were made during the past week: Lieuts Taylor and Wimsatt to Austin, Texas and return in one of the new Voughts; Sergeant Blizzard to Boerne and return in a D.H.; Captain Sturcken to Kennedy and return; Lieut. Corkille to Houston and return; Lieut. Breene to Fort Ringgold, thence to Galveston and return; Major Royce and Captain Bock, Lieuts. Dawson and McClellan and two mechanics flew to Galveston Saturday morning and returned that

afternoon. A formation was indulged in both going and returning. Lieut. Breene joined the formation at Galveston.

Wilbur Wright Field, Fairfield, Ohio, October 20.

Lieut. Clement McMullen of Brooks Field, who was the winner of the Liberty Engine Builders' trophy race at St. Louis, stopped at Wilbur Wright Field enroute from St. Louis to his home station.

Major J. H. Rudolph, Engineer Officer, returned to Wilbur Wright Field on October 7. He spent about two months on an extended automobile trip, going first to Milwaukee and later to various points in Canada.

Lieut. Ward Robinson, of Maxwell Field, Montgomery, Alabama, stopped at Wilbur Wright Field on October 8, on his way from St. Louis to his home station. While at this Field he made arrangements for the shipment to Maxwell Field of urgently needed supplies.

Lieut. R. V. Ignico, former Chief of the Materiel Section of the Property Maintenance and Cost Compilation, was here for a few days and left on October 8 for a short vacation, previous to his departure for the Philippine Islands.

Lieut. W. S. Hamlin returned to Wilbur Wright Field a few days ago after a month's absence in the east. He spent the greater part of his leave in New England, the farthest point east that he reached being Augusta, Me. He returned by automobile thru northern New England and New York and saw the Thousand Islands from the New York side.

Lieut. V. J. Meloy spent several days at Wilbur Wright Field while his airplane was being touched up by the Engineering Department. The instruments on his plane were tested and a number of minor repairs were made to the engine. He left on October 13 for his station, which is the National Guard Air Field near Nashville, Tenn.

Major B. Q. Jones of the Supply Division at Washington, arrived here October 19. He has been in consultation with Capt. E. E. Adler and other officers of the Property Maintenance and Cost Compilation. Major Jones is keenly interested in all supply problems of the Air Service and expressed satisfaction with the methods used by this office in their routine handling of supply problems. Major Jones expects to remain here for several days, as this is his first visit to the Air Service Activities at Dayton and vicinity since his return from an absence of several years spent in the Philippine Islands.

Lieut. Robert S. Worthington returned to Property Maintenance and Cost Compilation and resumed his duties as Chief of the Maintenance Section.

Lieut. D. L. Decker, Q.M.C. who for a long time was our popular and efficient Utilities Officer, visited Wilbur Wright Field on Oct. 6 and 7. His many friends regret that he has been transferred to another station.

On October 11 the Barling Bomber returned from St. Louis where it thrilled and delighted the citizens of that metropolis and the many visitors who were temporarily in St. Louis at the time of the International Air Races. On October 14, the Barling Bomber attempted a flight to Columbus, Ohio, to participate in the Aerial Circus for the benefit of the Army Relief Association, but owing to heavy fogs and consequent poor visibility, the trip was necessarily abandoned, or rather postponed until some future date when weather conditions will be favorable. In spite of the weather on October 14, the greater portion of the Aerial Circus at Columbus, Ohio was carried out as planned. Among the pilots from Wilbur Wright Field who were present at the Aerial Circus were Capt. E. E. Adler, Capt. H. Pascale, and Lieut. G. V. McPike.

Lieut. Andrews was at Wilbur Wright Field several days ago making arrangements for the overhauling of his DeHaviland airplane. The huge red and white dice which are pictured very prominently on the side of his plane have always brought him luck and prevented him incurring serious mishap when making a forced landing recently on a poor field.

Mr. N. L. Hankinson returned to McCook Field after an extensive inspection trip, which was taken under authority of Property Maintenance and Cost Compilation and McCook Field. Mr. Hankinson's specialty is inspection and testing of wooden parts for airplanes. He has been to Chanute, Langley, Rockwell and many other fields and stations, and emphasizes the necessity of storing wooden parts in such a way they will not deteriorate. The opinion that has prevailed in some quarters that wooden struts, bulkheads, instrument boards, etc., are good for only a year

or two has been found altogether erroneous. The struts that were manufactured in 1917 and 1918, if they have been stored in dry warehouses are just as good as new now. Where damage has resulted, it has been due to throwing the wooden parts in a pile on the floor or storing them under a hole in the roof or keeping them on the ground with a piece of canvas thrown over them. Wooden parts can be easily damaged when piled up in heaps like steel castings, or stored on a damp cement floor where they will take up moisture; but if handled with care and stored in a dry place where there is free circulation of air, they will last for many years. The familiar expression "dry rot" is often used, Mr. Hankinson says, as a pretext for discarding serviceable wood parts.

The Golf Tournament of the Industrial Commercial League of Dayton was brought to a close with the Wilbur Wright Field team the winner, with a per cent of 1000, which means that no games whatever were lost. The members of the winning Wilbur Wright Field Team are Majors A. W. Robins and Hugh Knerr, Captains C. O. Thrasher, B. J. Peters, E. E. Adler and Lieut. H. A. Bartron. Captain Peters was recently transferred to another station, but all other members of the Team are still here and enjoying their hard-won victory. Among the teams opposing them were McCook Field, MacGregor, Metropolitan Clothing Co. and six others. On Friday, October 12, at the Engineers Club at Dayton, the trophy, a large silver cup, was awarded to the Wilbur Wright Field Team.

Lieut. Ira A. Koenig, a Lighter-Than-Air pilot, has been transferred to Property Maintenance and Cost Compilation from Scott Field.

Clark Field, Pampanga, P.I., September 15.

The training schedule that was suspended on August 3rd was resumed on September 10th. The ground work consisted of one hour Buzzer practice and Radio Communications. The air work consisted of Formation Flying, Aerial Communications, sending and receiving messages either from ground or another plane, and adjusting fire for the 24th Field Artillery.

Two planes were received from Camp Nichols this week, giving the Squadron the following complement of planes: 2 D.H.4A's, 6 D.H.4B's and 1 D.H.4 Freighter.

The M.B.3's arrived and are being set up at Camp Nichols. Delivery of same should start in about 10 days.

Clark Field, Pampanga, P.I., Sept. 22.

On September 17th five hours were devoted to Gas Warfare instruction. This consisted of a lecture on the various kinds of gases, use of gases and protection against same. Afterwards everyone went through the gas chamber, first with a gas mask on and then going into same without a mask, placing same on, clearing it and then staying in a few minutes to see if mask gave sufficient protection. Afterwards the command was divided into two groups and an attack was carried out using smoke screen and gas. During these problems casualties were narrowly avoided due to the fact that the range on the rifle grenades was underestimated and direct hits were nearly scored on the defenders, putting them on the run.

During the week twelve successful artillery adjustments were made, working in conjunction with the 24th Field Artillery (P.S.). This was part of the weekly training schedule.

Camp Nichols, Rizal, P.I., Sept. 1.

The 6th Photo Section was unusually busy the past week, taking two complete mosaics, one of Fort Wm. McKinley and one of Camp Nichols. All of the men of the Section are busy matching and putting the mosaics together. This section has an operating strength of nine men. At the present time the Commanding Officer is on duty at the Air Office, Manila, and the personnel has been reduced to four men, which makes it difficult for the Organization. They are turning out the work however, with a little overtime.

The 42nd Air Intelligence Section contributes: "A quiet week-end, tendencies of pay day to the contrary notwithstanding, was enjoyed by all members of this command. The dope was, however, upset on Labor Day when the 42nd became the horseshoe champions of our local community. Sergeant Haberlin and Private

Mortenson, who hail from Youngstown and Marysville, Washington, respectively, did the deed. Scientific throwing of ringers featured the games. Chewing tobacco, however, was missing, gosh darn it."

Camp Nichols, Rizal, P.I., September 8.

Inspection at this Post on Saturday included full field equipment. Enlisted personnel were required to pitch shelter tents. Also meals on Friday and Saturday were cooked in field kitchens and served in mess kits, simulating field conditions. The inspection was very satisfactory. It was found that there were very few articles short and that the organizations were as proficient in pitching tents and laying out their equipment as could be expected considering their experience. These inspections will be held frequently in the future, with a view to promoting proficiency of organizations in being able to take the field on short notice.

The Commanding Officer of the 6th Photo Section, accompanied by Staff Sergeant E. J. Davis and Private J. W. Kavanaugh, also of that Organization, left on the Transport "Merritt", with cameras and photographic supplies, for special duty in the devastated area around Tokyo and Yokohama, Japan.

Captain Thomas J. Hanley, Jr., commanding 28th Bombardment Squadron, led an eight-ship formation to meet the U.S.A.T. "Merritt", Tuesday. The "Merritt" was returning from a cruise to the Southern Islands and Northern (British) Borneo, with Major General Reed and many others, including Major Reinburg, the Department Air Officer. No wild men were reported as having been encountered. In this connection it is mentioned by a traveller in those parts, that the common term for Mr. Barnum's famous "wild man of Borneo", "orang-outang", is erroneously, meaning, literally, "man-in-debt". The proper word is "orang-utan", "man of the forest". So, should a returned Philippine Islander mention casually that he is an orang-outang, never mind the Pyscopathic Ward, he will be perfectly normal.

The following is contributed by the Commanding Officer, 42nd Air Intelligence Section: "Lion hearted valor; sagacity; astuteness and several other qualities (all possessed by this organization) have contrived the undoing of much villiany during the past month.

"Thanks to the fearless efficiency of the 42nd, every man can now rest in peace, secure in the knowledge that his raincoat or blanket will be safe, or if taken, will be recovered. Boy! Bring the cut flowers and pin them on our magnificent rainbow silk shirt fronts. We are not by nature inclined to brag. On the contrary a violet would look like a brass horn when compared to us. But one must do oneself justice, which we generally attempt to do."

Rockwell Air Intermediate Depot, Coronado, Calif., Oct. 12.

The rabbit drive mentioned in our last News Letter was pulled off as per schedule and about 300 jack rabbits bit the dust during the afternoon, each man on the firing line getting his share of the shooting. The Navy outnumbered the Army in personnel, but the Army outshot them, two to one. Battle Commander, Wm. M. Randolph, Captain, A.S. was mounted on a dashing Harley-Davidson motorcycle and the responsibility of keeping the line fell upon his shoulders. Unfortunately, however, he broke a sprocket chain near the middle of the drive and before he could regain control of the line, it had become pretty ragged near the center and it is estimated that at least 75 big jacks broke through at this point, but the Captain, always alert and ready for emergencies, grabbed his trusty shot-gun and soon rallied the Navy forces, closing up the gaps and bringing the stragglers up again on the line, thus saving the day. Every one expressed themselves as having a good time, and it is hoped by all present that the 75 more or less which broke the line will get busy on the Commanding Officer's garden so that he will declare another shoot against the pests.

Fire prevention week is being observed at this Depot as outlined by the War Department. The President's proclamation was read by the Fire Marshall, Lt. Frank W. Seifert, A.S., to the entire personnel at the conclusion of a fire drill held for that purpose.

1st Lieut. Lowell H. Smith, A.S. reported back from St. Louis this morning and resumed his former duties as Chief Engineer Officer, Rockwell Air Intermediate Depot.

Rockwell Air Intermediate Depot, Coronado, Calif., October 19.

The mid-air refueling fleet, consisting of four DeHaviland planes, left here Monday morning for San Francisco to give the American Legion, holding its National Convention in the Bay City, a few thrills and also demonstrate the feasibility of re-fueling in the air. The personnel composing this fleet were:

Major H. H. Arnold, A.S., Commanding. Lieut. Lowell H. Smith, A.S.

Capt. L. M. Field, M.C., Flight Surgeon. Lieut. J. P. Richter, A.S.

Capt. R. G. Ervin, A.S. Lieut. V. Hine, A.S.

Lieut. O. R. McNeel, A.S., ORC Lt. Frank W. Seifert, A.S.

During the absence of Major Arnold, Capt. W. M. Randolph, A.S., assumed command of the Depot.

Lieut. Frank W. Seifert, A.S., ferried an overhauled DeHaviland 4B plane (63461) especially equipped for carrying passengers, to San Francisco, to be used by Colonel Gillmore, Air Officer of the 9th Corps Area.

Lieut. J. P. Richter, A.S., ferried a completely overhauled DeHaviland 4B1 (#63778) to Crissy Field to apply on Transfer Order No. 877.

The one great step towards the development of the spirit of fellowship among the employees at this Depot, was taken Tuesday at meetings held in the various departments, when the Rockwell Field Welfare Association was organized, with S. M. Crawford as President, and the constitution adopted, which will, it is hoped, be a great benefit to all connected with the Rockwell Air Intermediate Depot. The business men of San Diego are responding generously to the plans as outlined, and it is believed that within the next few weeks members of the association will be able to make purchases anywhere in San Diego at a substantial discount. For the benefit of any Air Service activity interested in the organization of a Welfare Association, the members of our association will be glad to cooperate and impart any information asked regarding the local activity.

Boston Air Port, East Boston, Mass., Oct. 11.

On Saturday, October 6th, the 101st National Guard Observation Squadron, flew a formation of six planes to the Brockton Fair where they put on an aerial demonstration and were the guests of the Fair Association for the day. The flight was commanded by Major Woolley, Commanding Officer of the Squadron.

Captain L. R. Knight, Air Officer for the First Corps Area, will command a flight of twelve planes from the Boston Air Port to Westfield, Massachusetts, where a municipal airdrome is to be dedicated. The flight will be participated in by Regular Army, Organized Reserve and National Guard Officers, among whom are Lieutenants Occlittle, Richards, Lewis and Moffat of the Regular Army, and members of the 101st Squadron and members of the Organized Reserves.

San Antonio Air Intermediate Depot, Texas, October 18.

Lieuts. Edward M. Powers and Ivan G. Moorman, flying DH-4 planes, returned from the International Air Races at St. Louis last week. They both expressed great admiration for the Navy pilots and the ships which they flew in the races, and expressed the hope that at the next year's races the Army would carry away some of the honors. General Mason M. Patrick, Chief of Air Service, who attended the races, was so favorably impressed with the performance of the ship flown by Lieut. Powers that he requested this Depot to build him a DH-4-B plane with slight modifications for his personal use.

The Engineering Department, under the direction of 1st Lieut. Charles E. Branshaw, has remodeled and overhauled 4 DH-4B's, 4 TMMB-3A's, 5 JN-6H's, 17 Liberty 12-A's and 5 Wrights during the first half of October.

Lieut. Lewis A. Dayton, the Fire Marshal, has finished installing the new fire alarm telegraph system and is making a number of tests to familiarize the fire department, the Watchman, heads of Departments, and others with its workings. A number of perplexing problems were encountered during its installation, but happily all were solved and the system promises to afford valuable protection against fires.

Mrs. Dorwin Lackland, mother of the Commanding Officer, entertained at dinner Captain and Mrs. C.T.C. Buckner and their house guests, Mrs. Lee and Mrs. Heffernan, wife of Major Leo Heffernan, Commandant of Fort Bliss. They were

joined later in the evening by several more guests and bridge was enjoyed by all.

Bonita, the Airedale pup owned by Lieut. Lewis A. Dayton, but during his absence shown by Major Lackland, won first prize in one entry and third in another at the San Antonio Dog Show. Bonita was bred by Major Lackland and is the daughter of his Airedale, "Cinderella."

Mrs. Heffernan is here on a visit from Fort Bliss after a year's absence from Kelly Field, and is renewing many friendships.

Mr. Felix Parsons of this field has just received an appointment as Second Lieutenant, Air Service, and after a month's leave, will proceed to Brooks Field, his new station.

Mrs. Dorwin Lackland organized about thirty of the wives and daughters of Depot employees into a sewing and knitting circle. Two well attended meetings have been held in the Post Library building and many of the wives and daughters have met and become better acquainted with their neighbors. They are planning to make many useful garments for their families or for use as presents at Christmas.

McCook Field, Dayton, Ohio, Nov. 6th.

Lt. Wendell H. Brookley has received orders to proceed to Mitchell Field, Long Island to demonstrate sky writing in connection with the exhibition to be given there for the Army Relief Society. He will then proceed to Chicago not later than November 11, and to Kelly Field, Texas, not later than November 16 to perform the same services at exhibitions to be held at these fields for the same benefit.

Captain Robert Kauch has been granted one month's leave of absence to go beyond the continental limits of the United States. Captain Kauch's address for the period will be Schrieber, Ontario, Canada, where the big game is supposed to be in abundance. Mr. Louis Meister, who filled the office of Official Announcer for the Pulitzer Cup Races accompanied Captain Kauch. Fellow officers are remarking however that either the radio is out of order, or that the big game is keeping strictly under cover, for so far the official announcer has been strangely silent and no word has come from the deep woods.

Major Walter C. Kilner has returned to the Engineering School after an absence of three months, during which time he has been under treatment at Walter Reed Hospital.

Major Delos Emmons has returned to the Engineering Division after an absence of six weeks spent at Walter Reed Hospital.

Officers of the post with the ladies as their guests held their first splash party in the new gymnasium on the night of November 5. All were enthusiastic over the pool and the appointments. A game of volley ball was played. Also some one got out the fire hose, whose water while no wetter than that in the pool was many degrees, of untempered coldness, colder. The first regular officer's dance of the season is scheduled for November ninth.

113th Observation Sqdn. Ind. Natl. Guard, Wilber Fagley Field, Ind., Oct. 14.

The local unit is being well taken care of by the supply base at Wilbur Wright Field, two overhauled JN6H training planes having been received this week, bringing the outfit's total of training ships up to five, not including Capt. Donnelly's DeHaviland. Four more planes are due the local unit, and will be received during the next few weeks, well fitting them for the hard grind of training flights. The two overhauled ships were flown to Kokomo by Captain W. F. Donnelly, Federal instructor stationed here, and Major J. C. Patten, commander of the 113th.

Pilots from the First Pursuit Group who attended the International Races at St. Louis continued to drift into the field during the past week. Capt. Burt Skeel of the 27th Squadron and Lt. F. D. Hunter of the 94th Squadron, and Lieuts. Arthur Liggett of the 94th, L. C. Hurd and T. W. Blackburn of the 17th stopped here Wednesday. Lieuts. E. M. Haight (27th Sqdn.), G. P. Tourtellot (94th Sqdn.) and H. R. Yeager (95th Sqdn.) stopped here Thursday, October 11th. The four other members of the First Pursuit Group's Representatives at the Races - Capt. V. B. Dixon of the 94th Sqdn., Lts. T. K. Matthews and T. H. Johnson, of the 95th, and Lt. L. C. Simon, of the 27th, stopped here on October 8th enroute to their home stations.

113th Obs. Sqdn. Ind. Natl. Guard, Wilbur Fagley Field, Kokomo, Ind., Oct. 21.

The placing of Fagley Field on the new transcontinental airway, as well as on the Model Airway, has materially increased the number of arrivals at the field, about 20 flyers visiting the Kokomo base for service last week.

Lts. Carr, Smith, Downer, Givens and Farnsworth and Sgt. Porter, all of Chanute, were among the arrivals, enroute from Selfridge to Chanute. Lt. Farnsworth and Sgt. Porter were ferrying Sperry Messengers to Chanute, and the remainder were in DH's.

Lt. McFullen of Kelly Field was here, enroute from McCook to Kelly in a DH plane.

Ralph Lockwood, civilian experimental pilot at McCook whose family resides here, was here in a DH to visit his wife.

Lt. Carr paid two visits to the field last week, his last one being in the interest of the airways.

Lt. Givens, Engineering Officer of Chanute, paid a visit to the field in an SE5.

Capt. Devery, who left his plane here for repair, came after it during the week. It went bad near here recently and he limped into the field with it. He returned to find that it had been placed in fine shape by the local mechanics.

Several other pilots from Bolling, Selfridge, Chanute and McCook were here, bringing the number up to a score for the week.

Lt. John W. Zeigler of the 113th ferried a reconditioned "Jenny" to the local field from Wilbur Wright, bringing the local ships available up to seven planes. Major Patten, C.O. of the 113th, and Capt. W. F. Donnelly, Federal Instructor, will ferry two more reconditioned planes here next week, filling the local quota of training planes.

The nine pilots of the 113th made a general average of thirty hours in the air per week during the past month. All possible flying will be done here this winter. The flights and other sections of the unit have been moved to the Armory for winter training, and will get into a hard grind of classes during the winter. Sports will also be in order, as the squadron expects to have a first-class independent team to represent it at home and away, and also will have several section teams. It is contemplated to embark in football, baseball and wrestling during the next season. Several of the officers will vie with the enlisted men for places on the athletic teams.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

FOR RELEASE December 10, 1923.

THE BORDER TO BORDER REFUELING FLIGHT

In their historical mid-air refueling non-stop flight from British Columbia to Mexico, Lieuts. Lowell H. Smith and John P. Richter, of Rockwell Field, San Diego, Calif., traversed approximately 1250 miles in an elapsed flying time of 12 hours and 13 minutes, or at a speed of a trifle over 100 miles an hour.

Three times during their dash down the Pacific coast, contact was made with their plane by a hose connected to another one flying directly above it and a supply of fuel transferred. The personnel at Rockwell Field deserve commendation for their initiative, perseverance and diligence displayed in having developed a successful means of refueling airplanes in the air. It is possible that experimentation in this direction may open up unforeseen possibilities and probably revolutionize to a certain extent the design of heavier airplanes.

The border to border non-stop flight was conceived and executed by the personnel at Rockwell Field, and in the face of a great many obstacles. Some slight improvements were made on their former method of refueling, and the big project was successfully carried through to completion. It should be borne in mind that in a project of this nature close coordination of effort between all pilots and passengers concerned is absolutely essential to success, and the absence of any hitch in connection with this flight speaks volumes for coordination of effort.

The official report to the Chief of Air Service covering this flight, which was submitted by Major H. H. Arnold, Commanding Officer of Rockwell Air Intermediate Depot, is quoted below in full, as follows:

"In compliance with letter from the Office of the Chief of Air Service, dated October 3, 1923, arrangements were made and completed for a refueling flight from the Canadian Border to the Mexican Border. The time for the flight was selected so that all the pilots who could be spared would be in San Francisco enroute to Oregon at the time of the American Legion Convention. Accordingly, airplanes left Rockwell Field on October 15, 1923, as follows:

Endurance plane piloted by Lieut. L. H. Smith, with Lieut. H.A. Erickson, O.R.C., as passenger - nonstop flight to San Francisco, via Los Angeles and Fresno.

Refueling plane piloted by Captain R.G. Ervin, with Lieut. Oliver McNeel, O.R.C. as passenger - to San Francisco with stops at Santa Monica and Morgan Hill.

Refueling ship piloted by Lieut. V. Hine, with refueling hose and supplies - to San Francisco with stop at Santa Monica.

DH4B plane for delivery to Crissy Field with Lieut. F. W. Seifert as pilot, no passenger - to San Francisco with stops at Santa Monica, Fresno and Morgan Hill.

DH4B plane for delivery to Crissy Field, with Lieut. J. P. Richter as pilot, Mr. Herrick, member of the 479th Pursuit Squadron, Reserves, as passenger - to San Francisco, with stops at Santa Monica, Bakersfield and Crow Landing. At Santa Monica Mr. Herrick proceeded to San Francisco in plane piloted by Lieut. Seifert.

Rockwell Field DH4-B1 plane piloted by Major H. H. Arnold, with Captain L. M. Field, M.C., as passenger - to San Francisco with stop at Santa Monica.

From the above it is seen that the time of the refueling flight was arranged so that all Rockwell Field planes available could be present at the American Legion Convention, and at the same time two reconditioned DH4-B planes were delivered to Crissy Field.

The flight north as far as Santa Monica was without incident. After leaving Los Angeles a strong north wind about 80 miles velocity was encountered which

materially cut down the ground speed of the planes. However, by flying close to the ground sufficient headway was made so that two of the planes arrived in San Francisco from Los Angeles without making any stops, although the time consumed was increased to 4 hours and 50 minutes over the normal time of flight between the two places of 3 hours and 30 minutes.

In passing it may be remarked that this wind was so strong that out of 19 planes which the Navy started from San Diego for San Francisco only 14 ever reached Crissy Field, the others being smashed up enroute in landing, and in two instances were destroyed while standing on the ground by a strong wind which turned them over on their backs in spite of the fact that four or five mechanics were doing their best to hold the planes down.

After participation in the aerial events for the American Legion, four planes left Crissy Field for Eugene, Oregon, - Lieutenants Smith and Richter in the endurance plane; Lieuts. Hine and Seifert in one refueling plane; Captain Ervin and Lieut. McNeel in the other refueling plane and Major Arnold and Captain Field in a standard Rockwell Field DH4-B1 plane. On this trip also a strong north wind was encountered and the standard Rockwell Field DH4-B1 plane was forced to land at Medford, its gas capacity being only five hours. The endurance plane and refueling planes had a gas capacity of about 7 hours and made the trip through without any stops, arriving at Eugene about 3:00 p.m., October 18th, the other plane arriving about an hour later.

Arrangements had been made in San Francisco with the Standard Oil Co. to have high test gasoline spotted at both Eugene and Camp Lewis, Washington. On arrival at Eugene the Standard Oil Co. immediately dispatched a truck to the field and rendered excellent service in supplying gas and oil to the planes.

On October 19th, the next morning, it started to rain and continued for three consecutive days, so that no further progress for the border to border flight could be made. However, plans were made to leave for Camp Lewis, Wash., on October 23rd. On that date there was a heavy ground fog which eliminated any possibility of starting in the morning, but in the afternoon about 2:30 the fog was broken to such an extent that all four planes took off and arrived at Camp Lewis about dark. It was decided to send the endurance plane north on the following day to select a landing field as close to the border as possible; one refueling ship to return to Sacramento for refueling at that place and the other refueling ship to return to Eugene for refueling at that point - all planes to be in position for the border to border flight which was to take place on October 25th. The following morning, October 24th, however, there was a ground fog which covered the entire region about Camp Lewis, and it was impossible to get the planes started to their destinations before 10 o'clock, at which time the endurance plane headed north to locate a landing field near the border.

Although the Standard Oil Co. had placed high test gasoline in a hangar at Camp Lewis, they had provided no facilities for gassing the planes, with the consequence that it was necessary to utilize trucks and men from Camp Lewis and pour the gas into the planes with five-gallon cans. Furthermore, it was discovered that the gasoline was very dirty, which necessitated the use of chamois skin strainers. This so delayed the work that Captain Ervin was detained 2 hours and 30 minutes and was unable to leave in his refueling plane until 12:30 p.m. However, by 2:30 all planes were enroute to their destinations. The refueling plane left for Eugene, arriving there about 5:00 p.m., as did the Rockwell Field standard DH4-B1 plane with Major Arnold and Captain Field. Later in the evening word was received from Lieut. Smith that a suitable landing field had been located at Sumas, Washington, right on the border, and he was instructed to leave the following morning as soon as possible for the Mexican Border. Information was also received that, due to his late departure from Camp Lewis, Washington, Captain Ervin had been able to proceed only as far as Medford, Oregon, landing there about dark. He was instructed to shove off as soon as possible the following morning to arrive at Sacramento in time to complete all arrangements for refueling. Constant communication was maintained with the Weather Bureau with a view of determining beforehand, if possible, the kind of weather which would be expected on the day of the flight, and, true to the Weather Bureau's prediction, the morning of October 25th was clear from border to border.

The endurance plane left Sumas, Washington, and crossed over the border headed south at 6:30 a.m., October 25th. Information was received at Eugene from Salem, Oregon, that the plane passed over Salem at 9:30 a.m. Accordingly, it was

expected that the plane would pass over Eugene about 10:00 o'clock A.M. The refueling ship left the ground at Eugene at 9:45, proceeded north and met the endurance plane between Salem and Eugene, made contact and delivered 50 gallons of gasoline. The two planes then broke contact, the refueling plane accompanying the endurance plane south until the gasoline had been pumped forward into the main tank, when another contact was made just north of Roseburg, Oregon. However, only 25 gallons of gasoline were delivered on the second contact, due to the valves on the hose sticking and allowing approximately 25 gallons of gasoline to escape before they were closed. In the meantime, the Rockwell Field standard DH4-B1 plane with Major Arnold and Captain Field took the air to accompany the border to border plane as far as Sacramento. It was soon discovered that the border to border plane was traveling so fast that it would be necessary for the other plane to turn the engine up to about 1600 r.p.m. to keep up, so no attempt was made to accompany the plane into Sacramento.

The endurance plane passed over Mather Field, California, about 2:10 p.m. Information had been previously received at Mather Field of the time of passing over Chico, Calif. Fifty gallons of gasoline were delivered to the plane between Chico and Mather Field, Captain Ervin endeavored to transfer more gasoline, but Lieut. Smith would not accept it, so that after one contact the refueling plane returned to Mather Field and landed. The Rockwell Field standard DH4-B1 plane on its way from Eugene, Oregon, arrived at Sacramento five minutes after the border to border plane. The border to border plane proceeded south across Tehachapi and was in the vicinity of Long Beach, Calif. when darkness overtook it. However, it continued south, passing over the Mexican Border at 6:43 p.m., returning to Rockwell Field and landing at 6:50 p.m. From the above it is seen that the border to border flight was completed in 12 hours and 13 minutes, having covered a distance of about 1350 miles. The refueling planes and the plane piloted by Major Arnold proceeded to Crissy Field that same date and returned to Rockwell Field the following day. During this flight a total of 125 gallons of gasoline was delivered to the border to border plane - 75 gallons at an altitude of 3,000 feet in the vicinity of Eugene, Oregon, and 50 gallons at an altitude of 3500 feet in the vicinity of Mather Field, Calif.

In this connection, attention is also invited to the fact that the endurance plane and two refueling planes participating in this border to border flight are the same planes used in the refueling and endurance test conducted at Rockwell Field on August 27-28, 1923."

OUR BOY AVIATORS.

A novel contest was conducted recently at the instigation of McCook Field when the small boys of Dayton were offered prizes for hand-made models of airplanes. Miniature Curtiss Racers, DeHavilands and Martin Bombers, cleverly and neatly turned out, began to arrive at a downtown clothing store, where they were exhibited and where the decisions as to the winners were to be made.

So much intelligence and enthusiasm was shown by the twelve-year olds in their offerings that it would seem to indicate that but a little propinquity is necessary to fire the boy-imagination with not only the charm, but the possibilities and advantages of aviation. Here is a field lying fallow for education, and we are inclined to believe that should the coming generation not arrive at the state of manhood, incipient if not actual aviators, we can lay the blame all to our own neglect.

FROM THE ATLANTIC TO THE PACIFIC COAST AND BACK IN 50 MINUTES.

Yes, the above is an actual fact. But don't be alarmed, dear reader, for there is only one place where such a thing could happen - the Isthmus of Panama. Our France Field (Panama) Correspondent, touching on the fact that Monday, October 15th, marked the beginning of the France Field - Balboa Transcontinental Aerial Mail Service, states that a plane takes off each day from France Field with the official mail for Department Headquarters, lands at Balboa Field, delivers Headquarters mail and picks up the mail for France Field. The trip from Atlantic to Pacific coast and return requires less than 50 minutes flying time. He further goes on to say:

"The world's record for coast to coast flights has been broken so many times

by France Field pilots that we have lost interest in competing. To show the world what we think about Transcontinental Flights we will relate a little incident that took place a few days ago. One of our 'Loots' was sitting in the Operations Office entering time in his pilot book when he got a phone call from some desk warrior on the Pacific side. He tried for several minutes to make out what was wanted, but the 63rd Service Squadron was tuning up an engine on the line and it couldn't be done. He told the party to stay right where he was for about 25 minutes and they would get together. He rushed out of the Operations Office with helmet and goggles.. One hour later he was back at his job entering time and was grumbling something about 'That guy over on the Pacific side sure is long-winded' and 'Doggoned air over the Continental Divide sure was rough this morning'.

That's what France Field thinks about a two way transcontinental flight."

FRANCE FIELD OFFICERS RECEIVE RADIO INSTRUCTION

Several weeks ago an order was issued at France Field, Panama Canal Zone, requiring all the officers to attend radio school and qualify in radio telegraphy. Two classes per day are held, one primary class and the other advanced. At present more than fifty per cent of the officers can take more than ten words per minute and all can take five. After all officers have qualified they will be required to keep in practice by taking weekly tests.

IMPROVEMENTS AT WHEELER FIELD, H.T.

The Wheeler Field utilities department has been working steadily to improve the area. A large plot has been planted in grass which is taking hold and spreading rapidly. Arrangements have been made with the Forestry Service for a large assortment of plants and small shade trees, which will be obtained and set out in the near future. It is believed that by the end of the approaching rainy season a vast improvement will be very evident in the appearance of the field.

The new aerial gunnery range, located on the southern extremity of Wheeler Field, has been completed and is now being fired on almost daily. The range consists of three sets of targets constructed of concrete. One section is a trench system, another is a three-ship formation in silhouette, and the third section depicts a railroad, railroad station and ammunition dump.

The Post Commander of Schofield Barracks, Major-General Charles T. Mencher, made his annual inspection of Wheeler Field recently. The inspection included (a) Review, immediately followed by inspection of personnel in War Set Equipment; (b) Methods of aerial communications; (c) Aerial Gunnery and simulated day bombing; (d) Inspection of planes on the line; (e) Inspection of hangars and equipment; (f) Inspection of motor transportation; (g) Inspection of barracks and kitchen.

PROGRESS OF PREPARATIONS FOR CENTRAL AMERICAN FLIGHT. ✓

With the announcement of the proposed flight of Army airplanes on a visit of courtesy to the various countries of Central America comes the following additional information from our France Field Correspondent:

"Some definite action has finally been started on the trip to Guatemala City, which has just been authorized by the War Department. Lieut. John M. Clark, A.S. is leaving today (Oct. 31) as advance agent for the trip. The flight will be commanded by Major Raycroft Walsh, with Major Follett Bradley in charge of laying out the routes for mail and passenger service. Lieut. Perry Wainer will be radio and log officer; Lieut. L. L. Beery, navigator; Lieut. Leland Miller, photographic and historical record officer; and Lieut. Frank Albrook, engineer officer. It was originally intended to take two DH's and one Martin Bomber, but it is rather questionable whether the Martin will go or not, considering the altitude of some of the landing fields. This, however, will depend on the recommendation of the advance agent.

Lieut. Clark will have a trip from France Field to Port Limon, Costa Rico; San Jose, C.R.; Pontarenas, C.R.; Corinto, Nicaragua; Manangua, Nicaragua; Anapala, Honduras, Tegucigalpa, Honduras; Comayagua, Honduras, San Pedro Sula, Honduras; Puerto Cortes, Honduras; Puerto Barrios, Guatemala; Guatemala City, Guatemala; San Salvador, Salvador; Acajutla, Salvador; and then back to France

Field. The trip will be made by boat, rail, auto and donkey, the latter part probably very interesting for a flyer.

The flight itself will go to David, Panama; then to the capital cities of San Jose, Costa Rico; Managua, Nicaragua; Tegucigalpa, Honduras; San Salvador, Salvador; and Guatemala City, Guatemala, visiting these cities as a matter of courtesy, and then return. The return trip will be made more leisurely, with many small side trips for the work of laying out routes, photographing, etc. As soon as the maneuvers in January are over, everything will be set and the flight will take off."

✓✓ SPECIALIZED FLYING TRAINING STARTED AT KELLY FIELD. ✓

Specialized training in the four branches of Aviation began at the Air Service Advanced Flying School at Kelly Field, San Antonio, Texas, on Nov. 5th. The Students now on duty at the Advanced Flying School have been assigned to the four branches of training, as follows: Pursuit training - 2nd Lts. Benj. W. Chidlaw, H. M. Wittkop, Townsend Griffiss, John S. Griffith, O. R. Cook, Cadets Jesse B. Stowe, Dean W. Burford, John A. Collins, Chas. N. Wisely, S. A. Gilkey, Wm. H. McArthur and Marius C. J. Markle; Bombardment training - Capt. R.C. Candee, 2nd Lts. R. E. Snavely, C. E. O'Connor, M. E. Gross, Alfred A. Kessler, Hugo P. Rush, Cadets Frank F. Ray, Archie R. Loomis, Leroy Manning, Geo. W. Allen, F. V. Tompkins and F. J. Schwaemmle; Attack training - Majors O. Westover, Wm. B. Duty, 1st Lt. F.W.H. Kimble, 2nd Lts. James W. Spry, Milton Long, Cadets A. S. Smith, Geo. A. Weis, L. C. Sherman, L. G. Fritz and Schuyler Priestly; Observation training - Major R. E. Rowell, A.S., M.C., Capt. Willis H. Hale, 1st Lts. Byron T. Burt, F. E. Hopkins, Wm. V. Andrews, 2nd Lt. L. C. Catlett; Cadets Chas. H. Earnest, Julius W. Johampeter, C. E. Smith, John G. Kliemand, Milton M. Murphy, Rodney S. Lamont and Earl W. Fleet.

DIRECT COURSE FLIGHT ✓

A cross-country flight, for the purpose of making tests on instruments and methods of navigation, was recently made by Lieut. A. L. Johnson, pilot, and Mr. Mac Short, observer, from McCook Field, Dayton, Ohio, to Fort Riley, Kansas. The entire distance of 675 miles was made in one hop. A DeHaviland airplane equipped with a large fuel tank was used.

A direct course was held through the entire flight by the aid of the earth inductor compass. It permitted the flyers to navigate over the shortest route, that of an arc of a great circle and by flying at an altitude to receive full benefits of favorable wind currents. The distance was covered in 6 hours and 40 minutes, or at an average speed of 100 miles per hour. The first 350 miles were traveled in or about the clouds, where no check on the ground could be made. Descending through the clouds after having completed this distance, the flyers came upon the Illinois River, which was directly in the course. This flight was one of a series being conducted by the Instruments and Navigation Branch, McCook Field; to develop and perfect accurate means of navigating direct courses through the air, instead of by ground land marks, railroads and cities, which often means a deflection from a straight line course and adds many miles to a cross-country journey.

12TH OBSERVATION SQUADRON RETURNS FROM MANEUVERS

The 12th Observation Squadron, stationed at Fort Bliss, El Paso, Texas, recently returned to its home station after completion of the First Cavalry Division maneuvers held at Marfa, Texas. During the maneuvers the squadron completed 72 hours and 5 minutes flying and 67 missions, made up of contact, courier, reconnaissance, artillery adjustments, and observation flights for visiting officers and attaches. The terrain on which the maneuvers were held is ideal for aerial observation, it being practically impossible for the concealment of moves by the ground forces. The work by air forces was carried out in a highly efficient manner and received praise from the ground troops. An incident to the maneuvers was a report received by the squadron that an officer and his orderly had been lost for three days, and a request that a ship be sent out to look over the surrounding country to see if they could be found.

Lieut. Sullivan and observer took the mission and covered the ground, but were not able to locate the lost party. A landing was made near the park of one of the division trains, and while there a note signed that morning at six o'clock by the supposedly lost officer was discovered, it having been written from one of the neighboring ranches about fifteen miles distant. The finding of the note cancelled the mission, and the ship returned to report this information.

As a fitting conclusion to the maneuvers, a division review was held on the Marfa airdrome, consisting of the entire division. Considering the isolation and small population of the town of Marfa, there was a large assemblage of visitors to see the review. The Twelfth Squadron was inspected by Major General Howze, Commanding the First Cavalry Division, and afterwards indulged in formation flying and an aerial review.

FLYING WITH A "SANTA ANA" WIND. ✓

Aviators have ridden through storms, gales and even monsoons, but Captain Robert G. Ervin and Capt. Wm. M. Pandolph, Rockwell Field pilots, are believed to be the first airmen to fly with a "Santa Ana" wind cross country. These officers, flying DeHaviland 4B-1 No. 22-577, reached Rockwell Field recently in exactly two hours and 45 minutes after taking off from Phoenix, or at the rate of about 165 miles an hour. They encountered a "Santa Ana" over Phoenix, and with this brisk wind on the tail of their DeHaviland they breezed into San Diego in what is believed to have been the fastest air voyage ever made between the two cities.

ADMIRAL MAYO VISITS DAYTON FLYING FIELDS

The flying fields at Dayton were honored recently by a visit of Admiral H. T. Mayo, who commanded the American Naval forces on the Atlantic ocean during the World War. He was the principal figure in the Dayton observance of Navy Day, and was the honored guest at a luncheon given by several hundred business men at the Gibbons Hotel. Officers from Wilbur Wright Field and McCook Field were also present at the luncheon.

Admiral Mayo paid a brief visit to Wilbur Wright Field later in the day and the object that interested him chiefly was the Barling Bomber. In fact, all of the recent distinguished visitors to this field are taken down to see the big Bomber right away, and Major Robins, Commanding Officer of Wilbur Wright Field, has found that the Barling Bomber is the biggest drawing card that the field ever had. While the Barling Bomber was assembled under the direction of the Engineering Division at McCook Field, it is actually stationed at Wilbur Wright Field on account of its larger area and better opportunities for landing and "take-off". Our Correspondent hopes that the Bomber may be kept at Wilbur Wright Field permanently, but that it may venture forth on special occasions in order to show the people of the United States that it really flies and that it goes through the air with no more effort than a small scout or a "Jenny".

THE FLIGHT OF ARMY AIRPLANES AROUND THE WORLD |

The Secretary of War has just recently approved a project, outrivalling in importance the circumnavigation of the globe by the early explorer Magellan, which is to be undertaken by the Army Air Service during the spring and summer months of 1924, when a flight of four or five airplanes will be sent around the world to demonstrate the feasibility with which aerial communication may be established between the various continents, and to obtain much valuable information concerning the operation of present type aircraft in various climates of the world.

The type of equipment to be used has been determined upon, and it is expected that about four airplanes, American designed and built throughout by the Douglas Airplane Company at Santa Monica, California, will leave the United States about the first of April, 1924, at Seattle, Washington, flying northward along the coast of Canada and southern Alaska; across the Aleutian Islands; down through the possessions of Japan; along the shore of China, French Indo-China, Siam and Burma; across India; up the Persian Gulf; across Turkey and Europe to England; thence north through the Faroe Islands to Iceland; thence to Greenland and south-

ward along the Eastern shore of that continent to Cape Farewell, Greenland, from which point a direct flight will be made to Hamilton Inlet on the Labrador Coast; thence southward along the Canadian shore and up the St. Louis River to Quebec and Montreal, from which point the flight will proceed south to Washington, D.C., its original point of departure. Such an itinerary will, it is hoped, enable the fliers to dodge the rainy seasons in the United States and India and insure their passage through Iceland and Greenland during August and September.

The flight will consist of four officers and four enlisted men well qualified for a long and arduous flight. The selection of this personnel is now under consideration.

The four Douglas world cruisers will be equipped with pontoons at Seattle, Washington, and will make water landings in sheltered harbors along the coast of British Columbia, Alaska and through the Aleutian Islands, down into Japan. The present plan contemplates the removal of the pontoons and the use of landing gears from Tokio, Japan, or from Calcutta, India, depending upon the conditions which the flight encounters enroute. Landing gears will be used across Asia Minor and Europe, as far as Hull, England, where pontoons will again be placed on the airplanes and used until the flight reaches Montreal or Keyport, N.J., at one of which points pontoons will again be replaced by landing gears and the flight completed in this manner.

The existing airway facilities in the United States, and it is hoped those in southern Japan and the ones between India and London can be utilized. The intervening sections of the route will be given further study by the advance officers who will precede over the route prior to the arrival of the flight.

A pathfinding expedition of two officers was sent out sometime ago. One officer, 1st. Lieut. Clarence E. Crumrine is at this writing in Greenland, investigating facilities for aviation in that country, and it is expected that diplomatic arrangements with Japan will shortly be consummated for the travel of 1st Lieut. Clifford G. Nutt, now in the Philippine Islands, through Japan to make preliminary arrangements for that flight. Both of these officers were members of the successful Alaskan Flying Expedition in 1920.

A detailed study of the route is being made in the Office of the Chief of Air Service, which is working in close cooperation with the Coast Guard for the purpose of obtaining data on facilities between Seattle, Washington, and Attu Island in the Aleutian Group, which is the point of departure of the flight from the United States' possessions.

Lieut. Erik H. Nelson has been for the past two months assigned to duty at the Douglas Airplane factory at Santa Monica, Calif., where he has supervised the construction of a special airplane for this flight. Lieut. Nelson was the engineering officer on the Alaskan Flight, and also on last year's flight of six Army airplanes from San Antonio, Texas, through the West Indies to Porto Rico and return to Washington, D.C. Through his efforts a very successful around-the-world cruiser, capable of remaining in the air for over twenty hours, has been built.

Our McCook Field Correspondent throws additional light on Lieut. Nelson's mission in connection with the selection of a suitable type of airplane for the around the world cruise, and also gives a brief description of the world cruiser, viz:

"Advance interest in the contemplated world cruise has recently been aroused at McCook Field by the arrival of Lieut. Erik Nelson in the new Douglas World Cruiser, the high-powered biplane built especially for the proposed round-the-world flight, which he flew from the Douglas factory, Santa Monica, Calif., to McCook Field for test. Lieut. Nelson reported a successful flight with the airplane behaving beautifully.

Lieut. Nelson has spent most of his time in the last few months in Santa Monica, supervising the construction of the DW-C (the official title), the plans for which were completed in July, and which was built in two months' time. Because of its ruggedness and weight carrying features, it has seemed the logical airplane to use for such a cruise, and it is expected that the thorough ground and flight testing of the airplane, engine and accessories, to which it is now being subjected, will bear out the judgment of the Air Service in its selection. This selection is by no means final, but entirely incumbent on the airplane's performance under these tests.

It is a doughty appearing customer, its fuselage being of welded steel tubing, braced with streamline tie rods and provided with stiffening gussets. The under-

carriage is convertible, the land type consisting of the divided axle form of chassis, with two 36-inch by 8-inch straight sided wheels and an articulated steerable tail skid. The water type undercarriage consists of twin pontoons to replace the land type, capable of withstanding rough water landings. There are six aluminum gas tanks, with a total capacity of 600 gallons. One, a 60-gallon gravity tank, is situated in the upper center section; the second (150 gallons) in the engine section just aft of the fire wall; the third (160 gallons) in the mid section below the pilot's floor; the fourth (105 gallons) in the tail section underneath the rear pilot's floor, and the fifth and sixth (62½ gallons each) in each of the lower wing stubs. Two terne plate oil tanks are mounted, one on each side of the engine, one with a capacity of 20 gallons, the other holding 30 gallons. The radiator is of the nose type. A 10-gallon copper reserve water tank is installed in the pilot's cockpit, provided with an air pump, so that the pilot may pump water from the tank to the radiator if necessary. There is an electric starter and the plane is equipped with dual control throughout. A hoisting ring will be provided for lifting the plane from the water to a dock or a ship's deck. The plane is motored with a 1921 model standard Liberty engine, equipped with the Army type propeller hub and the latest type of navigation instruments. A radio direction finder will also form part of its fittings. In going over the speed course recently the ship achieved 105.4 miles per hour at 1650 r.p.m., but it is thought this will be bettered.

It is expected to take several weeks to complete the testing at McCook Field, but when this has been accomplished, Lt. Nelson will pilot the cruiser to Langley Field for thorough water testing. If the DW-C proves satisfactory, four more will be built to form the world cruise fleet. And last of all, the icing to the cake, will come the names of the Air Service Pilots chosen to man the ships."

In order to assure every possible facility being available for the use of the flight, special attention is being given to the weather conditions throughout the route, and the personnel selected for the flight will make an intensive study of this matter for aerial navigation on the route. The proposed airway around the world has been sub-divided into six divisions: 1st Division beginning at Washington, D.C., and ending at Attu Island in the Aleutian Group; 2nd Division ending at Nagasaki, Japan; 3rd Division at Calcutta, India; 4th Division at Constantinople, Turkey; 5th Division at London (Hull), England; 6th Division at Washington, D.C.

One advance officer will cover each section of this route, obtaining detailed information on landing and seaplane facilities, transportation, airways, meteorological and climatic conditions, etc., and will make arrangements for the passage of the flight through territory to which he is assigned. Supplies will have to be shipped from the United States to various points on the route several months in advance of the flight, and for this purpose each division will have a main depot with one or more sub-depots where major items of supply will be allocated. Gasoline and oil and smaller articles of supply will be placed at practically all stops. The longest hop which is necessary, according to present plans, will be from Attu Island in the Aleutian Group to Paramishiru Island, in the northern part of the Kurile Islands Group, a possession of Japan. Other long hops will be necessary over the Atlantic Ocean between the Faroe Islands and Iceland; between Iceland and Greenland, and between Greenland and northern Canada; the longest of these three being about 700 miles.

Several previous attempts to encircle the globe by air have been made by the British and French, but without success. The accomplishment of a flight of this nature by the United States will, therefore, bring to the United States the honor and distinction of being the first nation to encircle the globe and would be quite in keeping with the present rapid development of aeronautics in which our country leads all nations of the world, in spite of the small appropriations available for experimentation and research in this new science.

19TH PURSUIT SQUADRON WINS COMPETITION DRILL

A competition drill between the organizations of the 17th Composite Group, Wheeler Field, H.T., was recently held at that station. Three officers of the 21st Infantry Brigade were detailed as judges. The first competition was between Squadrons, and all men on duty were required to participate with their respec-

tive organizations. For the Squadron competition, meals were delayed so that every man could be in the ranks. The second competition was between picked platoons representing each squadron, and the third competition was between representative squads. The 19th Pursuit Squadron won all events by a small margin.

4TH OBSERVATION SQUADRON WINS BLUE RIBBON

A DH4-B Observation plane, the property of the 4th Observation Squadron at Wheeler Field, H.T., won first place at the Hawaiian Department Transportation Show, held at Schofield Barracks on October 4th. First Lieut. Charles P. Prime was the Squadron Commander, and Corporal Daniel Landrigan was crew Chief. An MB3 plane of the 6th Pursuit Squadron of Luke Field won second place, and an MB3 plane of the 19th Pursuit Squadron, Wheeler Field, was given third place.

"HANK LETTERS" TO APPEAR IN NEWS LETTER

Yes, we have a new contributor. He is none other than Sergeant-Major Herman Levy, of the 10th School Group, stationed at Kelly Field, Texas. Sergeant-Major Levy, who had heretofore submitted his well-known "Hank Letters" to the weekly magazine "Trail", a Second Division publication, recently joined the Army Air Service, and being loyal to his new love will hereafter be a regular contributor to the Air Service NEWS LETTER, all of which, we are sure, will meet with the hearty approval of our readers. His first contribution goes as follows:

"Kelly Field, Texas,
November 14th, 1923.

Dear Old Hank:-

With a rattle and a roar, I arrived at Headquarters in my Hebrew gondola, and after putting my foot on everything I had, it come to a stop. If the 'Dumb Friends League' wouldn't pinch me, I would run it into a wood saw, but how the so ever Hank, that car can sure run when the engine is out of it.

Which reminds me that Peggy Pierce borrowed Mayes car again and he liked to of wrecked a DH with it. Still he claims that he is an expert driver. In fact what he knows about driving would fill a book. But Mayes told him what he don't know would fill a hospital, and he didn't mean maybe.

Since the women stopped bucking Mah-Jong they have taken to knitting again during the holidays. I suppose we will all get some more of them gloves without fingers and sweaters without sleeves. Mrs. Teegarden and the better half are framing up something in the knitting line which they call the idiots delight or the lazy daizy stitch, two under and four over. Ask your wife Hank, she knows.

You know Hank, old John Rule hasn't been thirsty for a long time and only a few days ago I thought his skin was cracking when I heard him say: 'You know, they say when a man's ears are red that somebody is talking about you.' 'Yes, and you can just bet that somebody is talking about you if your nose is red too'.

Always dry, eh Hank?

The regular Thursday night dance took place as usual and Putnam was all riled up because the Hostess asked him to dance with a big twist. "Put" afterward remarked that she hadn't had a dance all night and what's more a man ought to be in the pink of condition to haul that Martin Bomber around. Another bob-tailed queen told Hill that she had been on a milk diet for six months and gained $\frac{1}{2}$ pound. Hill states that the first time he danced with her he apologized five times for getting his feet under hers. Mebbe so, mebbe so, eh Hank.

Three of our birds by the name of Powers, Hay and Maxwell found themselves at a revival meeting last Sunday. When the plate was being passed around and some quick thinking was necessary, so just before the plate reached them Powers fainted and Hay and Maxwell carried him out. They ain't got no business in the Army, eh Hank?

Lavilier, our motor-cycle cop made the amazing discovery that a water glass dropped on a cement floor would not bounce. That's the same bird who thinks that Granger Twist is the father of Oliver Twist. I suppose the first thing we know he will be telling us that the reason they write so much about the chestnut tree is because it is so nutty. Yes Hank, Job was indeed a patient man, but he never spilled gravy on his white shirt at your girl's dinner party.

Well Hank, prepare for a shock as the warden says to the condemned convict. Lieutenant Dutton and Lieut. Raley have forsaken single blessedness. I might say that with a good sink and enough dishes they shouldn't have any trouble feeling at home. Lieutenant Finn told me that in addition to their other duties they were to take a refresher course as swimming instructors for cracked dishes. Yes, Hank, married life is great as far as I have argued. You can't get along with them and you can't get along without them.

Why is it Hank that ball-headed men are so bashful. We was introducing Pickles Abbott to a chorus girl and he wouldn't look her in the face. That's the turtle's lip stick, ain't it Hank?

Well Hank I got a date to have the two lunger fixed by a bird who will repair your car and you'll never take it anywhere else. As there is nothing the matter with it I am going to find out how much he really knows.

As ever,

SHYLOCK.

P.S. No, Hank, Rex Beach is not a summer resort or a rattle snake or its not a baby's play toy."

ASSISTANT SECRETARY OF WAR VISITS DAYTON FIELDS

McCook Field, Dayton, Ohio, and Wilbur Wright Field, Fairfield, Ohio, were recently visited by a group of distinguished visitors headed by Mr. Dwight F. Davis, Assistant Secretary of War; General John F. Hines, Deputy Chief of Staff, and General Mason M. Patrick, Chief of Air Service. Colonel H. B. Ferguson, Assistant to Mr. Davis; Major James A. Mars, Chief of the Industrial War Plans Division, Office Chief of Air Service, and Lieut. Ames S. Albro, assistant to Major Mars, were also of the party. Mr. Davis and his party came from Detroit to Dayton in his private car.

After an inspection of McCook Field, some exhibition flying was given for their entertainment. The Industrial War Plans Committee of Dayton entertained the party with a luncheon at the Miami Hotel. The new site for McCook Field was also inspected, and the visitors expressed themselves as approving most heartily the plans for the new home for the Engineering Division.

The party visited the Repair Shops at Wilbur Wright Field and manifested great interest in the work in progress in the Aero Repair and Engine Repair Departments. Then they were driven down to see the Earling Bomber. The Assistant Secretary of War, who had never seen the huge craft before, expressed his admiration and pleasure at the size and impressiveness of the huge airplane. During a portion of the day the Secretary was in conference with Mr. Gilbert Eichelberger, Chairman of the Dayton Branch of the Industrial War Plans Committee, and Frederick B. Patterson, President of the National Aeronautical Association and President of the National Cash Register Co.

Secretary Davis is very much interested in aeronautics and speaks on this subject from a fund of knowledge. He is of the opinion that the aeronautical industry must be rebuilt; that flying fields should be increased in number, and that national encouragement should be granted to the entire industry on a broader scale. Advocating the adoption by the United States of a comprehensive policy along aeronautical lines, Secretary Davis outlined how, in his opinion, civilian organizations can be of great assistance.

He recommends the following:

"First," said the Secretary, "there should be appointed local committees for increasing commercial use of airplanes and giving thereto authentic publicity.

"Second, there should be a special aerial section of all transportation committees for Chambers of Commerce and similar organizations, to study and publish data regarding aerial navigation.

"Third, vigilance committees of all Chambers of Commerce to prevent organization of 'wildcat' aerial navigation companies.

"Fourth, commercial use of aircraft, by newspapers, department stores, express companies, real estate developments, photographers, surveyors and the like.

"Fifth, coordination of all private organizations by a national association to insure intelligent presentation of commercial service needs to Congress.

"Sixth, dissipation of the popular misconception regarding the safety and reliability of the airplane in commerce."

Secretary Davis further outlined what the government can do. He said:

"First, it should amend existing laws requiring competitive bids, for government aircraft so that experimental orders may be placed.

"Second, the standardization, as far as possible, of military, naval and mail types of aircraft.

"Third, turn the design of aircraft, as far as possible, to private industries, limiting its specifications for machines to capacity for performances, thus assisting in the building up of technicians capable of designing all types of aircraft.

"Fourth, promulgate all necessary rules governing the relation of aircraft to customs, immigration and public health services.

"Fifth, establish aerial traffic rules.

"Sixth, take up with other nations the matter of an international air code.

"Seventh, establish uniform rules for licensing of air pilots.

"Eighth, provide an inspection and license system for all aircraft.

"Ninth, prescribe air routes and provide all necessary aids to aerial navigation.

"Tenth, encourage the creation of air ports, owned and operated by private capital or municipalities.

"Eleventh, prescribe conditions to be met before official recognition would be extended to air ports.

"Twelfth, lend the assistance of its technical service to the standardization of commercial types.

"Thirteenth, collect and publish all vital statistics pertaining to aerial navigation.

"Fourteenth, adopt a ten-year building program for the aircraft required in the army and navy, thus enabling these services to replace their war-time equipment and insuring, during the present critical state of the aircraft industry some promise of continuing orders during the next few years.

"Fifteenth, train flying cadets in the army and navy, not only for the purpose of creating a corps of reserve officers for aviation duty, but also to insure civil aviation having at its command an ample supply of well selected and well trained licensed aviators.

"Sixteenth, put its technical laboratories at the disposal of industries for the purpose of producing an all-metal airplane of American material."

BARLING BOMBER IS A RECORD BREAKER ✓

Not content with being merely the biggest airplane in the world, the Barling Bomber decided to further justify her existence by going after world records.

On October 25th, in the conducting of regular performance tests, the Barling, piloted by Lieuts. Harold R. Harris and Muir Fairchild, with Douglas Culver as engineer, took off carrying 200 kilograms of bombs and reached an altitude of 6,800 feet. Over the speed course a speed of 95.5 miles per hour was attained. Official representatives of the Federation Aeronautique Internationale were present.

On October 27th the bomber again took off, this time carrying 3,000 kilograms of bombs, and reached an altitude of 5,000 feet, establishing the altitude and endurance weight carrying record for this loading. F.A.I. officials observed this performance also. A mechanic and radio engineer were carried as dead weight. The fuel carried comprised 365 gallons of gasoline and 72 gallons of oil.

The Barling has recently been equipped with radio, which on its flight to St. Louis made communication with the cities along the route possible. This increased the weight by 82 pounds. The total load of the bomber as it took off was 37,435 pounds.

Having obtained the altitude and endurance records for 2,000 and 3,000 kilograms, it is planned to make another flight in the near future carrying 4,000 kilograms of bombs and establish this record also.

NOTES FOR AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, October 20.

THIRD ATTACK GROUP

TWENTY-SIXTH ATTACK SQUADRON: Captain J. H. Davidson, assumed command of this squadron relieving 1st Lt. Latha A. Smith, assigned to command the 8th Squadron.

Lt. Robinson was assigned to Group Headquarters Detachment.

Lt. R. H. Clark took advantage of a six weeks' leave of absence to visit relatives at Huntington Park, Calif. and San Diego, Calif.

During the past week pilots of this squadron participated in formation flights and flights for training purposes.

EIGHTH ATTACK SQUADRON: Tech. Sgt. McDaniel, of this squadron received his appointment as 2nd Lt., Regular Army Air Service, on October 17th, and was sworn in on that date. The members of this organization extend congratulations to the Lieutenant and wish him the best of good fortune in the future.

NINETIETH ATTACK SQUADRON: Flying activities of this squadron for the past week consisted of plane and motor tests and formation flights.

This squadron has only one pilot present for duty at this time. Lts. Andrews and Zettle are expected to return from leave in the near future.

On October 13th, the Group Commander inspected barracks and mess halls.

THIRTEENTH ATTACK SQUADRON: Although the squadron is handicapped by a shortage of officers, several flights were made for test purposes and one formation of three planes was flown during the past week for practice in Group Formation and practice of combat signals.

Much work has been done around the hangars and our ships and hangars will now compare favorably with the other squadrons on the field.

SIXTIETH SERVICE SQUADRON: Major Brereton, Commanding Officer of the Third Attack Group, with Pvt. Webb of this squadron as mechanic returned to the field from Washington, D.C., on Thursday, October 11th.

Lt. W. T. Larson returned to the field and assumed command of the organization on October 11th.

Lt. A. S. Heffley left the field on October 13th on cross-country to Post Field, Oklahoma, where he has been assigned for temporary duty.

TENTH SCHOOL GROUP

40TH SCHOOL SQUADRON: Flying was curtailed to a large extent in this organization during the past week due to the muddy field and continuous rains.

Motors were changed on one Martin Bomber and various control wires replaced by new ones. One tail post was found to be broken and a new one was installed.

The multitude of pilots and student pilots who are flying the Martins had a chance to exhibit their skill and ability in landing and taking off the field, due to a strong North wind which was blowing all morning, making the air exceedingly bumpy. One instance which occurred during the morning's flying gives a fair example of the strength of the wind. A certain officer was taxiing a ship to the line when a puff of wind lifted the ship about ten feet in the air. The motors at that time were only turning up about 700 r.p.m. As Old Dame Luck would have it though, the ship was landed without damage.

41ST SCHOOL SQUADRON: Lieut. Earl H. DeFord flew to Muskogee, Okla., October 13th, carrying some spare parts to Lt. Wagner whose ship was down at that point. The return to this station was made on October 16th.

43D SCHOOL SQUADRON: Flying for the week consisted of: Test and training flights in MB-3A's, DH-4B's and Sperry Messengers and a trip to Camp Stanley and Bullis in a Sperry Messenger. The Squadron received a new assignment of student officers and cadets for instruction. They are now being given transition in SE-5A's and dual instruction in DH-4B's. A few SE-5A's have been sent to

the S.A.A.I.D., the rest awaiting shipment for change of landing gears, the old landing gears having been condemned.

Lieuts. Strickland and Maughan have been assigned to this organization, the former assuming the duties of Squadron Engineering and Operations Officer.

Our two DH-4B's with Capt. McDaniel and Lieut. Strickland as pilots, Lieut. Aldworth as passenger and Staff Sgt. Williams as mechanic returned from the races at St. Louis, Lieut. Strickland and Sgt. Williams returning by way of Birmingham and Montgomery, Ala. An enjoyable trip was claimed by all.

68TH SERVICE SQUADRON: The Motor Overhaul shops of this organization are now completely overhauling and repairing eight Liberty and two Wright motors. One Liberty and one Wright Motor are now being tested. Four overhauled Liberty motors received from the S.A.A.I.D. for assignment to organizations within the 10th School Group were placed in storage and will be assigned when needed. Two Liberty motors recently overhauled were assigned to organizations in need of them in the 10th School Group.

The Aero Repair Shops of this organization are now repairing three DH4B planes and making minor repairs on Colonel Howard's DH.

22ND PHOTO SECTION: During the past week the men of this Section have policed the grounds and hut thoroughly. Mosaics were made of Tallulah, La., and prints of X-Rays made for Captain Wagner, Medical Corps.

During the past week Lieut. Cronau, Sgt. Brown and Pvt. Womack have been drawing plans and securing estimates on the new Photographic Hut to be constructed in the near future.

Captain Giffin and Staff Sgt. Ward made a flight Wednesday to take pictures of Floresville. Results were very good.

Kelly Field, San Antonio, Texas, October 27.

TENTH SCHOOL GROUP

Recently appointed officers who reported for duty this week at Kelly Field, 2nd Lieuts. Ben Cordell and Oscar A. Proehl, Air Service, were assigned to the 10th School Group for duty.

During the period from October 16th to 23rd the following officers from Kelly Field cooperated with the 2nd Division on annual maneuvers at Camp Bullis: Captain Giffin, Lieuts. Maughan, Chapman, Hopkins, Carr and Robinson, using three DH4B's equipped with radio and photographic apparatus. In this period the Division had four separate problems - one where one Brigade attacked the other; one where one Brigade attacked, the other defending and retreating; one with the Division attacking, and the other with the Division on the defensive. The Air Service assisted in all four maneuvers and from the reports did very creditable work. The Air Service used Kelly Field as a base, operating twenty-five miles distant.

During the period from October 23rd to 25th, inclusive, the same personnel cooperated with the 8th Corps Area in its annual maneuvers. On the 23rd four DH's were taken to Camp Bullis, also a radio truck, a G.M.C. and a Dodge Car with tents and equipment for the officers and men. On the 24th the Division moved from Camp Bullis to Camp Stanley. On the same day the Air Service was turned loose to carry out missions and at 4:00 P.M. almost to the second, two planes left the ground and were busy until dark. At 7:00 A.M., October 25th, two planes took off, and from that time on until 1:35 p.m., when the "war" was over, there was hardly a minute when the enemy was not under the observation of at least one plane. One forced landing was made, due to one plane being out of gas. Fortunately, the field landed in was friendly territory.

FORTIETH SCHOOL SQUADRON: Lieut. Willis, accompanied by Lieut. Stone, Q.M.C., made a cross country to Dallas on Saturday, returning on Sunday.

Two engines were changed on one Martin and preparations are being made for the installation of two new engines on another plane.

An inspection of crew chief's property made by the Engineering Officer proved to be very satisfactory, everything being in tip top shape.

A number of new members of the command were assigned to the planes and the hangar personnel was entirely reorganized.

FORTY-FIRST SCHOOL SQUADRON: Every available man on the line was fully occupied the last few days in remedying minor defects in the planes, which the rigid inspection of the Engineering and Operations Officer disclosed. Practically all ships of the squadron are in perfect trim, with the exception of a plane awaiting transfer to the S.A.A.I.D. for general overhaul, and a plane damaged while landing, which is now undergoing repairs.

FORTY-SECOND SCHOOL SQUADRON: The total flying time for the past week was 76 hours, consisting mostly of training flights by student pilots and assisting the Artillery and Infantry in their maneuvers at Camp Bullis. The Squadron has at present two DH-4B's at Camp Bullis for these maneuvers. These planes are piloted by Lieuts. Chapman and Maughan, with Captain Giffin and Lieut. Hopkins as observers. The Squadron at present has 24 planes assigned, 23 of which are in commission and one awaiting a general overhaul at the San Antonio Air Intermediate Depot.

FORTY-THIRD SCHOOL SQUADRON: The new class of students, consisting of 15 officers and 7 cadets, are doing quite a bit of flying. During the last week they flew MB-3A's, SE-5A's, DH-4B's, and Spads, doing acrobatics, transition and flying formations, and some combat work. During the week over 160 hours' flying time was credited to the squadron. A cross-country flight was made to Galveston, Texas, over the week end and while there a recruiting exhibition flight was made. Several new SE-5A's were received this week. The other SE-5A's assigned to the squadron are being sent to the S.A.A.I.D. as fast as that Depot can change the landing gears and return the planes.

SIXTY-EIGHTH SERVICE SQUADRON: The Motor Overhaul Shops are now overhauling eight Liberty and two Wright engines. Two additional Liberty engines were received for overhaul during the week. Six Liberty engines were assigned to different organizations during the week, while three Liberties and one Wright engines were tested and are ready for assignment.

Major FitzGerald's DH4B was received for repairs. Work on Lieut. Walker's DH4B is progressing nicely.

The wrecking truck and crew returned from a nine-day trip to Temple and Fort Worth, Texas. Repairs were made to a DH4E at each place, both being forced down while on a cross-country trip, and they were flown back to Kelly.

Second Lieut. Ben E. Cordell was assigned to the organization and appointed Squadron Adjutant.

CADET DETACHMENT: Training this week consisted of bombardment and pursuit work. Preliminary work in observation was completed by all cadets.

Cadets taking bombardment training this week soloed the Martin Bombers upon completion of their dual instructions. Work in practical bombardment was also given, consisting of the dropping of 50 lb. demolition bombs from an altitude of 3,000 feet, on a small target. In order that the students may have some knowledge of the requirements of dropping a bomb, the camera obscura method of instruction was used. The ground school work consisted of practical instructions in the care of the Martin Bomber, and a thorough study of the ignition, cooling, oil, and gas system of this plane.

Pursuit training consisted of formation flying and combat work. Most of the students taking this training have now flown the MB-3A's, Spads and SE-5A's.

THIRD ATTACK GROUP.

TWENTY-SIXTH ATTACK SQUADRON: On October 20th, Lieut. James E. Duke, Jr., returned from a cross-country flight to New York with Sergeant Teichman of this squadron as passenger. They left Kelly Field on September 28th, for St. Louis, Mo., and while at that place Lieut. Duke received telegraphic authority to continue on to Mitchel Field, New York.

On October 24th, Captain Davidson, with Private Hammack as passenger, made a cross-country flight to Fort Clark, Texas, to inspect the airdrome there.

During the last week operations consisted of formation flying in Group formation and practice in combat signals, also simulated attacks of objects on the ground.

EIGHTH ATTACK SQUADRON: On October 20th, the members of this squadron gave a luncheon in honor of Lieut. Carl B. McDaniel, who recently received an appointment in the Regular Army Air Service. Major L. H. Brereton, Group Commander, acting as toastmaster presented Lieut. McDaniel with a sabre and Sam Browne belt, with the compliments and congratulations of the Squadron:

Lieut. Harbeck returned from a cross-country flight to St. Louis, Mo., Total time on the trip was 23 hours in 12 flights.

Lieut. Carr was engaged in liaison with the Second Division at Camp Bullis during the past week.

NINETIETH ATTACK SQUADRON: On account of the flying personnel of this organization being on detached service, there has been very little flying.

Lieut. Beverly, with Captain Tully as passenger, made a cross-country flight to Fort Clark, returning to Kelly Field October 19th.

Lieuts. Andrews and Zettel are expected to return from leave of absence in the near future.

Lieut. E. C. Cushing was assigned to, and reported to the squadron for duty on October 24th.

THIRTEENTH ATTACK SQUADRON: Several formations were flown by this squadron during the last week, in connection with the group maneuvers and were for the purpose of practice in group formations and in combat signals.

Lieut. Wheeler, on temporary duty at Post Field, visited Kelly on October 20th, with Master Sergeant Wiseman as passenger. He returned to Post Field the next day.

SIXTIETH SERVICE SQUADRON: Lieut. Beverly, who has been on detached service at Langley Field, returned to Kelly Field on October 15th. and was appointed Operations, Engineering, and Supply Officer.

Captain Hastey, Assistant to the Air Officer of the 8th Corps Area, with Private Cummins as mechanic, made a cross-country flight to Sanderson, Texas, and returned the same day.

Brooks Field, San Antonio, Texas, October 29, 1923.

Excellent weather has favored this section of the country, and during the past week the flying training progressed much more rapidly than expected. Every day sees an increased number of solo students and the best of the class are now reporting for their final test.

Lieut. Carl B. McDaniel, who just received his commission at Kelly Field, reported for duty and was assigned to instruction work.

Captain Donald M. McRae reported for a course of instruction.

On Thursday the post football team traveled to Austin, where the Short Horns, composed of the second squad of ineligibles of the Texas U. Squad, were defeated 20 to 0. The team showed a very decided improvement in every phase of the game. The journey was made in the cars of the various officers, and quite a number of rooters enjoyed the trip.

Two minor crashes occurred during the week. Cadet McCully, returning from cross-country to Seguin, ran out of oil and washed out his ship in the mesquite just before reaching the field. Lieut. Prentiss, while instructing Lieut. Hale at Stinson Field in 180's, was just making his first turn, when the rudder stuck. The ship slipped to the ground and was completely wrecked, but both occupants got out with only a bad shaking up. Examination of the wreck showed that the Pyrene had jarred loose and wedged between the floor board and the rudder bar.

The monthly dance was held Friday at the Officers' Club, and a large number of guests enjoyed a very pleasant evening.

Cross-countries during the past week were as follows: Lieut. Patrick and Sergeant Solso to Pittsburgh, Kansas, and return; Captain Sturcken to Denison, Texas, and return; Captain Bock to Corpus Christi, Texas, and return. Captain Bock also attempted the El Paso flight during week end, but was forced to turn back on account of bad weather near Del Rio. Lieut. Breene and Major McGrath tried to go to Muskogee, Okla., the same day, but were forced back after reaching Georgetown. Sergeant Kelly and Sergeant Templeman flew to Del Rio, and return.

Plans are now under way for an Army Relief Aerial Carnival, to be given at Kelly Field on November 18th. This is to be a combined effort of the A.I.D.,

Brooks and Kelly Field, and should be a stupendous affair. Every effort is being made to promote it in all ways possible, and it is hoped that quite a sum will be secured for the Relief Society.

Major Frank, Executive in the office of the Chief of Air Service, was a visitor in San Antonio for the past five days. Major and Mrs. Royce entertained at dinner in his honor, Friday evening before the dance. Major and Mrs. Hickam, Captain Bock and Mr. Ruggles were the other guests. The guests stayed and enjoyed the dancing afterwards.

Major Frank reviewed the troops and inspected the field Monday, October 29th, and was the guest of the officers at the Club for lunch. He made a short talk to the assembled officers afterwards. Colonel Culver also visited the field that day, and was with Major Frank during the inspection.

The Ladies Bridge Club held their weekly meeting Thursday at the Officers' Club, Mrs. C. C. Chauncey and Mrs. Hez McClellan being the hostesses.

Brooks Field, San Antonio, Texas, November 5.

The past week saw the first let-up in flying activities since the class began, due to the cold drizzly norther that prevailed thruout the week. The students were kept busy with their ground school work morning and afternoon, which gave the hangars and shops a chance to put the motors and ships in shape, and also gave the instructors a chance to go out and shoot ducks and deer. As is usually the case after such a week, Friday morning proved to be an exceptionally fine, clear and warm day, so that the instructors who had planned cross-country trips, could make them. Major Bock and mechanic made the trip to El Paso and return in a DH; Lieut. Wimsatt and mechanic flew to Laredo and return in a Vought, and Lieut. Breene and mechanic made the same trip in a DH.

The Ladies' Bridge Club met at the Officers' Club, Thursday afternoon, Mrs. Downing and Mrs. Morse being the hostesses.

During the week Lieuts. Troupe and Clary reported for flying training.

The football game scheduled to be played at Kerrville Sunday, against the Kerrville All Stars was called off due to the heavy rains which made the roads between here and Kerrville almost impassable.

Friday evening the permanent officers were entertained by the officers of the A.I.D. at a very delightful party at the Officers' Club. The decoration of the Club showed a great deal of originality and work, and no effort was spared to make the evening a very pleasant one. The officers of this station enjoyed and appreciated the affair very much, and are now planning for a return affair.

Saturday afternoon the Club was the scene of a Tea Dance, before which the returns of the Yale-Army game were received and plotted, an especial wire being arranged with the Western Union. Despite the terrible score, and the resultant depression, the Tea was an immense success.

The Officers' Orchestra made their first appearance and proved to be better than any civilian orchestra we have been able to procure as yet from the city. Lieut. Wolfe at the piano, Lieut. Slater on the saxophone, Lieut. McCormick on the cornet, Lieut. Thompson on the banjo and Lieut. Greenlaw on the traps, proved to be a wonderful combination. The orchestra was augmented by the presence of Lieut. Hookum of Camp Travis, who played the saxophone.

The curriculum for the Primary School has at last been put into production. Every Air Service station is on the mailing list, and copies will be sent to each station. If there is any one in the Air Service who desires a copy for his own personal use, same may be procured by writing to the Primary School.

Rockwell Air Intermediate Depot, Coronado, Calif., October 26.

Major H. H. Arnold with Captain L. M. Field, M.C., Flight Surgeon, who accompanied Lieuts. Smith and Richter from Sumas to Eugene, Oregon, arrived at Rockwell Field this afternoon. Captain Ervin and Lieut. McNeel also came in from the north. Lieuts Hine and Seifert are expected back tomorrow, being forced to make a landing at Berkeley on account of engine trouble.

Major Arnold's parents, Dr. and Mrs. H.A. Arnold, of Ardmore, Penna., were the first to greet their son upon his arrival from the North, having come up from the East during his absence.

Lieut. Warren A. Maxwell arrived from Crissy Field on October 25th in a

DH4-B1 plane, which is to be overhauled at this Depot. He will leave in a few days for his home station in an overhauled DH4B1 - #63768.

On a flight across the continent and return, Martin Bomber #68510, piloted by Lieuts. J. F. Whiteley and H. D. Smith, with Sgt. K. T. Weidekamp as mechanic, arrived at Rockwell Field on November 5th from Clover Field, Santa Monica, Calif. New engines are being installed in the bomber here, and the big plane will receive minor overhaul given all visiting planes upon arrival at the Depot.

On an air mapping expedition which took them as far as Phoenix, Captains Robert G. Ervin and Wm. M. Randolph left Rockwell Field on the morning of November 5th. The two military aviators collected data relating to emergency landing fields between Rockwell Field and the Arizona airport, which later will be submitted to the Chief of Air Service for incorporation in the new aerological maps now being prepared by the government for the benefit of military, navy and civilian fliers.

Wilber Fagley Field, Kokomo, Indiana, October 28.

Model Airway fliers who arrived at Fagley Field during the past week were Lieut. Shoemaker of Langley Field, enroute to Chanute in a DH; Lieut. Givens of Chanute, en route home from Selfridge in a DH; and Sgt. Porter of Chanute, ferrying a Sperry Messenger from Selfridge to Chanute. All arrived without incident and received excellent service here.

The Photographic Section of the local unit (113th Obs. Sqdn.) headed by Lt. Albrecht and with Ed L. Tobias, Kokomo photographer of long experience as master sergeant and instructor, has been very active during the period since the two weeks' camp at Wilbur Wright Field in August. On October 28th, Sgt. Tobias, with Lt. John Ziegler, assistant operations officer of the local field, as pilot, made a 200-mile trip for photographs for use by the photographic and other sections of the unit. About a dozen towns and cities northeast of Kokomo were photographed, and some fine views were taken. The pictures were shot from over the side of a JNS ship and Tobias got some good results. His pictures are remarkable for their clarity.

Master Sergeant Joe Bell, who took his 609 examination during the encampment period, was recently commissioned a 2nd Lieutenant.

The Communication Section, in charge of Captain R. R. Dieden, is installing two 50-foot steel masts on the Armory building, and will put in place an aerial about 150 feet long. Broadcasting programs will be sent out, and code practice will be given the section's members from a station which will be set up at the Armory. The other sections are getting some real workouts on equipment which has been brought to the Armory.

Wilber Fagley Field, Kokomo, Ind., Nov. 4.

Steady rains and foggy weather kept down the visiting list at Fagley Field this week, no out of town pilots "dropping in." This is the first week in many months that has not seen from three to twenty government fliers land here for the well known hospitality and service of the local field.

Extensive preparations for the safety and comfort of the fliers visiting Fagley Field are being made, using a 12-ton steam roller for the purpose, and it is expected that the field will be as smooth as a floor when this work and other operations planned, are completed.

The 113th Observation Squadron is extremely active in its class work, and the pilots are doing a lot of actual flying problems. The nine pilots of the unit have done 52,000 cross-country miles during 62 hours of flying for the month of October.

Captain W. F. Donnelly, Federal Instructor of the unit, will "ferry" a new DH4B ship for his own personal use from Wilbur Wright Field next week. His old DH has seen many miles of travel without mishap.

Sgt. L. M. Johnson, D.E.M.L., assigned to the local unit as Sergeant Instructor, has returned from Chanute field, Rantoul, Ill., where he completed a four weeks' course in parachute construction and repair and did an 1800 ft. drop. When questioned as to whether he took stimulants before or after jumping, he said "Afterward", and then had little more to say about his experience. He began instruction in parachute work at the drill period on Nov. 5th, explaining the seat pack style of Chute to a class of officers, and will explain the other

types of parachutes as soon as they are received by the local unit.

Indiana, Ohio, Illinois, Kentucky and Michigan flying units had better look out, or the 113th Squadron's speedy basketball team may get them if they don't keep a sharp watch. Several fast independent basketball stars have been signed up, and the unit hereby issues a challenge to all army posts and National Guard unit basketball fives for games. A wrestling and boxing instructor has also been enlisted in the person of a former lightweight wrestling championship claimant and former local boxing star, and he will try to develop some good boxers and wrestlers to meet service men from other units. Baseball and football teams will be organized by the unit next season.

France Field, Panama Canal Zone, October 5.

The recent order from Washington with reference to washing out SE5's was a sad blow to the pilots of France Field. With the six assigned to the 24th Pursuit Squadron some excellent training was being had in all forms of pursuit work. Practically all the pilots on the field were receiving some training in these ships. Pursuit work will now be limited to MB3's with the few experienced pursuit pilots available.

For the last few days it has been a familiar sight to see officers galloping around with household goods, trying to find their new quarters. The arrival of so many married officers and the lack of quarters for all has caused a general shake-up and reassignment of quarters. All married N.C.O.'s and some of the married officers have taken quarters in Colon.

Concrete machine gun butts are being built under the supervision of the Ordnance Officer. With their completion synchronized forward gun practice will be taken up.

France Field, Panama Canal Zone, October 19.

The past week was devoted to Coast Artillery reglage. The Atlantic and Pacific Coast Defenses have begun the season's target practice which will continue until some time in December.

Last week's transport, the "St. Mihiel", had on board the following Air Service officers bound for France Field: Major Henry Abbey, Jr., Captain Thomas S. Voss, 1st Lieuts. Clarence E. Shankle, William L. Boyd, Irwin S. Amberg, Francis P. Booker and 2nd Lieut. Edward A. Hillery. The arrival of these officers brings the commissioned strength of France Field to fifty-one. Six more officers are due before the first of the year.

San Antonio Air Intermediate Depot, Texas, November 5.

During the latter half of October, the Engineering Department of this Depot repaired and remodeled 2 DH-4B's, 1 DH-4B-1, 3 TMMB-3A's, 10 JN-6-HA-2's, 1 JN-6-HI, 13 Liberty Engines, and 14 Wright A-2 Engines.

Wednesday evening after work hours, Lieuts. Charles E. Branshaw and Ivan G. Moorman flew to Laredo, where they were joined by Mrs. Branshaw and her sister, Miss D. Schwing, who had preceded them by rail earlier in the day. A pleasant and interesting evening was spent by the party sightseeing in and around Laredo after an excellent quail dinner. The gentlemen returned by air to the Depot the next morning in time for their duties and the ladies by rail later in the day.

Mrs. Lawrence Lee, of Montgomery, Ala., who has been visiting her daughter, Mrs. Buckner, wife of Capt. C.T.C. Buckner, has returned to her home.

Major Frank D. Lackland and mother, Madam Dorwin Lackland, entertained at dinner Major and Mrs. Horace Hickam, of Kelly Field, and Major Walter H. Frank, Executive, Office of the Chief of Air Service, Washington. Later, Captain and Mrs. C. T. C. Buckner and Lieut. and Mrs. Lewis A. Dayton joined the dinner guests for bridge.

The wives and daughters of the employees gave a Hallowe'en party Saturday night in the Service Club. Committees were appointed who went to the country and brought in sugar cane, cornstalks and pumpkins, which were used for decorations. The Kelly Field Orchestra played for the dancers, many of whom were in costume. Lieut. Myron R. Wood furnished transportation from Collins Carden for those living in the city. Lieut. Kenneth McGregor, Supply Officer, furnished all conveniences needed to make an enjoyable evening.

Charlotte Mayberry, little daughter of Warrant Officer Mayberry, entertained with a Hallowe'en Party Wednesday night for fourteen children of the Field.

On Friday evening, November 2d, just after twilight had cast the purple shades over the plains of Texas, the beauty of the evening was marred hideously by ribald outbursts of cowboy song, laughter and jest. It was the hard boiled bunch of cloud punchers from Brooks Field Ranch on their way to the fancy dress ranch party given by the Depot. All the "gals" were present, too, and it was not long before "Little Nell" was strumming out chords on the barroom 'piany' and the boys and gals were swinging partners right heartily. A good old fashioned free lunch graced one corner of the bar and from the looks of the damaged and empty plates and the thin emaciated flies which hopelessly circulated the room vainly seeking nourishment, the eats were enjoyed by all.

The customary faro, roulette and poker games were played, and the sheriff preserved order at times only by being quick on the draw (4 bullets) or by stopping the wheel on red with the point of his rusty trifle (trusty rifle).

The ranch house was finally deserted of guests along about --- o'clock, and it was figured that all damage was reparable to furnishings and fixins, but that the personnel would probably not ever be the same. The following form of invitation was sent out:

"INVITASHUN.

"bo Birdie" Lackland and a feu Cloud punchr's which grazez a round hiz corrals Wishez to envite all the permanunt hands and skirts ov the brooks Ranch to a kind ov a partee. same which iz to b gave at the backlers bunk house at the a.i.d. (all In det) On the nite ov friday nov. two at the ewer ov ate.

Amuzmunts.

Stript poker (uzing a stript dek) dansing (not stript) brige, rowlet. dice and other past times will b indullg in, And the same rools about no guns aloud and nives checkt at the dore will b strickly in forct. old clothes must b wore out on that nite.

syned by the commitea"

Air Service, Tenn. Natl. Guard, Nashville, Nov. 1.

Quite recently there has been a decided change in the officer personnel of the Squadron. Lieuts. B. T. Riley and J. A. Seward were transferred to the National Guard Reserve and Lieut. C. G. Percy was discharged to accept an appointment in the Air Service of Regular Army. New additions to the unit are Lieuts. J. F. Outlaw and V. J. Safro, who have been Federally recognized, and Lieuts. S. Chester and Horkins, whose Federal recognition is withheld pending their 609 exams. In addition, a new transportation officer, Jesse Zellner succeeds 2nd Lieut. N. S. McEwen, who was compelled to resign because of business reasons.

Three planes from Blackwood Field made the trip to St. Louis for the races, stopping at Princeton, Ky and Carbondale, Ill. Personnel making the flight included Lieuts. Williams, Percy, Outlaw, Safro and Sergeants Blanton and Hartsfield. In addition, Major and Mrs. J. C. Bennett, Jr., attended the races, going to St. Louis via rail.

Sergeant William N. Clary, A.S. (D.E.M.L.) is now at the Air Service Technical School, Chanute Field, Rantoul, Ill., taking a course in parachute rigging. He is shortly expected to return to his station.

The Air Service Instructor returned from temporary duty at the St. Louis Field. On October 19th, with Captain Richard Gleaves, Squadron Operations Officer, a cross-country flight to Dallas, Texas, was made via Tallulah, La., and Maxwell Field, Montgomery, Alabama. An excellent trip was reported.

On Armistice Day the Squadron will have a formation over the parade and the planes will drop flowers on the monument to be unveiled at Centennial Park. The enlisted personnel of the Squadron and Photo Section will march in the parade in command of Lieut. Bailey Rascoe.

The experimental R.O.T.C. class for Air Service at Hume-Fogg High School has an enrollment of 22 students, Sergeant Ed Boice, A.S. (DEM.L) is in charge of the class, and its progress is very gratifying to this office and to the school authorities. It is a good selling point where new enlistments are concerned.

Camp Nichols, Rizal, P.I., Sept. 22.

The following letter received from the 66th Service Squadron which recently left in a truck train for a week-end trip to Pagsanjan:

"We're here because we're here because we're here, etc., etc. Yes, we are very much here after a trip that lasted approximately thirteen hours. The delay was due to magneto trouble 'n' carburetor trouble 'n' everything that goes to make up the pleasures of motoring. But that's over now, and with breakfast under our belts the outlook on life is not so dreary just now. The camp site (which by the way was reached in the "ee Sma' hours of the morning) is still rather damp from the rain of last night, but as yet no one has been washed away, or at least no one had been washed away at Muster this morning. At this writing the camp, which is situated about two hundred feet from the banks of Pagsanjan River, is practically deserted. Some of the men are bathing, some have gone hiking into town, supposedly for the purpose of taking pictures, others are climbing cocconut palms in a manner that immediately convinces one that chances are "Darwin was right", while still others are engaging in that ever popular method of recreation, "pounding the air". About half the command have gone up the river to shoot the rapids, and those of the command who have already come back from the falls say its a treat no one should miss. In addition, we have several Pinochle Decks, baseball equipment, horseshoes, and with all these varied forms of recreation and the dance scheduled for tonight at Santa Rosa, we can't see how there can be a dull minute for anyone during our stay. We neglected to mention it, but we are carrying our own four-piece orchestra with us to "Drive those Blues away" and believe us we certainly would like to shake hands with any Blues that could stay around when these boys begin playing, - - - it's more than we can do."

Lieut. C. C. Nutt, ably assisted by most of the bachelors and a few others, held a wake over the late lamented freighter which went ka-fooey with him the previous Monday. There was some first class weeping and wailing in progress, and all in all we think the old ship had a good send off.

Owing to inclement weather this past week, the Photo Section has been confined to work such as matching mosaics and printing a mosaic of Camp Nichols.

Captain Samuel E. Brown, M.C., reported from Kelly Field, Texas, for duty as Flight Surgeon, relieving Captain Eugen G. Reinartz, M.C., who reported at Clark Field, Camp Stotsenburg, for duty as Flight Surgeon.

Contributed by the 42nd Air Intelligence Section:

"The Assignment, Detection and Mutilation Divisions (nomenclature for individuals) contemplate a hunting trip as soon as the ban on snipe, Luzon mallards and wild chickens is lifted. The Nimrods are undecided as to appropriate weapons, but a pinch of salt will be carried. You see, local hunters report wild chickens rather easy to approach here in the Philippines.

Note: The wild chickens referred to above wear feathers."

"Members of the 42nd are enduring a rather comprehensive course of training; this in preparation for the approaching election riots. Preparedness in this case consists of oiling pistols, polishing brass knuckles and drilling with the black jack. The finishing touch will be added when all qualify in the 100 yard dash."

Clark Field, Pampanga, P.I., October 1.

The MB-3's have arrived, and the work of setting them up and testing has begun. Every one not taken off flying has solved some successfully, with the exception of Captain Gilkeson who landed thru a bonnet and Lieut. Hackett, who after landing, ground-looped sharply, collapsing a wheel and then nosing over.

The Poet Laureate of this Field published a poem on the MB-3 shortly after the above mentioned accidents occurred and is reprinted for the information and guidance of all concerned.

"Of M.B.-3's we had a pair
And one by one we took the air
Until at last but not the least
Our youth climbed in and headed east
Up, into the air he went

And to his feelings, did give vent
 He looped and spun and turned around
 And then he headed for the ground
 Down he came with a terrible speed
 But to the wind he did not heed
 Slowly he settled to the earth
 And to the hangars gave wide berth
 He bounced, but gently touch the ground
 But lo and behold he turned around
 With many a burst to straighten it out
 The little M.B. stood on its snout
 It trembled and shook but with never a crack
 Gently but firmly it lay on its back
 A shout for the ambulance, a wild mad rush
 Then our hero came forth and stood in the brush
 In a voice very mild, with no mistakes
 "My luck's just the same", he said "No breaks"
 But I heard him exclaim in tones quite loud
 At the club, Five o'clock, Beers for the crowd."

The officers of Clark Field played Volley Ball here against a team from the Del Carmen Sugar Central last Saturday night and went down to defeat, losing three out of four games.

After defeating the Cavalry Officers baseball team repeatedly and then soundly trouncing the Artillery Officers baseball team, the Officers of Clark Field challenged a team of officers picked from the entire commissioned personnel of Camp Stotsenburg and went down to defeat 14 to 8. They are after revenge and intend to wipe out the blot on our records.

Hqrs. 2d Division, Air Service, Fort Bliss, Texas, Oct. 18.

As a conclusion to the maneuvers at Marfa, Texas, a series of field events and athletic contests were held by the division. The Air Service, under the management of Lieut. Morris, won the divisional baseball championship by defeating the following unit teams of the division: Special Troops, 6-2; 82nd Field Artillery, 13-3; and 8th Cavalry 14-3. As a conclusion to the baseball series the Air Service team then played the Marfa civilian team and lost after a hard game by score of 7-11. This game also would have been a victory for the Air Service team but for the fact that it was short in pitching material, the pitching staff not having had time to recover from the previous games.

The squadron is now engaged in moving into the permanent brick barracks formerly occupied by the E & R Schools. It is intended removing the temporary buildings now in use when the change is completed. The new buildings will be a great improvement and more comfortable, especially during the coming months of anticipated Texas Northers and local sandstorms.

Lieut. Sullivan, A.S., received orders to duty in the Panama Canal Zone, and will leave for his new station about the first of November.

440th Obs. Sqdn. Organized Reserves, San Jose, Calif., Oct. 20.

Upon the invitation of Col. E. V. Smith, Chief of Staff of the 91st Division, and Camp Commandant, the 440th Observation Squadron, Organized Reserves, recently gave an aerial demonstration at the Citizens Military Training Camp at Del Monte, Calif. The squadron, which is commanded by Major Sykes, and which has 28 members and 3 enlisted mechanics, went to Crissy Field, Presidio of San Francisco, Calif., early on Saturday morning. Six JN's and one DH were flown to the squadron's headquarters at San Jose, Calif., where the planes were re-gassed. After a delightful luncheon, tendered by Major Sykes, the reserve officers took off in two flights across country to Del Monte, a distance of about 70 miles, and arrived there just at the conclusion of the review. It being visitors day, about 3,000 civilians were present, mostly relatives of the young men attending the camp. The guest of honor was Major-General Morton, Commanding the 9th Corps Area, and upon the squadron officers paying their respects to him and to the Camp Commandant,

the former complimented them upon the excellent formations and perfect landings.

Much interest was evinced by the C.M.T.C. students in the equipment of the squadron, and they expressed themselves as having enjoyed the visit of the reserve airmen when they left Sunday morning.

On Saturday evening the reserve officers were guests of Col. Smith's mess, and later attended a dance at the Hotel Del Monte. Taking off the following morning at ten o'clock, the two flights landed at Paicines on an improvised field - a "T" constructed in a recently harvested hay field. Here they were met by autos and conveyed to Major Sykes' beautiful country home for dinner; Leaving there at three o'clock, the airmen proceeded to San Jose and gassed up for the trip to Crissy Field. Lieut. Brammer cracked up his plane, tipping a tree branch in endeavoring to avoid some small children who happened to be on the field. His forehead and temper were both injured. Lieut. Smith also encountered a slight difficulty, taxiing his plane into the sea wall and sustaining one wet leg in the encounter.

Capt. A. F. Herold of the Army Air Service, detailed as instructor of the Organized Reserves, accompanied the expedition. A wonderful time was had by all.

The purpose of this letter is to keep the personnel of the Air Service, both in Washington and in the field, informed as to the activities of the Air Service in general, and for release to the public press.

For release December 24, 1923.

LIEUT. MACREADY'S ATTEMPT FOR ALTITUDE RECORD ✓

Mechanical troubles failed Lieut. John A. Macready's attempt to regain for the United States the world's record for altitude, and he was forced to land after one hour and 28 minutes in the air.

At the take-off on December 7th from McCook Field, Dayton, Ohio, the engine and supercharger apparently functioned perfectly up to 10,000 feet. Above 10,000 feet the gauge registering the supercharged pressure oscillated, indicating considerable variation in the amount of supercharging. It was, however, possible by manipulation of the control gates, to maintain the pressure at the carburetor to the desired amount. An altitude of between 36,000 and 37,000 feet indicated, which calibrated down to approximately 32,000 feet, was reached in 49 minutes, when suddenly the supercharger ceased to function, and although the throttle was wide open the revolutions per minute dropped to approximately 300.

Lieut. Macready kept his throttle wide open coming down in the glide to avoid freezing the water in engine and radiator. The engine revolutions picked up around 7,000 feet, where it was also possible to supercharge again, but due to the large amount of fuel which had been used, a further attempt at climb was abandoned.

Upon an examination of the supercharger after landing, it was found that the thrust bearing at the front end of the supercharger was badly burned and apparently had been frozen. This is undoubtedly the cause of the fluctuations in the amount of supercharging noted above 10,000 feet, as well as the complete failure of the supercharger to function at the peak of the climb.

The strut temperature at the highest altitude was minus 46 deg. C, and the cockpit temperature was minus 44 deg. C.

It is contemplated using a modified form of the present thrust bearing on the next attempt at the altitude record.

When Lieut. Macready established his world's altitude record of 34,509.5 feet on September 28, 1921, it was generally thought that his mark would withstand the onslaughts of rival airmen for some time to come. It remained, however, for Sadi Lecoq, one of the foremost pilots of France, to eclipse this record a little over two years later, for on October 30th last at Villesauvage, France, he ascended in his Nieuport-Delage airplane to an altitude of 36,564 feet.

The Army Air Service, by virtue of the altitude flights of Major Schroeder and Lieut. Macready, held the world's altitude record practically since the close of the World War, and a general feeling prevailed in Air Service circles that with the new and improved supercharger, that remarkable invention of Dr. Sanford A. Moss which enables an aviation engine to function efficiently in rarefied atmosphere under approximately sea level conditions, no difficulty would be experienced in regaining this highly important aviation record.

The old LePere (P-53) which on three previous occasions had been piloted to heights never before attained by a human being, had been thoroughly primed at McCook Field, Dayton, O., for the supreme test. It has been subjected to a number of tests in which Lieut. Macready took an active part. The new supercharger with which it is equipped resembles in some respects the old "Form B" supercharger, but the speed of the turbine wheel has been increased from 22,000 to 34,000 revolutions per minute. When the turbine and impeller of this supercharger were tested, they were given an overspeed run of 41,000 revolutions per minute. The tip speed of the impeller was 1880 feet per second, three-fourths of the speed of an army rifle bullet. At this rate, a one-pound weight having its center of gravity at the center of gravity of one of the turbine buckets would have a centrifugal force of 222,000 pounds or 111 tons. The weight of a bucket is .00959 pound, but even so the pull on each bucket is 1750 pounds, and as the cross-section of the bucket is the small fraction of an inch, the stress is very high. The turbine and shaft were machined from a solid forged mass, weighing 250 pounds. The finished weight

of the turbine is only 20 pounds, 8 percent of the original forging. A commercial compressor delivering the same amount of air as this supercharger would weigh 5,000 pounds and occupy a space of 6 feet by 6 feet by 8 feet. One man can easily carry this supercharger about, but at 35,000 feet it increases the power of the Liberty engine by over 300 horsepower.

People wonder what a supercharger is, and just what it does. An airplane engine loses power as it reaches higher altitudes - the air is less dense the higher one goes, and like a man climbing a hill, the engine literally puffs for breath, for on the weight of air that it sucks in at each stroke depends its power. At sea level a Liberty engine will develop 400 horsepower; at 15,000 feet it will give but 200, and at 25,000 feet the same engine can only deliver 87 horsepower, a small fraction of its original output. No wonder something is needed to keep up its "pep". This is the function of the supercharger - it is a high speed centrifugal air pump driven by an exhaust gas turbine. When the charge in the engine cylinder has done all the useful work it can there, it still has power left in it. This the supercharger turbine converts into useful work, driving the compressor that pumps air to the engine at constant sea level pressure, and so maintains its original power regardless of the altitude at which it may be flying.

In constructing the supercharger, the first and most serious trouble was securing a material that would stand up under the terrific temperatures, surrounded by white hot exhaust gas. When the supercharger is in full operation the nozzle box and manifolds are sizzling hot, and the fast spinning turbine wheel is surrounded by gases the temperature of which is 1500 deg. Fahrenheit. No wonder pilots thought they were being offered a combination cook stove, blacksmith forge, and flying junk shop. But one by one the various troubles were met. Flexible manifold connections helped overcome warped and cracked joints, and leaky connections. The tips of the turbine wheels were ground off to lighten the dead weight, and to decrease the stress due to centrifugal force. Then came the design of the side type supercharger. The turbine wheel was overhung and exposed to the full blast of the propeller. The compressor, casing mounted sideways, cut down the head resistance. The whole installation was simple, easily adjusted and, best of all, it worked. The first outfit was run for over fifty hours without the slightest attention. It is now the standard type - reliable, rugged, and easily taken care of. It increases the performance of an airplane to a remarkable extent.

The new and improved supercharger, previously mentioned, has a great many interesting features, and was designed for exceptionally high altitude flying and experimental work.

Further refinement of design has been perfected in the last two years, or since the establishment of the last world altitude record in the United States, in cooling and fuel systems. Also to make the flight a little less grueling for the pilot, a system for heating the cockpit has been devised, as well as material improvements in the supplying of oxygen. Recent tests in the use of liquid oxygen for altitude work make it probable that this will be used instead of gaseous oxygen used in former tests. Its absolute tastelessness is one of the advantages in adding to the comfort of the pilot, while its complete dryness precludes the possibility of the formation of ice in the supply lines from the freezing of moisture, clogging the supply.

It has been rather amusing to hear of the effect of altitude on some of the men who have been taking the LePere up for various tests in the interest of the recent trial flight. The notes they brought down at times caused those who were waiting for them to scratch an ear, thoroughly puzzled. For instance, a man fully intending to write the figure 18 will write the figure 81, which will cause the supercharger expert a bad half hour until he finds the writer, who is as surprised as he over the discrepancy.

The supercharger expert himself, when up one day, kept reading the sealed altimeter in the reverse direction, trying to communicate frantically to the pilot that he was running the supercharger for 20,000 feet below sea level. Nor could he realize until he came down to more normal air pressure, he said, the queer twist in his reasoning that caused the misconception. It is not alone the lack of oxygen in the air which works his hardship upon a man mentally and physically, it is the difference in pressure from that in which for countless thousands of years he has accustomed himself to exist. Each muscle and artery, each convolution of the brain protests in strain and lowered vitality for being forced through that

strange bourne, which through all time has never held human breathing organism before. Artificial oxygen can only partly relieve this difference. For the rest it is a grim grinding fight between man and his own endurance, a fight which must be waged subconsciously, since all conscious concentration is given to keeping his plane climbing, to the proper functioning of his engine, which is also fighting mechanically for continued vitality. With his instruments he is not so much concerned. They will tell their own story if safely brought to earth. To force the plane to its ceiling, whatever that altitude may be, it is for that that he struggles to keep his hold on consciousness.

When he made his last altitude record, Lt. Macready succeeded in doing this. "The plane wallowed about as in a trough," he said afterward, "she would go no higher."

This perhaps is the most heroic test which an aviator is called upon to make. There is no audience, nothing to keep up the morale through that hour that may well seem ages, no one even knows there is a story until it is all over.

Just now Lieut. Macready is sporting a bunged up eye, in which a piece of steel became imbedded when he recently took the LePere up for a test flight. His grin, however, we are glad to say, sustained no injury.

THE KELLY FIELD AIR CARNIVAL FOR ARMY RELIEF. ✓

The Air Service activities centered around San Antonio, Texas - the Primary Flying School at Brooks Field, the Advanced Flying School at Kelly Field and the San Antonio Air Intermediate Depot - combined forces and staged an air tournament at Kelly Field on November 18th for the benefit of the Army Relief Society. It seemed that everything, including the weather, was out with a hammer, as a spell of perfect Texas sunshine was apparent for seven days, but at daybreak on the 18th low fogs and rain was the order of things.

By a strange perversity of fate which seems to have overtaken nearly every affair of that sort staged at various Air Service fields during the past several months, rain and the resultant heavy mud marred the event to no small extent. So far as our recollection goes, unfavorable weather has marred these benefit performances at Bolling Field, D.C.; Mitchel Field, N.Y.; Chicago, Ill.; and the weather man threatened to throw a monkey wrench into the affair held at Scott Field. Evidently the weather man is not charitably inclined.

A very extensive advertising program had been undertaken and, in spite of the inclement weather, by 11 o'clock the field had received a considerable number of visitors. Throughout the program the mist and, in some instances, light rains prevailed, so at four o'clock the program was terminated and visitors issued rain checks good for the next Sunday. The show, although not embracing all of the exhibitions planned, was a huge success from the spectators' standpoint. The day, however, was marred by the crash of Lt. Paul T. Wagner and his death which followed.

Members of the garrison at Brooks Field did everything they could to make the affair a success and, despite the mud which prevented the activities of the JN ships to a great extent, they participated in the events as called for in the program. They had it all arranged for Casco, the famous police dog owned by Lt. Greenlaw, to take part in the program. Scheduled to make a jump in a parachute from a Martin Bomber, he was taken up with the parachute strapped to him. When the trap door was opened an effort was made to get him to jump, but he absolutely refused to do so. He backed into the wires in the cockpit and the efforts of two strong, husky officers could not move him, so that event was cancelled.

We remember that several years ago, when the Primary Flying School, which was then located at Carlstrom Field, Fla., staged an aerial demonstration a goat was made "the goat" of a parachute jump stunt, which turned out very successfully. Perhaps it was of the mountain variety and was used to high altitudes.

The San Antonio Air Intermediate Depot furnished 18 types of airplanes and their accessories for the ground exhibit, and Lieut. Charles E. Branshaw, engineer officer at the Depot, was a member of the Committee on Exhibits. The exhibits were arranged to show all stages in the process of assembling and rigging airplanes, wing and propeller construction, application of dope and varnish, and motor overhaul and installation. Several thousand persons viewed the exhibit and many expressed admiration of the engineering skill and craftsmanship displayed. Numbers lingered near the exhibits and asked many questions, which indicated

deep interest in Air Service matters. Lieuts. Myron R. Wood and Lewis A. Dayton, A.S., were members of the Program Committee. The programs were attractive and unique and thousands of them were purchased by the visitors as souvenirs of the day. Lieuts. Ivan G. Moorman and Edward M. Powers flew the ships from which parachute jumps were made. The ladies of the Depot, under the leadership of Mrs. Lackland, provided hams, roasts, salads, cakes and other delectables which were served to the visitors at the "Dainty Lunch" in one of the hangars. The proceeds from the refreshments were used to swell the receipts for the Army Relief Fund.

A feature of the Carnival was the arrival from Scott Field, Ill., of the Army Airship TC-3, manned by a crew consisting of Capt. L.T. Miller, 1st Lieuts. Arthur Thomas and R.S. Heald, pilots; 1st Lieut. Alfred I. Puryear, student pilot; Master Sergeant Gamble, coxswain; and Sergeant Neff, engineer. The TC-3 left Scott Field at 7:00 a.m. November 16th, and landed at Muskogee, Okla., for refueling at 5:00 p.m., took off again half an hour later and arrived over San Antonio at 3:00 o'clock in the morning of the 17th. The ship flew around the city until daylight and was landed at Brooks Field at 5:30 a.m. Due to the bad weather on the day of the exhibition, the ship remained in San Antonio until the following week in order to take part in the exhibition given on Sunday, November 25th. During the interim the airship made a flight to Fort Worth, Tex., where it received an enthusiastic reception by the people of the city, it being the first airship to arrive at Fort Worth, and because it is filled with Helium, which is produced in the vicinity of that city.

Authority being requested and received from the Office of the Chief of Air Service to hold another Carnival on the following Sunday, an advertising campaign was conducted, not only through the newspapers but also by planes with advertising painted on the lower wings. The newspapers gave the affair their whole-hearted support, and in addition to running in several instances full page supplements, gave numerous radio broadcasts, which included a talk by Col. Howard Commanding Officer of Kelly Field, on the purposes of Army Relief, and one by Major H.M. Hickam, outlining the program and explaining the various events. The Kelly Field Band, which incidentally is one of the best broadcasting musical organizations in this part of Texas, enlivened the broadcasting hour by some ten selections of everything from "Il Trovatore" to "Yes, We Have No Bananas".

Although "Old Sol" disappointed everybody and raised particular havoc on the 18th, he relented at about 10:00 a.m. on the 25th, and promised perfect weather. By 12 o'clock some odd thousand visitors had arrived, and by 2:00 p.m. it was estimated that between 18,000 and 20,000 people were ready for the Show.

The first thing on the program was the landing of the TC-3. This ship caused a great amount of comment among the spectators, who marveled at the maneuverability and ease at which the ship operated. A free balloon flight by Major Westover and Lieut. Burt followed the ascension of the TC-3. At 2:00 p.m. the clearance flag was given, and the first heavier-than-air events started. This consisted of SE's, VE9's, DH4E's, Sperry Messengers, NBS-1's, JN6H's, GAI's and XBLA's. Following in the order named were acrobatics, apron-string formation, balloon-breaking, parachute jumping, sky-writing, bombing, etc. The apron string formation by Sergeant's Newcomb, Mitchell and Kelly from Brooks Field, who flew three Voughts tied together with 40 ft. strings, was a sensation, not only to the spectators but to other pilots as well. The formation passed the reviewing stand several times, the strings in all cases overlapping or dragging at least ten feet.

The parachute jumps were a huge success and furnished plenty of thrills. Two simultaneous jumps from two DH's were as pretty a sight as one could hope to witness. Sergeant Bottrill, a veteran parachute jumper, slipped his parachute vertically for several thousand feet. Practically all of the spectators felt that something had happened amiss. At about 500 feet, however, he released the cords and made a perfect landing. It was as perfect a piece of parachute work as has ever been demonstrated at Kelly Field.

The sky-writing by Lieut. Brockley caused gasps of amazement from all who witnessed his work. After completing his writing he gave an exhibition of stunts which alone were worth the price of admission.

The ground attack and demonstration of maneuverability by the Attack Group of Kelly Field was particularly interesting to all who witnessed it. Cross-over turns, line formations, V and column formations were demonstrated before the crowd. At the close of this event an attack was made with terra cotta bombs and

machine guns on a simulated enemy position, located approximately in the center of the field. The event was spectacular as well as interesting and seemed to please the crowd very much. Formation stunting followed. A tug-of-war between a Martin Bomber and a Liberty truck was the next thing on the program, and furnished considerable amusement for everyone. It was nip and tuck for several minutes, but the Liberty truck finally dug in and all the king's horses and all the king's men plus one NBSI failed to move it.

A potato race was staged by Brooks Field next and proved exceedingly interesting to everyone. In fact, it is believed this was the first event of the kind ever attempted.

Altitude stunting and a combat between Lieut. Schneider in a Sperry Messenger and Lieut. Canfield in a Martin Bomber followed. This, from a flyer's point of view, was probably the most amusing event of the day. The altitude had been limited to 500 feet, and this engagement was without doubt one of the most comic events on the program. The Sperry Messenger, which was caught in the propeller blast of the Martin, seemed to go through all the gymnastics possible. A draw was finally declared.

The smoke-screen ship, piloted by Captain Duncan, made a great hit with the crowd. He laid a perfect smoke screen the length of Kelly Field, and this was one of the most gorgeous sights one could hope to witness. The TC-3 then landed for a final inspection by the spectators and the show concluded.

From 12:15 until dark three Martin Bombers, eight DH4B's and five JN6H's were kept busy ferrying passengers. The Carnival was a huge success, not only from a spectator's standpoint but from a financial standpoint as well. Except for the fatal crash of Lieut. Wagner and one or two crack-ups, both shows were run off in an excellent manner. Numerous committees had been formed, and all entered into the spirit of the thing with all the vigor and energy possible. Not only the officers and enlisted men of the post, but the ladies as well joined in to make it the biggest Carnival and the most successful ever held in the Southwest. Brooks Field and the Air Intermediate Depot combined with Kelly Field for the Carnival, and not only furnished a number of very interesting events but lent their whole-hearted support to the Relief Show. The newspapers of San Antonio without exception backed the Show and advertised it to the fullest extent, not only running pictures but also giving at least one column every day, explaining and commenting on the various events.

Although at this time it is impossible to tell the exact amount realized from the Show, it is believed that approximately \$7,500. was cleared, this including concessions, general admissions, programs, etc. Although not mentioned before, Mr. Ruggles, inventor of the Ruggles Orientator, who is now at Brooks Field, brought two of his ground planes over and demonstrated with visitors as pilots the various stunts that could be performed in these machines.

SOME SHARP SHOOTING IN AERIAL GUNNERY

Lieut. Oliver Broberg in aerial gunnery practice at Selfridge Field recently scored 100 hits out of 300 rounds on a target ten feet square with a five foot bull's eye. Half of the shots were placed in the bull's eye. Lieut. Broberg started his dives at approximately 800 feet and pulled away from the target at 150 feet.

SCOTT FIELD HOLDS AERIAL DEMONSTRATION FOR BENEFIT OF ARMY RELIEF

The aerial exhibition for the benefit of the Army Relief Fund, staged by Scott Field, Ill., recently, seemed destined to suffer from the elements like affairs of a similar nature given at other Air Service fields, for due to low visibility and bad weather several days preceding the exhibition only a small percentage of heavier-than-air pilots from other stations were able to get through. At the start of the day the weather looked very bad, but by ten o'clock people began to crowd into the field and the day turned out excellently for the exhibition. The heavier-than-air pilots participating stayed in the air nearly the whole day, giving beautiful exhibitions of formation and acrobatic flying. The only accident to mar the affair was a crash of the Vaught, with Lieut. Givens as pilot. Fortunately, he was not injured, but the crash gave the crowd the morbid thrill crowds always look for at exhibitions of this sort, but without the usual attending fatalities.

A beautiful event was the start of seven free balloons on a race. Each

balloon was piloted by a cadet making his first solo flight. The self-propelled balloon, developed by Mr. Meadowcraft, Aeronautical Engineer of the Air Intermediate Depot, Scott Field, proved very interesting. The balloon is of 5,000 ft capacity, has a small propeller revolving in a horizontal plane above the basket. This is operated by hand, and blows the basket up or down, at will.

The most spectacular event was the burning of an observation balloon at dusk by Lieut. Neely. After setting fire to a fuse and allowing it to burn near to the bag, Lieut. Neely made a safe parachute descent. The balloon lighted the country for miles around.

AIRSHIP AC-1, INFLATED WITH HELIUM, MAKES SUCCESSFUL FLIGHT. ✓

The military airship AC-1 recently made its first test flight at Scott Field Ill., since it was taken down in August last for a general overhauling. Not only were the motors overhauled but the ship was re-erected and inflated with Helium gas instead of hydrogen. The test flight was made by Lieut. W.C. Farnum, ship commander; Lieut. McKinley, pilot; Master Sergeant Bishop, coxswain, and Sgt. Greenfield, engineer. Everything functioned well, the ship handling excellently with Helium gas. After a short flight of 1-1/4 hours, the ship landed, took on Lieut. Turnbull as passenger, and assistant engineer Kenniston, and flew to St. Louis, where bouquets of Chrysanthemums were dropped over a Safety First Demonstration at 12th and Olive Streets. The airmen also bombarded the city with Safety First literature.

AIRMEN COMBAT LOCUSTS IN PHILIPPINES. ✓

The success which has attended the experiments conducted in this country of using the airplane to spray chemical solutions on orchards to destroy insect pests and on cotton plants to check the ravages of the boll-weevil had led the Civil Government of the Philippines to adopt the same method in combatting the locusts which are overrunning parts of the Islands. Pilots from the Air Service station at Camp Nichols, Rizal, P.I., have been cooperating lately with the Civil Government in the work of ridding the Islands of this crop-destroying insect, the method adopted being to fly over the afflicted areas, spraying the ground below with a chemical solution which is very deadly to the locusts.

According to a report recently sent in to the Chief of Air Service from the Islands, the use of the airplane in this work has proved more effective by far than any other method previously used.

WILBER FAGLEY FIELD SUFFERS FROM DISASTROUS FIRE. ✓

Flyers who land at Fagley Field in the near future will find the scenery slightly changed, as the big wooden commercial hangar, property of the Kokomo Aviation Corporation, which stood just south of the two big government steel hangars, burned to the ground on the afternoon of November 18th. Sixteen commercial planes, including two Cicoles and fourteen "Jennies", and thirty extra motors were destroyed, as well as many spare wings, fuselages and other equipment. The fire, which started from a short circuit in the electric lighting system, did damage estimated at \$50,000. No government property was damaged.

A thrilling feature of the blaze was the explosion of 24 light aerial bombs, which had been procured for exhibition purposes when a big air meet was held at Kokomo a year ago. The explosion threw bits of debris over a radius of many feet.

MB-3 PURSUIT AIRPLANE MAKES FIRST APPEARANCE IN PHILIPPINES.

Considerable excitement was recently caused at Camp Nichols, Rizal, P.I., by the testing of the first MB-3 Pursuit plane flown in the Philippine Islands. Lieut. A.W. Vanaman, of the 66th Service Squadron, proved himself a very capable pilot in the handling of this type of plane.

CHIEF OF STAFF, 8th CORPS AREA, INSPECTS BROOKS FIELD.

Colonel John F. Preston, Chief of Staff of the 8th Corps Area, visited Brooks Field recently on a tour of inspection. The start of flying was delayed until 8:30 a.m., at which hour Colonel Preston arrived, accompanied by Colonel

C.C. Culver, Air Officer of the 8th Corps Area. The visiting party was escorted to Hangar No. 11, and the signal for flying given. Inside of five minutes 88 ships had taken the air, in three columns, one from each of the instruction stages. The regular program of flying instruction was then carried out. The inspection party also visited the cadet barracks and mess, the Ground School building, the Air Service chops, the consolidated mess, and the flying stages.

SOME HIGH JUMPING AT SELFRIDGE FIELD ✓

At Selfridge Field, Mt. Clemens, Mich., recently, Corporal Webb of the 57th Service Squadron, and Private Crane of the 94th Pursuit Squadron, indulged in a competition for the high altitude record for parachute jumps. Crane pushed his record up to 17,000 feet, and Webb topped this mark the following day when he jumped from 19,600 feet.

AIR DEMONSTRATION IN THE PHILIPPINES.

The 28th Bombardment Squadron, stationed at Camp Nichols, Rizal, P.I., recently gave a demonstration of Air Service operations, embracing the following program:

Formation of nine DH's, led by Captain Thomas J. Hanley, Jr.; pilots, Captain F.I. Eglin, Lieuts. H.A. Halverson, C.C. Nutt, Milo McCune, R.A. Hicks, K.N. Walker, Norman D. Brophy and A.W. Vanaman. These airmen flew over Manila and back to the Airdrome, performing various maneuvers and simulating bombing and ground attack.

Lieut. G.M. Palmer, with Sgt. Stephens, photographer, photographed the visitors at the field from the air, rushing plates to the Photo Hut, where they were rapidly developed and printed, copies being presented to the visitors before the show was finished.

Lieut. Harry Weddington dropped a parachute with dummy, a live jump being impracticable, due to the proximity of Manila Bay.

Lieuts. H.A. Halverson and Milo McCune demonstrated their synchronized guns from the air, and Lieuts. R.A. Hicks and A.W. Vanaman piloted Lieuts. F.E. White and John Y. York, Jr., gunners, in a Lewis gun ground attack.

Captain Eglin and Lieut. George Burgess, observer, demonstrated artillery adjustment, using puff targets to simulate battery fire and shell burst.

Lieut. Hicks flew the new MB3 in a few acrobatics, while Lieut. Burgess contributed what proved to be of considerable interest - a radio controlled flight - maneuvering in response to directions by radio phone from those who desired to test the efficacy of that device.

Lieut. York, piloted by Lieut. Halverson, concluded the affair by dropping messages and hand grenades from the air, and the visitors from Headquarters expressed themselves as being favorably impressed by the demonstration.

NEW TRAINING SHIP MAKES FIRST TEST FLIGHT.

The new training ship, TA-1, received at Scott Field, Ill., and erected in the Airship Hangar by a crew from the Goodyear Factory, made its first test flight on November 26th, and performed excellently. The crew included Lieut. Clark, Mr. Brannigan (Aeronautical Engineer of the A.I.D.) and two representatives from the Goodyear Tire and Rubber Co., of Akron, O. Additional test flights were made the following day, and the ship was then turned over for service as an instruction ship to the 9th Airship Company.

The TA-2 has also been received from the factory, and is now being erected at Scott Field. Upon completion and test it will be turned over as an instruction ship to the 8th Airship Company.

LIEUT. HUNTER SUFFERS FRACTURED BACK IN CRASH

Lieut. Frank O'D. Hunter, noted war pilot, with eight German planes to his credit, who is attached to the First Pursuit Group at Selfridge Field, Mt. Clemens, Mich., is spending the winter in the General Hospital at Buffalo, N.Y., suffering from a fractured back and a badly cut face. Hunter was returning to Selfridge Field from the flying carnival at Mitchel Field. After a number of narrow escapes and thrilling experiences, which included flying through snow

storms and fog in the Alleghenies and flying above the clouds with a missing motor, Hunter was finally forced to seek a landing field expeditiously when his motor quit completely. In trying to effect a 90 deg. turn to land in an open space his airplane fell in a spin, resulting in the injuries. His spinal cord was uninjured, and the surgeons at Buffalo are confident of complete recovery.

ARMY PILOTS GIVE AIR CARNIVALS AT TEXAS CITIES.

Four Voughts and one DH from Brooks Field, San Antonio, Texas, joined with ships from Kelly Field in giving an air carnival at Dallas, Texas. These ships then flew to Fort Worth, Texas, where a small aerial program was given in honor of that city's Diamond Jubilee. At Fort Worth the contingent was joined by three DH's, one SE-5 and one Spad from Brooks Field. The Diamond Jubilee was a celebration in honor of the establishment of Fort Worth 75 years ago by members of the United States Army. It is very hard for the airmen flying over the extensive city of today to realize that but 75 years ago there were no buildings at Fort Worth. Everything possible was done to entertain the flyers during their stay there, and the efforts were successful.

POLISH OFFICERS VISIT MC COOK FIELD

General Haller of the Army of Poland, Major Casimir Mach, Military Attache of the Polish Legation, Washington, D.C., and a party, touring the United States as the guests of the American Legion, visited McCook Field, Dayton, O., recently. An inspection of the field was made and some special flying was performed for their entertainment.

CHICAGO GIVES \$15,000 TO ARMY RELIEF FUND ✓ By Robert McKnight

Three results of the aerial demonstration staged by the Air Service for the benefit of the Army Relief Society on November 11th last at Ashburn Field, Chicago, stand out conspicuously:

1. The raising of \$15,000 for the Fund.
2. The death of Lieut. Benjamin R. McBride.
3. The need of a good, large Chicago airport.

According to the latest available figures, only \$15,000 was collected for the relief of suffering among the widows and orphans of Army men. Only \$15,000 from the crowd of more than 25,000 who were thrilled and entertained by the unusual show!

Why?

Because the men collecting admission fees could not reach all of the spectators, and the charitable spectators did not form a line to pay, nor did they riot for the privilege. It was nobody's fault - just a demonstration of human nature.

Lieut. McBride, a member of the First Pursuit Group from Selfridge Field, lost his life early in the meet in a short tail spin from which he could not recover. Stunting at low altitude, he lost flying speed and fell. It is a pity. His crash took the edge off the Carnival, although no let-up was apparent to the spectators.

Chicago's need of a proper field was made apparent to a blind man. Myriad motors moving at a snail's pace failed to find parking space on the broad acres surrounding Ashburn.

Why?

Because of poor drainage. No heavy rain had fallen between October 17 and November 11, and yet the landing field and the encircling prairie was soft in mud.

Wise motorists would not risk the fields, where there was room, but stayed in the road, impeding traffic further.

The unwise did park in the fields with tragic results. Many fine limousines were buried hub-deep in mire. As night fell, crews of men were scattered hither and yon tugging away, trying to drag them out. Many were left for wrecking crews to handle.

Thus thousands who could not navigate the main narrow road leading to the field, did not see the demonstration, did not contribute to the relief fund, but

but were forced to go home disappointed.

And it was such a distance out from the center of town, too! Without better flying facilities it is doubtful if another such crowd can ever be got out again in Chicago.

Throughout the meet a baby tractor was in constant service hauling ships from the mud in the field. A Martin Bomber could hardly pull itself off the wet ground. The Barling Bomber, warned at Chanute Field by radio, did not attempt a landing, but contented the assemblage with circling the field twice, then speeding off to the dry turf of Maywood.

The demonstration itself was splendid from all angles, the death of Lt. McBride excepted. It was a great education to the populace.

The parachute jumping, the flight of the new target glider, the sky-writing, and the new smoke screen laid down from the air were particularly spectacular features.

The majority of the Sixth Corps Area commissioned establishment, and many of the commissioned reserve were present, particularly members of the Military Intelligence and Air Service Officers' Association.

Hard work in plenty preceded the meet. There was publicity that would have gladdened the soul of Barnum, and a good gate seemed assured.

If it only had not been for that field and its abominable condition $\frac{1}{2}$

Now what? Simply this: All of those interested in the Air Service - in fact, all of those interested in aviation (both military and civilian) should bend every effort to the end of getting Chicago a good field - or fields - worthy of the city and its importance in future air developments.

With its central location and its manifest destiny as the world's greatest city, Chicago should be the air center of the future.

The Air Service Officers' Association has launched a determined campaign for a field, and the effort promises to bear fruit. It is a worthy cause and deserves everybody's strong support.

AERONAUTICAL CHAMBER OF COMMERCE SEEKS INFORMATION ON OPERATION OF COMMERCIAL AIRCRAFT.

The lack of any Government system of registration for privately owned aircraft makes it very difficult to obtain any accurate data regarding aircraft operations. The Aeronautical Chamber of Commerce is attempting to obtain this data by sending out a questionnaire to all aircraft operators. The questionnaire seeks to obtain information regarding the names of companies and persons engaged in the operation of aircraft, equipment, fields, shop facilities, number of flights during the year, total flying hours, mileage, passengers carried, freight carried, traffic charges, routes flown over, accidents and their causes. The information received from these questionnaires is to be incorporated in the next issue of the Aircraft Year Book. As it is very important, both to the Air Service and to the industry at large that this information be obtained, it is hoped that all private aircraft operators who do not receive such a questionnaire will correspond with the Aeronautical Chamber of Commerce, 501 5th Ave., New York City, regarding this matter.

NIGHT FLYING AS AN ADVERTISING STUNT

The Aero-Lite Advertising Company of Indianapolis, Ind., recently landed a big advertising contract for night flights, using electric signs built in the lower wings of "Jennies". Harry M. Storms, formerly a commercial pilot of Kokomo, Indiana, is one of the flyers for the Indianapolis Company, and in his first flights over Kokomo the flashing signs attracted a lot of attention.

GENERAL MITCHELL'S VISIT TO HAWAIIAN DEPARTMENT By Lieut. J.M. McCulloch, Air Service.

Brigadier-General William Mitchell, Assistant Chief of Air Service, and Mrs. Mitchell arrived in Honolulu on a U.S. Army Transport. The couple were greeted off Diamond Head by the largest aggregation of airplanes ever assembled in the Territory. The two Army Air Service posts here, Luke Field and Wheeler Field, sent out airplane formations which joined forces over Honolulu and flew out to meet the steamer, conveying to these distinguished guests the "Aloha" of

the Air Forces in the Hawaiian Department.

During the first two days after their arrival, the General and Mrs. Mitchell were engaged in arranging for their apartment at the Moana Hotel and visiting points of scenic interest on the Island of Oahu.

General Mitchell established himself at Department Headquarters, Fort Shafter, utilizing a part of the office of the Department Air Officer for official business while here. He and Mrs. Mitchell visited Luke Field, and the General flew a Martin Bomber, a DH4B, an MB3A and an SE5, which, with the exception of the "Jenny", makes a complete aggregation of the land type of planes used here. The following afternoon Luke Field gave a reception at which the officers and their wives were given an opportunity to become acquainted with Mrs. Mitchell and the General and to welcome them to our "Rock".

November 5th and 6th were spent by the General in inspecting Wheeler and Luke Fields, examining the equipment and viewing a few simple evolutions, such as formation take-offs, formation maneuvering, and bombing at the Harbor target. He expressed himself as pleased with the work.

An MB3A was loaded on the lighthouse tender Kukui, Nov. 7th, and on the evening of that day the General and Mrs. Mitchell, R.R. Tinkham, Supt. of Lighthouses, Senator Rice of Kauai, and others set forth for the Island of Kauai. Upon reaching it the party became the guests of Senator Rice, who has a home there. The plane was landed for the General's use during his stay. He tried out the new landing field there and pronounced it satisfactory. Several pleasant days were spent on the Garden Isle by the General in hunting the quail, pheasants and goats that abound there, and several good catches of fish were reported.

On Nov. 18th, with Mrs. Mitchell and a few friends, the General started on a tour of the other Islands of the Group for the purpose of getting first hand information concerning them and to familiarize himself with the needs of the Air Service in this Department. The party was scheduled to return to Oahu about Dec. 1st, and the General has intimated that he will have some interesting missions for the aviators to carry out when he returns. The Air Force took this as a promise and anticipate operating directly under his eyes in an aerial war game from the time of his return until that much-to-be-regretted moment when he and Mrs. Mitchell will leave for a visit to the Air Service posts in the Orient.

MITCHEL FIELD STAGES AERIAL CARNIVALS.

By our Correspondent.

After two postponements, one at the instance of the Lord's Day Alliance, Mitchel Field staged its Aerial Carnival under lowering skies on Election Day, Nov. 6th. In spite of intermittent rains, 12,000 people paid admission to the field, while another 20,000, undecided on account of the weather, watched the demonstration from vantage points in the vicinity. In an effort to increase the sum to be turned over to the Army Relief Society, the demonstration was repeated on the following Saturday, when 5,000 people attended. The weather was fine, but as the majority of business firms are open all day Saturday at this season, the attendance was materially affected.

Between the two shows a total of \$17,542.96 has been collected to date, about one-quarter of what would have been realized on Sunday, October 21st, or about one half of what good weather would have brought on Election Day. Mitchel Field played in bad luck, but in repeating the show on Saturday a mighty effort was made to overcome circumstances beyond the control of the Air Service.

Perhaps the outstanding feature of both demonstrations was the acrobatic exhibition staged by Captain Skeel and Lieuts. Hunter and Mathews of Selfridge Field, flying MB3's. If these officers had been performing for their home station they could not have done more to make the exhibition a success. The smoke screen plane from Langley Field gave a spectacular exhibition, particularly on Tuesday, when the screen hung like a silver curtain across the flying field.

Through the courtesy of Rear Admiral Wm. A. Moffett, Lieuts. Williams and Brow, speed kings of the world, flew the Navy Curtiss Racers on Tuesday, and in their absence on Saturday permission was granted 1st Lieut. Edwin Johnson, A.S., to fly Lieut. Brow's plane. The Navy again assisted when Chief Petty Officers Starr and Ford, of Lakehurst, staged a parachute race from the wing tips of a Martin Bomber.

It is impossible to mention all the events and all the persons who contrib-

uted their time and money to make the carnival a success. Some of the donors of trophies were Colonel Fred Cardway, Maj. Thos. Hitchcock and Maj. Robt. Rasmussen. The enlisted men of the post supplied comedy features that were well received,

The New York WORLD described the demonstration in the following words: "Barnum's three-ring idea was a side-show compared with it. The scene was fifty county fairs in one. Everything was there but the pumpkins and pigs." And this was what Mitchel Field tried to make it.

HANK GETS AN EAR FULL ON EVERYTHING AND NOTHING IN PARTICULAR.

Kelly Field, Texas, Nov. 28, 1923

Dear Old Hank:

I got to write to you about the scandal this week, and also what the bunch has been doing. You know Hank, Capt. Berman was telling me that if I got away with this it would be only on account of my connections. I suppose he refers to the number of ex-bartenders I know.

That was a good gag you pulled off last week Hank, about "There's many a slip twixt the cup and the hip". By the way who is your bootlegger now?

Well Hank, I hear that you celebrated your fifth anniversary by killing one of your hogs. Of course it ain't none of my business, but what's the use of murdering a poor hog for what happened five years ago.

You know Hank, after dinner speaking ain't in my line and at a dinner given by the 8th Service Squadron on November 10, I couldn't resist the temptation of telling them of the old standby. In a small town (not in Texas) a man was to be hanged. A big crowd was gathered for this nectie party in front of the court house and when this bird walked onto the scaffold, the sheriff asked him if he had anything to say and he replied, "Nope, just let the ceremony go on", whereupon a man of the speech-making variety (just like me) rushed forward and loudly declared, "Mr. Sheriff, this solemn occasion should not be allowed to pass without someone pointing to its lessons in an appropriate speech, or something like that. The sheriff then asked the prisoner "Have you any objection to Mr. Heaptalk making a speech?" "None at all," said this bird, "but I have a request to make". "What is it?" "Hang me first". Rare judgment, eh Hank?

Well Hank, we had a Air Circus here on November 25, and the only thing that was missing was the sawdust and the brass rail. Yes Hank, always thirsty.

Old Man Rule during the inclement weather is taking a course of ground instruction for a rating as "Inside Pilot" and he allows, so he says, that after he gets a few more flops (I mean hops) he will be able to understand the "Doo-jigger", by keeping his hand on the "Thingamabub". He tells us that you can't never expect to be a "Inside Pilot" if you don't keep your eye on the "Flicker-flackers". You know what he means.

He tells us, Hank, the most important part of this learning is the 609 test as he hasn't much confidence in our Ruggles Orientator, so that accounts for seeing him riding up and down in an elevator twice a week. Speed that's him, Hank.

You remember Mayes, Hank? Well, he took up with a blond and they say he fell for her like Firpo fell for Dempsey. Him and her were talking and she had one foot resting on a fence, when she decided to put her foot down, and Hank, what do you think? Some sap-head hollered, "As you were", and Mayes remarked to her by way of apology, "Soldiers have such a delicate sense of humor". We gave him the crocheted chandelier, Hank.

You remember Speedball, Hank, Lt. Davidson's dog; well the Provost Sergeant picked him up again, this time for associating with goats. Ain't it funny how he takes up with everybody? But how-the-so-ever, the wooden cuff links go to Louaillier. We asked him if he knew that a Cadillac was, and he said, "Sure, my pa had one over his right eye for years". Bright lad, eh Hank?

Well, Hank, I finally got thru with that essay on "Our Army", listen to this: "When the English tried to make us speak English instead of United States and drink tea instead of whiskey, Christopher Columbo was the man of the hour. He being a graduate of Annapolis, he hurried to Kelly Field and took a get-rich-course (observation) and was given a hip pocket commission. He then borrowed some pointers from the Knight Templars and started an Army of his own. Having whipped John Bull, Bull transferred to our Army in which same it has always been since. I would write more, Hank, but I don't think you will be able to absorb all this knowledge as it is very tecknickle.

Shylock.

NOTES FROM AIR SERVICE FIELDS

Kelly Field, San Antonio, Texas, Nov. 3.

Halloween was fittingly celebrated by the wives, sweethearts, and officers of this field in one of the most successful hops ever held at Kelly. The Committee "done themselves proud" in the matter of decorations and eats as well as music. The Club was decorated with appropriate reminders of the black cat, old witch and all of the goblins; colored lights were everywhere as were bales of hay and everything that goes with it. A corner was enclosed with bales of hay and surrounded a Sperry Messenger completely; said Sperry being more or less covered with hay and chickens (the kind that lay eggs), in addition to plenty of pumpkins. At the other end of the hall, a very attractive booth was kept busy supplying the guests with everything from apples to hot dogs, with cider and coffee to wash it down.

Music was furnished by one of the San Antonio jazz orchestras and was pronounced by all to be one of the finest ever secured by the field. In fact, the orchestra played the familiar old tune of "Home Sweet Home" on three different occasions and after each was enjoined by the guests to play "just one more piece, with which they very willingly obliged.

The party was a huge success; the committee and mess officer deserve the thanks of all for their most splendid work.

TENTH SCHOOL GROUP.

CADET DETACHMENT: Cadet G.C. Rushing was instantly killed Tuesday, October 30th, when the Spad plane he was flying crashed into the ground about a half mile south of the flying field. Funeral services were held on Wednesday and attended by all officers and cadets of the School Group. Cadet Fritz accompanied the remains to Shawnee, Okla., the home of the deceased.

Due to the inclement weather very little flying was performed during the week. Training was mostly ground school work. All cadets are receiving instructions in military hygiene and first aid.

All cadets, except two, received pursuit training during the week. Practical work and flying was given in the following planes: MB3A's, Spads, SE5's and Sperry Messengers. Lectures on pursuit training, organization, and pursuit pilot constituted the ground school work. Two cadets received bombardment training during the week. They are being given dual and solo instruction in flying the Martin Bomber. The study of bombs and bomb trajectories constituted their ground work in this course of instruction.

TWENTY SECOND PHOTO SECTION: The Section was engaged in the regular routine duties, with the exception of the work of repairing and transforming the old Radio Hut into sleeping quarters for the enlisted personnel of the Section.

FORTY THIRD SCHOOL SQUADRON: This squadron furnished three five-plane formations of Spads, MB3A's and SE5's for the aerial review held Saturday, Oct. 27th.

During the week students performed the following class of flying: Formation, transition, acrobatics; and received dual instruction in Spads, SE5's, MB3A's, Sperry Messengers and DH's. The average flying time per day during the week was fifty hours, with an average of 30 planes flying.

Capt. McDaniel and Lieut. Strickland ferried two JN6H's from the San Antonio Air Intermediate Depot to Ellington Field, Houston, Texas, for use by the National Guard officers who are taking instructions in flying at that field.

FORTY SECOND SCHOOL SQUADRON: The flying time for the week totalled only 52 hours and 25 minutes, due to the inclement weather.

The squadron has had a series of show-down inspections. It is expected that the one tomorrow will be a perfect one, and that no more will be needed for some time.

Our Engineering Officer, Lt. Biggs, is on a ten-day hunting leave.

FORTY FIRST SCHOOL SQUADRON: Flying activities ceased Monday, October 29th, at noon on account of the inclement weather, confining the work of the hangar crews to policing hangars and planes, with a few minor repairs on the planes.

Four 5-plane formations were furnished for the aerial review on Oct. 27th.

FORTIETH SCHOOL SQUADRON: Major Andrews as pilot, with 1st Lt. Woodruff as alternate pilot, arrived Oct. 31st in a Martin Bomber from New York City, bringing with them some spare parts for the Martin Bomber planes of this organization. The total time of the trip was 29 hours, with a total of nine flights.

This Martin makes a total of 13 planes of this type now in the squadron.

Very little flying was done during the past week, due to rain and a muddy landing field. On one occasion a storm blew up while a plane was above the highest clouds, but a safe landing was accomplished.

Six Martin Bombers were furnished for the aerial review held on the 27th. The planes formed into two formations of three planes each, and passed the reviewing stand at an altitude of approximately 100 feet. The formations were exceptionally good and perfect landings were made.

SIXTY EIGHTH SERVICE SQUADRON: Rain during the week considerably curtailed the activities of the Squadron; however, the shops, supply departments, and aero repair have been functioning as usual. One DH4B and one SE5A were turned out of the Aero Repair and sent to the line.

Five Liberty engines were received from the S.A.A.I.D. to be stored and held for assignment. Two are special built motors for Martin Bombers. Two DH4B's were received for overhaul and two Spads for salvage. The Motor Overhaul Shops are now overhauling 8 Liberty and one Wright engines. Two additional Liberty engines were received for overhaul.

THIRD ATTACK GROUP

TWENTY SIXTH ATTACK SQUADRON: This squadron furnished a three-plane formation for participation in a bombing attack on targets situated on the bombing range northwest of Kelly Field. Each plane carried four 50-pound demolition bombs, which were dropped from an altitude of 300 feet.

During the rainy weather all available men and all spare time was devoted to putting planes and motors in shape. Work commenced on the new squadron insignia to be painted on all planes of the squadron. This insignia is quite a marked improvement on the old one and presents a more attractive appearance.

EIGHTH ATTACK SQUADRON: Operations for the past week consisted of formation, bombing and test flights. A 3-plane formation took part in an aerial review on Oct. 27th, and another 3-plane formation for a bombing attack on October 30th.

NINETIETH ATTACK SQUADRON: Lt. B.E. Gates with Sgt. Harmon made a cross-country flight to Sanderson, Texas, on Oct. 27th and returned before sundown same day.

On Oct. 30th the squadron participated in a bombing attack on targets located on the range northwest of the field, using 3 planes equipped with high explosive bombs.

THIRTEENTH ATTACK SQUADRON: This squadron furnished a 3-plane formation for the aerial review on Saturday, Oct. 27th. Several formations were flown during the past week for the purpose of practice in Group formation and Combat signals. On October 30th a 3-plane formation, equipped for bombing, was furnished by this organization for the purpose of bombing targets on the range adjacent to the field.

Kelly Field, San Antonio, Texas, November 10.

Lts. Delmar H. Dunton and Edw. W. Raley recently went on leave and married.

40TH SCHOOL SQUADRON: Old Man Blizzard, accompanied by Jack Frost, evidently deviated off his course in his tour of the Northern States, as the cold wind from his prop blast has been felt for the past week.

About six motors have been changed in the Martin Bombers of this organization, and all ships have been undergoing painting and varnishing.

Lieut. Frederick, accompanied by Capt. Houghland and Sgt. Protivnak made a cross-country trip to Post Field to bring back Cadets Collins and Lamont who cracked up there. The entire trip was made in 10 hours and 20 minutes.

41st SCHOOL SQUADRON: After almost a week lay-off, due to inclement weather and the resultant condition of the landing field, flying was again resumed Monday. Although landing was slightly difficult on some portions of the field on account of mud, the field as a whole was found to be in good enough condition for the start of specialized training of students.

42d SCHOOL SQUADRON: Planes from this squadron obtained a total of 101 hours flying time. A large percentage of the flights, as usual, were made by student pilots.

Five of the 24 planes assigned to the squadron are ready for general overhaul; the remainder are in commission and are flown daily.

Lieut. Biggs obtained a 10-day hunting leave and is now somewhere in Texas, getting fat on "wild" game. Lt. Chapman is temporarily performing the duties of Squadron Engineering and Operations Officer.

43rd SCHOOL SQUADRON: Flying for the week consisted of routine test and training in SE5's, MB's, Spads, DH's and Sperry Messengers. The regular pursuit students were assigned to the squadron this week and started training, viz: Transition, formation, tactical formation, acrobatics in SE5's, Spads and MB3's. Capt. McDaniel left for New York to ferry a Martin Bomber back to Kelly Field. Lieut. Strickland is acting Commanding Officer in the absence of Capt. McDaniel. Cross-country flights were made to Pearsall and Temple, Texas, this week. On account of the rainy weather the flying time of this squadron fell off to what it had been in the last few weeks.

68th SERVICE SQUADRON: In the Motor Overhaul, 4 Liberty and one Wright E motors were received for overhaul. Two Liberty motors were assigned to different squadrons, while 17 Liberty and 13 Wright motors were shipped to the San Antonio Air Intermediate Depot for storage. Nine Liberty and one Wright motors are being overhauled. Two Liberty motors were tested and are ready for assignment.

Mr. Ernest M. Suddith, Civilian Foreman of the Aero Repair, has gone on a 30-day leave to Virginia, leaving Master Sergeant, Cote in charge.

During the week one DH4B was received by the Aero Repair for overhaul, one Spad for salvage, and one DH completed and sent to the line for test.

THIRD ATTACK GROUP.

8th ATTACK SQUADRON: Flying operations during the past week consisted of training, formation and test flights. The pilots of the squadron are now taking part in the training of the student officers from the School Group.

Capt. Bubb with mechanic, and Lieut. Carr and Major Hickam, proceeded on a cross country to Eagle Pass, Texas, on November 7th.

Lieut. Latha A. Smith departed on Nov. 4th to Langley Field, Va. to ferry back a Martin Bomber.

Lieut. Crocker with Sergeant Simmons made a cross-country flight to Dallas, Texas, on Nov. 3rd, returning the next day.

13th ATTACK SQUADRON: Flying was devoted to training of student officers from the Advanced Flying School, in formation flying and practice of combat signals. A 3-plane flight is furnished each morning to fly with the Group.

Captain Harvey with Captain Legge of the Q.M. Corps as passenger, made a cross-country flight to Fort Clark, Texas, last Sunday, returning the same day.

26th ATTACK SQUADRON: This organization in connection with the other squadrons in the group commenced instruction of student officers and cadets in Attack Aviation on Nov. 4th. When the officer pilots have received their final training they will in all probability be assigned to the Attack Group for duty. Each day they assemble at Group Operations Office at 7:45 a.m. and are assigned to the instructors detailed to give them their training. The period from 8 a.m. to 9:14 a.m. is devoted to individual training and from 9:45 to 10:30 a.m. to formation flying.

Two planes left for Dallas, Texas, on November 9th to participate in an aerial exhibition for the American Legion Post at that place. An exhibition has also been scheduled to take place at Fort Worth, Texas, on Nov. 12th, designated as Armistice Day, Nov. 11th being Sunday.

During the past week the officers of this squadron participated in training of student officers and cadets. Formation flights, test flights and training flights were made.

60th SERVICE SQUADRON: Lieut.-Col. Howard, Commanding Officer of Kelly Field, and Major Burwell, Wing Operations Officer, made a cross-country flight to Dallas, Texas, on October 13th.

Major Brereton, Commanding Officer of the Attack Group, with Sgt. Richards as passenger, made a cross-country flight to Dallas, Texas, on Nov. 3rd, returning the next day.

Brooks Field, San Antonio, Texas, Nov. 19th.

The whole field joins in extending sympathy to Kelly Field because of the fatal accident which resulted from a collision in the air. Lieut. Wagner was well known and liked by the entire garrison at Brooks Field. He was a frequent visitor here, and his wonderful flying was a great example to the men undergoing instruction at this field.

During the past two weeks several minor crashes occurred at the field. Fortunately, all of them were without any serious results, although in nearly every case the plane was a complete washout. Lieut. Chambers spun into the ground near Camp Travis and escaped with severe cuts around his eyes. Cadet Hayes spun in near the field and only suffered minor cuts. Lieut. Asher washed out a machine at Yturri Field when he tried to land about 40 feet high, and Lieut. Hewitt had a forced landing and took off his landing gear.

The football Team showed great improvement in the last two games, the first one with A.B. Franke Bros., was won to the score of 12 - 0, while the Texas University Freshmen a week later were also decisively defeated by the score of 20 - 6.

Several new arrivals reported at the camp, namely, Lieuts. Troupe, Nissley, Parsons and Percy. The latter was a member of last year's National Guard class who was successful in completing that course.

Brooks Field, San Antonio, Texas, Nov. 26.

During the past week cross-countries were made by Lieut. Patrick and mechanic in a DH to Galveston and return; Sergeant Templeman and mechanic to Muskogee and return in a DH; Capt. Sturcken and Lieuts. Woolsey, Wolfe and Webster were placed on temporary duty with the National Guard for a few days and spent Saturday in ferrying four JN6H's from the A.I.D. to Ellington Field for use of the National Guard units at Houston. They returned to this station by train on Sunday.

Lieuts. Baisley, Potts, Nissely and McCalley reported for refresher work. All of these officers were in the service during the war and were recently recommissioned.

The use of the VE9 as a primary training ship has been observed with a great deal of interest by everyone at this station, and last Wednesday, when informed that the first cadet was to solo, everybody gathered to watch the event. The take-off, the flight around the field, and the approach for the landing were fine, Unfortunately, he selected a site where there were a few small bumps, and the ship started to buck. Five seconds later it was flat on its back. No great damage was done to the ship.

In connection with the visit of the TC-3, Lieut. McKee and Capt. Miller of Scott Field visited the post, making the trip in a DH. We were very glad to entertain them during their stay, as everyone here feels that they were muchly indebted to the officer personnel at Scott Field for the fine way in which planes from this station have been received.

Lieut. McGinty, one of the student officers, suffered a fractured forearm while attempting to crank a hot motor last Tuesday. Fortunately, only the small bone was broken, and it is hoped that the arm will be out of splints in a short time.

The usual ladies Bridge party was given Thursday afternoon at the Officers' Club, Mrs. Patrick and Mrs. Merrick being the hostesses.

The regular monthly dance was given at the Officers' Club Friday evening, and being the eve of the Army-Navy game, the Club was very prettily decorated in the black, gold and grey of West Point. The decorations were very pretty, all the work being performed by the student officers who recently graduated from the Military Academy.

A tea dance was given Saturday afternoon, during which the returns of the Army-Navy game were received and plotted. The Officers' Orchestra furnished the music, and Mrs. Patrick and Mrs. Martin served the tea. Both the regular dance and the tea dance were well attended, and were a success in every way.

Monday evening an Officers' Bridge Party was held at the Officers' Club, there being twelve tables and a few extra as floaters. This was a tournament in the true sense of the word, and each officer was charged \$2.00 entrance fee. This was divided into a first prize of \$50.00, a second prize of \$30.00, and a third prize of \$20.00. Play started at 7:30 and lasted until shortly after 10:00, when hot dogs and rolls, also near beer were served and the scores checked up. Lieut. Heyl, a member of the last year's West Point class, was far in the lead, with Lieut. Stanhope, a reserve officer, about 300 points behind him, and Lieut. Patrick, one of the instructors, taking third prize with slightly lower score. No ladies were admitted to the Club during this tournament, so an opposition party was given by Mrs. Royce at the Commanding Officer's quarters, there being

about 8 tables, Mrs. Martin and Mrs. Thorne winning the prizes.

Scott Field, Illinois, December 1st.

The Airship RN-1 has had two new Packard engines installed and made its first test flights with these engines on Nov. 27th. The crew consisted of Lt. Clark, Test Pilot, and Mr. Brannigan, assistant. It was reported that these engines functioned satisfactorily. The ship will be assigned for service to the 12th Airship Company.

Lieut. Joseph P. Bailey returned from Belgium, where he was on detached service as Operations Officer for the unfortunate U.S. Army Balloon Team who lost their lives in the Gordon-Bennett Cup Race.

Last week saw the inauguration of Scott Field as Central Airways Station, with the arrival of Lieut. D.V. Gaffney from Kelly Field and Lieut. H.K. Ramey from Bolling Field. They arrived within 20 minutes of each other on schedule and took off at 8 o'clock the next morning for their home stations.

Major Strauss, Officer in Charge of Lighter-than-air at McCook Field, was a visitor at Scott for a few days in connection with work on the TA airships.

Lieut. Moyer, Army representative for procurement at the plant of the Goodyear Company, was a visitor at the field for a week, also in connection with TA airships.

Major Tinker and Lieut. Barriger, of Fort Riley, stopped at the field on their way from Dayton, ferrying two new DH's.

Lieut. Carroll, of Richards Field, Kansas City, was a guest at the field on his way from Dayton to Kansas City with a new DH.

Hqrs. 2nd Division, Air Service, Ft. Bliss, Texas, December 3.

November was spent by the Division Air Service in construction work and tearing down temporary wooden buildings formerly used as barracks, store rooms, etc.

Capt. Levy S. Johnson, Medical Corps, and Lieut. Jack J. O'Connell, left Nov. 3rd on a ten-day hunting leave. These officers will spend their leave hunting bear and deer in the vicinity of the Gila River in New Mexico.

Capt. Bender and Lieut. Douglas returned from hunting leave in Mexico Nov. 8th. Both officers succeeded in killing three deer each.

Capt. Hastey, Air Service, from the Office of the Corps Air Officer at San Antonio, landed at the field enroute to Tucson, Ariz., last week. He again landed on the field when returning from Tucson, and in doing so completely washed out his plane in making a night landing.

The Division Air Service now lacks three men from authorized strength. Men are applying for enlistment in the Air Service nearly every day and unless the request for permission to take men for assignment to other stations is approved, they will not be able to enlist here for Air Service.

Thanksgiving was celebrated on the post in the usual and customary way. It is not believed that any more elaborate dinner was served anywhere in the First Cavalry Division than that enjoyed by the Second Division Air Service.

Our request for a Sperry Messenger plane for liaison work with the Division has been refused on the ground that the altitude at Fort Bliss is too high for these planes to function effectively in small fields.

Lieut. Weddington and detachment of the First Photo Section are still at Brooks Field awaiting favorable weather conditions to carry on photographic work ordered by the Corps Commander. In the meantime, no photographic work is being done here, as Lieut. Weddington took with him the cameras for aerial work.

Mitchel Field, L.I., New York, November 27.

Interest at the field is now focussed on the pistol range, where the various organizations are conducting their practice shoot, later to be followed by the record shoot when it will be possible to qualify for marksmanship ratings with increased pay. A healthy spirit of rivalry has developed between the different organizations. In addition to the Officer-instructors, the noncommissioned officers who have held pistol ratings are coaching the men individually. Mitchel Field is out to make a record, not only for accuracy but for safety.

In a supreme effort to do his duty, Private Aage Rasmussen, 61st Service Squadron, was killed at noon on November 10th. He was carried aloft on an anchor rope from the dirigible TC-2 from Aberdeen when this ship failed to land on its first attempt. In spite of the efforts of the pilot to again immediately

land the dirigible, Rasmussen's strength gave out when he was within less than a moment of safety, and he fell to his death. In his untimely end there was something of the grim devotion to duty of his Norwegian ancestors. The death of boys of his character and temperament is a distinct loss to the Air Service.

Selfridge Field, Mt. Clemens, Mich., Nov. 27.

Mrs. B.R. McBride, widow of Lieut. McBride, has left Selfridge Field, and for the next few months will be with her parents at 135 Pembroke Ave., Oak Cliff, Dallas, Texas.

Lieut. Russell Meredith, whose leg was badly fractured last summer by the propeller of an airplane which he was attempting to start, is gradually recovering. It is hoped that he will be moved from the Robinwood Hospital at Toledo within a week or so to the more congenial atmosphere of a military post.

The third annual 20-mile relay race was held on Thanksgiving Day. In this race each organization of the Group entered 80 men, each man running 1/4 of a mile. The race was won in 1921 by the 95th Squadron, time 1 hr. 45 min., and in 1922 by the 95th Squadron, time 2 hours, 10 minutes.

Mr. E.M. Haight, formerly with the Group, who resigned recently, purchased a Breguet airplane and has entered the field of commercial aviation.

The Group has been having considerable motor trouble recently, of which Lt. Hunter's was an instance. The carburetors fail to function in cold, damp weather, resulting in motor failure. This peculiarity has furnished many thrills during the past three or four weeks of cold weather, inasmuch as practically every pilot while on cross-country has been forced to find a landing field hurriedly. This in a fast landing ship, under weather conditions permitting of only 500 feet altitude, presents quite a problem.

The 27th Squadron won the Group football championship this fall. The athletic year starts Thanksgiving Day and ends the Saturday before the following Thanksgiving Day. Each organization of the Group competes with teams in basketball, baseball, and football. First place in any of these is awarded 1,000 points, second place, 500 points; third place, 250 points. In addition, there is a track meet on Organization Day and a 20-mile relay race on Thanksgiving Day. In both of these events first place is awarded 500 points; second place, 250 points; and third place, 100 points. The 57th Service Squadron won first place in baseball and basketball, and second place in football, track and relay, thereby winning the Group Athletic Championship for the 1922-23 athletic year with a total of 3,000 points.

Major Fred Coleman, formerly with the Group at Ellington Field, landed here last week on airways from Langley Field.

Clark Field, Pampanga, P.I., October 8.

All DH4-A airplanes and their accessories have been shipped from the Clark Field Branch, Philippine Air Depot, and except for a supply of Liberty engines and a few MB3's, the building appears rather deserted.

Practically all training has been suspended and all personnel is busy assembling and testing MB-3A airplanes, with which the squadron is to be equipped. It is expected to have twelve of these conditioned for service by the end of next week.

Captain J.H. Houghton, at present commanding Clark Field, and 1st Lieut. John I. Moore, received orders to sail for the United States on the Transport THOMAS scheduled for October 24th.

A Horse and Transportation Show was held at Camp Stotsenburg on October 5th. All organizations of Camp Stotsenburg and Clark Field were present. Governor-General Wood was a notable visitor and took the occasion to decorate a soldier of the 26th Cavalry (P.S.) for rifle marksmanship.

Clark Field, Pampanga, P.I., October 20.

Flying at this station consisted of official flights to Camp Nichols, Rizal, and practice flying with one plane for officers who had been on detached service and leave. All available personnel is assigned to duty assembling, painting, and testing the new MB3 airplanes.

Major J.C. McDonnell arrived on the Transport THOMAS on Oct. 17th and has been assigned to command the 3rd Pursuit Squadron and Clark Field.

Cpts. A.H. Gilkeson and J.H. Houghton, former commanding officers of this station, and Lieut. J.I. Moore sailed for the States on the Transport THOMAS. It is with regret that all officers of this command bade them farewell, but they hope to meet them again when their tour of foreign service is over. A farewell party was held at the bachelors' quarters in honor of the new commanding officer and the departing officers from this station.

Three new Staff Sergeants have been assigned to the Squadron - Don A. Hanaford, A. Separovich and O.E. Wonson.

Camp Nichols, Rizal, P.I., Sept. 29.

Major B.G. Weir, Commanding Officer of Camp Nichols, departed from this post on Monday for a ten-day sojourn in Baguio at Camp John Hay. Captain Thomas J. Hanley, Jr. is temporarily commanding Camp Nichols.

Lieut. E.R. McReynolds has been transferred to Clark Field, Camp Stotsenburg. He is now on ten days' leave.

The 66th Service Squadron returned to camp on Sunday night. The return trip from Pagsanjan was less eventful than was the one going up, that is to say, the happenings were of much the same nature but they occurred less often. The outing was made without one serious mishap and the squadron returned home late Sunday night tired, yet enthusiastic over the trip and the stay at Pagsanjan and expressing their willingness to go again at the first opportunity.

Lieut. Malcolm S. Lawton and John R. Glascock departed for Saigon on Thursday via the PRESIDENT MCKINLEY, beginning a 70-day tour of Southeastern Asia. Their trip will include some of the most interesting as well as least traveled countries from the French Indo-China south through the Straits Settlement, Siam, Dutch East Indies, including Borneo, and our own Southern Islands. A Tiger hunt in Cambodia is tentatively projected and, according to Glascock, Pop Lawton has ambition regarding elephants.

Lieut. Harry Weddington, Asst. Engineering Officer of this station, together with a number of other Army pilots, left during the week for the Provinces, where they will aid the Civil Government in combatting the Locusts which are overrunning parts of the Islands. Airplanes have been found very successful in aiding in the riddance of these pests, the method being to fly over the afflicted area and spray the ground below with a chemical solution which is very deadly to the Locusts.

Major B.G. Weir, Commanding Officer of Camp Nichols, returned to duty yesterday morning after an enjoyable ten-day vacation at Camp John Hay, Baguio.

Camp Nichols, Rizal, P.I., October 20.

Preparations are already being made for the visit of Brigadier General Mitchell, who will arrive in this Department sometime in November on a tour of inspection. We are all out to do our best and we feel confident that we will be able to convince the General that Camp Nichols is the finest field in the Department and that it is well located.

Lieut. Weddington is still in Mindoro, working with the Civil authorities in combatting the Locusts in that part of the country. Lieut. McCune returned from that section a few days ago and reported that Lieut. Weddington and himself had spent their spare time big game hunting and had succeeded in killing two (??), we can't spell the name of the animal, but they're larger than a Locust, and we gathered from the conversation that it was the intention of the officers to bring home the heads of these animals to have them mounted.

A camera obscura has been set up and a regular schedule of bombing practice carried on this week, results as indicated by the camera obscura being of great edification and considerable mortification to some of us who have not had previous bombing experience.

Among the arrivals in Manila on the Transport THOMAS last week were Major McDonnell, Captain Beam, who comes to the 28th Bombardment Squadron, this station, as does also Lieut. Selff, who will take command of the 6th Photo Section, relieving Lieut. E.H. Guilford, who returns to the United States on the THOMAS next week.

France Field, Panama Canal Zone, October 31.

The last ten days have been just one steady rain after another, being the most violent storm and greatest rainfall for a number of years on the Isthmus. Every now and then, in spite of the rain, a shoot would be handled with one or another of the Coast Artillery forts, which would sometimes cause the ships to loaf around for an hour or two after the shoot was over, waiting for a clearing to get home again. Our field at Balboa was under two or three feet of water.

On the 19th of the month three DH's went up to David, Republic of Panama, about 200 miles south of here. Capts. Flickinger, Quinn, Lieuts. Albrook, Carter and Sgt. Preston were guests of the Republic de Panama through Major Prescott, who flew with Lieut. Albrook on this flight. The Major is a reserve officer in the Signal Corps, U.S. Army, and is now in charge of all telephone and telegraph lines in the Republic of Panama. From David the party went to Boquete by special train through the courtesy of the President of Panama, as arranged by Major Prescott. Boquete is the mountain resort of Panama, located about 30 miles from David in the 12,000 ft. Cordilleras range, at the foot of the famous Volcan de Chiriqui, an extinct volcano, very interesting and grotesque in its weird formations.

The next day two Martins went up with Lieuts. Hildreth, Beery, Shankle, Ladd, Hough, Watson, Reid and Sgt. Mooney and Corporal Monroy. They joined the party and got back the following Wednesday through a terrible rain storm. Lieut. Hildreth was forced down at Balboa, where the ship will remain in about three feet of water for several days.

Wilber Fagley Field, Kokomo, Ind., Nov. 15.

Lieut. Harris, of Barling Bomber fame, was one of the new arrivals at Fagley Field during the week. Harris, test pilot at McCook, landed here accompanied by C.W. Post, General Manager of the Huff-Daland Airplane and Motor Corporation. They were flying from Chicago to McCook in a Huff-Daland "Petrel", equipped with a 9-cylinder Lawrence radial motor. The ship is under test by the U.S. Army, and was serviced here with gas, oil and water, while the two flyers visited for a few minutes with the local pilots.

Capt. Brower of McCook Field made a forced landing in a cornfield near Marion, about 28 miles east of Kokomo, with his DH, damaging the tail group, but the pilot escaped injury. Lieut. Taylor of the 113th Observation Sqdn., A.S., Ind. National Guard, flew to Marion to offer his services to Capt. Brower, but that officer had returned to Dayton by rail, leaving shortly before Taylor arrived.

The 113th flew a five-ship Hisso formation, accompanied by two DH's over this city on Armistice Day while the parade was in progress. The five H's were piloted by Major James C. Patten, commanding the 113th; Capt. Harold Smith, Lts. Lawrence Aretz, Ray Dieden and John Ziegler. The two DH's were piloted by Capt. Wm. F. Donnelly, Air Service Instructor, and Capt. Brutus of the 113th.

Lieut. Ziegler lately piloted a commercial ship owned by the Kokomo Aviation Corporation, which occupies Fagley Field jointly with the 113th Squadron, over the city, while a news service cameraman took pictures of the parade. Several of the squadron's pilots are doing night flying in commercial ships belonging to the Kokomo Aviation Corp., which bear large electric-lighted signs.

The McCook Field "Sky Pencil" and a Vought landed here Nov. 10th for gasoline and water, en route from McCook to Chicago.

The pilots of the 113th Squadron are doing much Sunday flying, and many of them get in two or three hops during the week.

San Antonio Air Intermediate Depot, Texas, Nov. 17.

During the half month ending November 15th, the Engineering Department overhauled, remodeled, or repaired 8 JN6H-A2's, 3 TM-MB3A's, 1 DH4B-1, 4 DH4B's, 11 Wright A2's, 3 Wright I's, 1 Wright H, and 7 Liberties.

Major Frank D. Lackland and his mother, Mrs. Dorwin Lackland, entertained at dinner Major and Mrs. Frank M. Andrews and Major and Mrs. R.E. Rowell. Major Andrews is the Executive Officer of Kelly Field, and Major Rowell is of the Marine Corps and is taking a course in advanced flying. After the dinner a number of officers and ladies of the post called and bridge was played.

On Armistice Day Mrs. Dorwin Lackland was in charge of the American Legion

poppy sales for the benefit of the disabled veterans at the Kerrville Hospital. Madam Lackland, assisted by Mrs. Clair Horton and a number of other ladies, were ably covering their territory, making many sales, when word was telephoned from American Legion Headquarters in San Antonio requesting the return of all unsold poppies; that they were all sold out and that the demand for these souvenirs of the day was so great that many were offering a dollar apiece for them. Madam Lackland called in her workers, gathered the unsold poppies and took them to the city, where she was besieged by workers for her poppies. At the close of the day's work it was observed that every employe leaving this Depot had a poppy on the lapel of his coat. Many employees paid from 25 cents to one dollar apiece for them. Many Mexican laborers who could not afford to pay more helped by paying five cents apiece. The American Legion Headquarters was highly gratified at the result of the day's labor.

Crissy Field, Presidio of San Francisco, Calif., Nov. 21.

The Crissy Field Officers' Club has been reaping the benefit of judicious and conservative advertising by attracting the attention of quite a number of Air Service people on their way to and from the Pacific possessions. By extending the facilities of the club to transients, we not only help our brother officers and their families to rest up and get organized for the second leg of what is usually a long journey, but we ourselves also benefit by coming in contact with officers from many different posts and activities of the Air Service.

For instance, Doc. Beeson, the proprietor of the Club, comes in contact, you might say, with a little ready money, while Major Brett and Cy. Marriner manage to lay by most of the golf balls and loose change of those transients who allow as how they can play golf. Visiting ladies with a weakness for bridge are encouraged to try and retrieve for the family exchequer the funds entrusted by their husbands for safe keeping to the well known poker investment house of Beeson & Benton. Transient children can stretch their legs and lungs in the playground. Those so inclined can find sparring partners of suitable weight and ages from among the local talent. At the present time the Crissy Field training camp has a complete assortment of promising youngsters ranging in weight from the Flea-weight division (under 30 pounds, 2-year old class) represented by Tommy Beeson and Lloyd (Barney) Barnett up to the Pin-weight division represented by Dora Brett (going on seven) the present unlimited title holder.

This morning the CAMBRAI sailed for Honolulu, taking with it a number of people who had stopped here for a short while, viz: Lieut. and Mrs. J.W. Benson, Lieut. Truman A. Allen, Mrs. Allen and son; Lieut. and Mrs. A.J. Etheridge, Lt. J.A. Wyatt, Mrs. Wyatt and Daughter Jane; Lieut. and Mrs. O.P. Gothlin; Lieut. H.A. Moore, Lieut. Brown and Lieut. Cummings.

Lieut.-Col. W.E. Gillmore, Air Officer, 9th Corps Area, accompanied by Mrs. Gillmore, left for the East on the 10th, partly on official business and partly to see the Army - Navy game. Their interest in the game this year was considerably increased, due to the fact that son Bill is in the Army line-up. Well, as Julius Caesar said at the battle of Curriculum, when the Roman sturm truppen went over the top - "SOC ET TUUM".

On Saturday last Lieuts. Miller and Barnett, returning from Rockwell Field, had a forced landing near Laguna Beach below Los Angeles. Yes, old timer, we know you have had lots of forced landings yourself, but just stick around a minute until we finish about this one. Well, as I was saying before I was so rudely interrupted, Miller and Barnett were flying along toward home when just over Laguna a hose connection let go, completely enveloping Barney, who was in the front seat, in a nice warm shower of water. Then a conn rod cut loose, sounding like sabotage in a boiler works. Barney had the entire Pacific Ocean on his left, marshes underneath and rough hillsides on his right. In spite of certain 9th Corps Area regulations, it looked very much as though there would shortly be a forced landing and Barney spied a clear space in the hills. It was a newly ploughed field on a steep hillside and he put the ship down there right side up. As the ship came to a stop Barney looked around to find that Miller had not only changed on the way down from flying equipment to blouse and cap but was at that very moment engaged in looking up San Francisco trains in a railroad time table. Now go ahead and tell yours.

Sometime ago Lieut. Post presented the Greenes with a set of Encyclopaedia Britannica. These large and handsome volumes came in handy in the Greene house-

hold, when applied to dining room chairs by bringing the little Greener within closer range of their food. The other evening Lieut. Greene inadvertently opened up one of these books (Vol. I, AACHEN - CINQUE, was the title of it) and here's what he found on page 116 with which to improve his mind:

"AL BORAK, literally 'The Lightning', was the legendary white mule on which Mohammed was supposed, by his disciples, to have made the journey from earth to the seventh heaven".

And here all this time Lt. John B. Patrick has been hightoning us on the strength of the claim that some of his great, great Carolina ancestors were the original discoverers of corn licker.

Phillips Field, Aberdeen Proving Grounds, Md., November 27.

Major J.H. Pirie, who has been our Air Service Commanding Officer for the past year and a half, has been transferred to Langley Field to command the 2nd Bombardment Group. Our new commanding officer is Major E.A. Lokman, who arrived here from Kelly Field, where he was Director of Observation Training at the Air Service Advanced Flying School.

Lieut. Phillips Melville has departed from our midst and is now listed with the notables in the Office of the Chief of Air Service. Considering his present pull (?), we are wondering if he will have the "Owl" transferred to Bolling Field where he can enjoy his flying hours and have frequent cross-country trips.

Capt. R.B. Hough, Jr., according to a letter received from him, is having a wonderful time on his vacation at Lowville, New York.

Lieut. H.G. Montgomery, who reported for duty, was assigned to the 18th Airship Company and as Adjutant, Air Service troops.

Two newly hatched 2nd Lieutenants reported for duty - Franklin M. Seward and Oscar P. Hebert, assigned to the 49th Bombardment Squadron.

Lieut. Ernst S. Moon, reported for duty Oct. 26th, having completed a five weeks' special observers course at Kelly Field.

Lieut. George and Sergeant Hudson ferried two new DH4B's from Fairfield.

During October and November both the heavier-than-air and the lighter-than-air have participated in two Ordnance exhibitions at this station and four Army Relief Shows, one at Logan Field, one at Langley Field, and two at Mitchel Field. The "Owl", with Lieut. Melville flew to all the shows; the TC-2 flew to Langley Field, piloted by Lieuts. Montgomery and McHugo, and to Mitchell Field by Lieuts. Martin and McHugo, having as passengers Colonels T.A. Baldwin, Jr.^{and} Ira F. Fravel. At Mitchel Field a captive balloon inflated by Lieut. Cressey was shot down in combat.

We have secured an additional \$75.00 for the purpose of completing the marking of our emergency landing field. Lieuts. Bleakley and Bond will finish up this work.

At the Ordnance exhibition on Oct. 5th, Lt. Myers dropped two parachute flares from a height of 4,000 feet, and on the night of November 6th, Lieut. George repeated the same operation.

On Oct. 12th Lt. Blesklev flew to Mitchel Field and carried with him a mooring cable to be used in connection with the aerial exhibition to be given at that station.

We are now prepared to have just the kind of weather we want. If we have a covered sky and wish to clear it up, Mr. Knight and Dr. Warren hop into the specially equipped DH4B and immediately turn darkness into light. Then, again, if we are in need of rain, they proceed to turn our dry country into a downpour and the poor DH4B wagon decides to do the work. Our next wonder of the present age is going to beat them all! We are now working on a plan to call all the ducks and geese of the Bay and herd them into hangars where they can be protected from the rough boy who shot at them.

Routine bombing has been carried on as usual. The heavier-than-air are ahead of the Ordnance program and now confine their work to the Camera Obscura, practically all the work being done at an altitude of 8000 feet, which has not been very comfortable during the past month due to cold weather at that altitude. The lighter-than-air from October 20th to November 20th dropped a total of 3600 pounds of bombs with 50 percent hits.

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