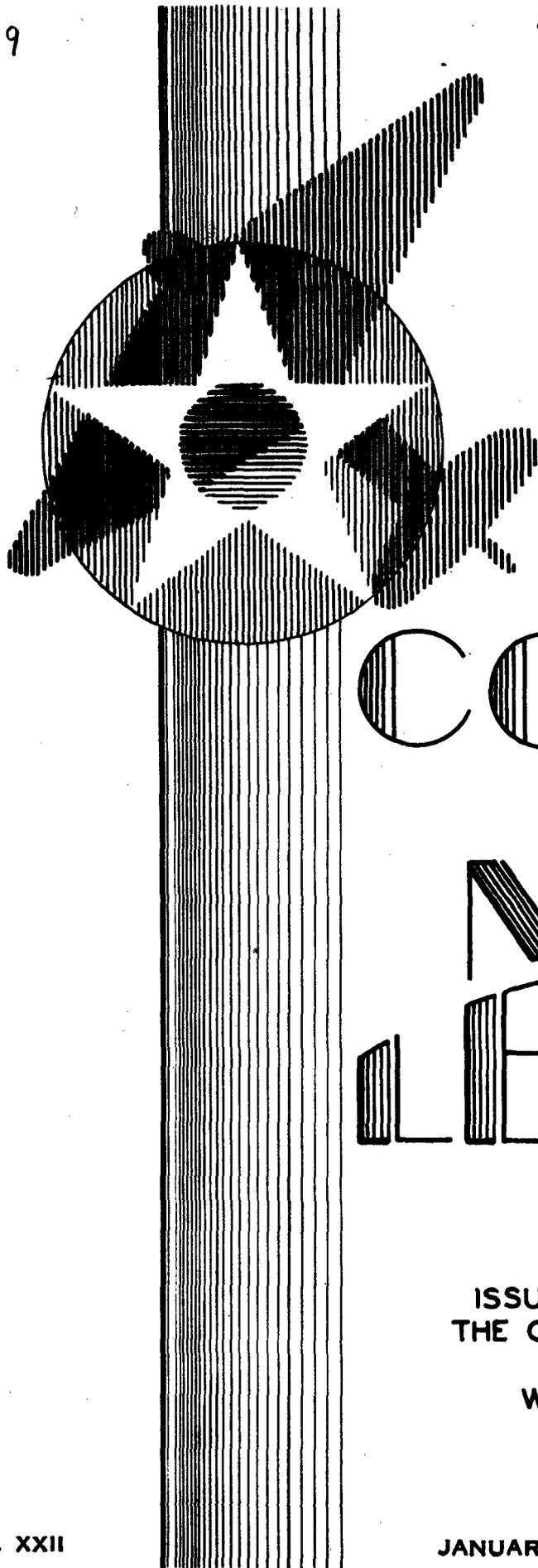


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NO. 1

Dunnington

Information Division
Air Corps

January 1, 1939

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

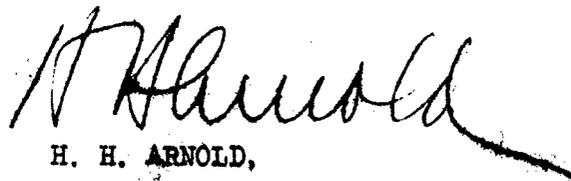
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GREETINGS FROM THE CHIEF OF THE AIR CORPS

1. On July 29, 1939, we celebrate the thirtieth anniversary of Army Aviation. Thirty years ago on that day the Army bought its first airplane - the first military airplane in the world. Nineteen-thirty-nine, then, writes "finis" to the first chapter, a chapter of accomplishment of which all you officers, enlisted men and civilian employees of the Air Corps who have made it possible should be proud.

2. All of us must approach this new chapter, however, with a full realization that we have only begun. Competition throughout the world for air supremacy daily becomes keener. We must not fall behind as the race becomes sterner. To keep abreast of this sterner competition, team play and unanimity of purpose and action are more necessary than ever. The year nineteen-thirty-nine may prove a momentous one in Air Corps history.

3. May I give you then this greeting for the coming year. Let us march together, moving forward on a single, united front to our objective, a more effective air force for our national defense.



H. H. ARNOLD,

Major General, Air Corps.
Chief of the Air Corps.

DROP-TESTING PARACHUTES AT RANDOLPH FIELD

The Parachute Department at the Air Corps Primary Flying School, Randolph Field, Texas, is manned by a complement of twelve men operating from two separate establishments - one on the Primary and the other on the Basic Stage. The two departments have their separate organizations and operate as distinct units coordinated by the Post Parachute Officer through Staff Sergeant Wilbur Lage, who exercises supervisory control over both departments. Each department is outfitted with identical equipment, floor space and drying facilities.

A total of 615 parachutes is cared for at the present time, this requiring the daily repacking of approximately ten 'chutes and the monthly drop-testing of slightly over fifty.

As a result of the past year's increase in the number of flying personnel, both student and permanent, and a not commensurate increase in the number of parachutes, the post is rather badly handicapped for parachute equipment at this date.

Whereas formerly each Cadet was issued an individual parachute, it has become necessary to ration out 'chutes to each flight, which then operates a pool for the Cadets' use. A certain amount of confusion is inevitable and considerable detail work and responsibility is given to the flight dispatchers in connection with the storing of the 'chutes when not in use and with accounting for each one as issued and received from the students for each individual flight.

The present system is working out with reasonable success, however, although resulting in greater wear and tear on equipment due to increased handling, strains arising from mis-fits, inadequate storage facilities in hangars and, incidentally, nearly triple the use per 'chute than formerly encountered.

Randolph Field has a total of 21 jumps in its history, but the rate has been falling off lately. In the year since September, 1937, there has been only one jump, and that arose from a misunderstanding between pilot and passenger. It seems the enlisted passenger, with little flying experience, heard the pilot of the B-10 call the control tower on the radio, and being somewhat lonely and apprehensive out in the front gunner's cockpit, decided not to take any chances with an airplane out of control (the only word he heard) and forthwith made his exit from about 2,000 feet.

Twenty airplanes of the 94th Pursuit Squadron, Selfridge Field, Mich., flew to Langley Field, Va., recently to witness a bombing demonstration.

RANDOLPH FIELD FLOODLIGHTS MOVED

The War Department has advised that \$2,000.00 will be allotted for the movement of the Northwest Flood Light installation at Randolph Field to a location where they will not constitute a menace to taxiing aircraft and yet furnish adequate illumination for that portion of the landing area now illuminated by these lights. From other available funds, the ramp in front of Hangar 10 and the area now occupied by the night lighting installation at the northwest corner of the building area will be extended to provide a completely surfaced area, clear of obstacles, on which taxiing aircraft may be maneuvered to and from this hangar.

On December 9th, specifications and blueprints furnished by the Materiel Division were turned over to Captain E. V. Dunstan, Quartermaster Corps, who will advertise for bids and prosecute the contract for the relocation of the night lighting installation following the award, which will be made by the Quartermaster General.

Notice was received from the Progress Administration of the allocation of Federal funds to the amount of \$6,575.00 for waterproofing, painting, glazing and performing incidental appurtenant work on buildings at Randolph Field. The project requires a contribution of \$1,560.00 by the sponsor for materials, transportation, etc. The principal item in the project calls for the painting of doors and steel sash on ten hangars, seven having been completed under a previous W.P.A. project.

PHOTOGRAPHIC WORK AT RANDOLPH FIELD

The Randolph Field Photo Department is boasting of a nation-wide circulation received by their picture of Captain Roger M. Ramey, Assistant Basic Stage Commander at the "West Point of the Air," and two Flying Cadets inspecting the installation of the newly devised BT-9 slots for BT-9's. In addition to being used as a recent cover for the NEWS LETTER, this photograph, made by Private Leslie Bland, AM 2nd Class, photographer, was published in approximately fifty newspapers throughout the United States as well as in Hawaii.

A photographic project, covering the taking of pictures of each Flying Cadet on the Basic Stage, approximately 100 in number, has just been completed by Private 1st Class Henry B. Scott, of the Photo Department. These pictures, in formal views of the Cadets, seated in the cockpit of a BT-9, will be released by the Public Relations Office. R. T. Wright is Photographic Officer and Corp. A. L. Barr is the noncommissioned officer in charge of the Photo Dept.

GLOSSARY OF FLYING CADET TERMINOLOGY
By the Randolph Field Correspondent

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Presented here is the first of a series of extracts from a mythical compendium of Flying Cadet Phraseology. At Randolph Field, although the Flying Cadet Detachment does not have the background of generations of students as has the United States Military Academy, a true esprit d'corps has been built up and is continuing to grow daily.

The language of the Cadets is dotted with highly colorful expressions, new ones being added as the occasion arises. It is the purpose of this and subsequent extracts to keep the Air Corps in general abreast of the latest phraseology, terminology, etc., for "It's the slang of today that's accepted tomorrow."

- Homing device** -- A furlough or leave of absence.
 - Hit Ho! Silver!** -- Used by mail orderly to announce collection of mail.
 - Black Wednesday** -- Calisthenics with rifles on that day.
 - Country Club** -- Randolph Field.
 - Bird-dogging** -- When a lower classman dances with an upper classman's date.
 - Get Lager** -- To strive to the utmost.
 - Rats** -- Balls of lint that suddenly appear on the floor; most noticeable when a cadet is standing at attention during an inspection of quarters.
 - Mice** -- Little "Rats."
 - Sleep** -- Go to bed, or take a nap.
 - Take off** -- To leave at a high rate of speed.
 - Ramrod** -- A name applied to anything that is dirty or in bad shape.
 - Wash out** -- To be eliminated from flight training, or one who has been eliminated from the Cadet Detachment.
 - Washing Machine** -- The Flight Commander's airplane.
 - The Grey Ghost** -- The Stage Commander's airplane, so named because it's the last plane one rides in before being washed out.
 - Push Button Pilots** -- Those cadets who are assigned to Flights using PT-13's or PT-11's for training, as differentiated from those cadets who train on the more elderly PT-3's. The PT-3's are considered the more difficult.
 - High Pockets** -- Any Cadet in "A" Company.
 - Blowers** -- The "B" Company Cadets.
 - "Roll up your flaps"** -- Stop talking.
 - Sugar report** -- A letter from a Cadet's girl friend.
 - "Come here"** -- Come here.
 - Master** -- The name every Cadet is known by from the day he arrives at Randolph Field.
- And here is the examination on the first of the series dealing with Flying Cadet phraseology. Solve the sentence below:
- "Master quit birdogging and roll up

your flaps. Let's take off for the Country Club, because we're not push button pilots, and are liable to wind up in the washing machine if we don't spin in early." ---oOo---

ARTILLERY ADJUSTMENT TRAINING AT KELLY

The Observation Section, Air Corps Advanced Flying School, Kelly Field, Texas, completed its customary training in artillery adjustment on December 9th. All of the 24 students undergoing instruction with this Section participated and received this valuable training.

The instruction was in direct charge of Captain Russell E. Randall, Air Corps, the Section Chief, and was held on the Stanley Reservation where the actual firing was conducted from December 6th to 9th, inclusive. The Observation students operated from the Camp Bullis landing field. Splendid cooperation and assistance was given wholeheartedly by the officers and men of the 15th Field Artillery, which contributed in a large measure toward the success of the mission.

A total of 192 rounds of smoke shell and 1320 rounds of H.E. shell was expended in giving the Observation students adequate experience in this most important phase of their training. ---oOo---

PILOT "SCENTS" LANDING GEAR TROUBLE

Lieut. J.A. Morris, Air Corps, of the 79th Pursuit Squadron, was about 200 miles from his home station, Barksdale Field, La., enroute to Wichita, Kansas, when he detected the odor of hydraulic fluid in the inclosed cockpit. He immediately tried to extend his landing gear and found that the wheels remained in their retracted position. Lieut. Morris then correctly assumed that a hydraulic fluid line was broken.

There being no question about a "belly landing," the pilot returned to Barksdale Field, and he landed "wheels up." The propeller was damaged beyond repair, but otherwise the airplane escaped further damage save for a few bent cowlings.

The Curtiss airplane factory is furnishing new fittings for the hydraulic system which will eliminate the possibility of further accidents of this nature. ---oOo---

During the month of November the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled 1 airplanes and 99 engines, and repaired a total of 33 airplanes and 8 engines. ---oOo---

ACTIVITIES OF LANGLEY FIELD PURSUITERS

The main body of the 33rd Pursuit Squadron, Langley Field, Va., is now engaged in gunnery qualifications at Valparaiso, Florida. A flight of ten PB-2A's, led by Major Russell L. Maughan, finally took off from Langley Field on the afternoon of December 5th, after being held up for two days by threatening weather along the route. Three other pilots; Captain Lane, Medical Corps, and twenty-four enlisted men accompanied the flight in a C-33 and a B-18. So rough was the air during the latter's flight that rumor reports only a few of the hardier men escaped the blight of air sickness.

The fledglings, who reported from the October class of the Air Corps Training Center, were left behind to continue familiarization work. Augmented by the arrival on December 5th of 2nd Lieut. C.O. Moffett, Air Reserve, who was detained at the Kelly Field hospital due to illness, this group has been "checking off" in the BC-1, under the direction of Captain Bodle.

The entire Squadron is eagerly awaiting the P-36A's, delivery of which was promised during December.

Once more the 35th Pursuit Squadron returned to Langley Field, this time from the gunnery camp at Valparaiso, Florida, where its "Warriors" qualified in aerial gunnery - yea, and they did it, for everyone qualified as "expert."

The selection by the 36th Pursuit Squadron of the range for tow target firing, just south of Virginia Beach, Va., proved to be a bad idea for the early part of December. No sooner had the firing started when the more enthusiastic game sportsmen of the outfit, spying the thousands of wild ducks floating leisurely and unmolested in the back bay below them, contracted the hunting fever. They could hardly wait to get back on the ground to gather their "shootin' irons" and shove off for the wilds of the North Carolina swamps.

DROUGHT CONTINUES AT RANDOLPH FIELD

The extended drought, which started in June, 1938, continues unabated at Randolph Field. Student training, while it has not been curtailed by the extreme lack of rain, has at least been made unpleasant, instructors on both Primary and Basic stages claim. Clouds of dust hang like a pall over all of the five auxiliary fields now in use, and when a group of instructors are on the ground, grading students on their accuracy landings, many approaches go unnoticed, due to the poor vision horizontally.

Beginning with June, every month except July has had less than the normal

rainfall, and most of these months have had less than half the usual amount.

During July, a total of 4.07 inches of rain fell, but since almost 3.50 inches of this fell in one day, the remainder of the month was arid in the extreme.

Despite this dry spell, however, the training has gone forward by leaps and bounds. The present class of the Primary Stage passed the 40-hour mark before the Christmas holidays started, and on the Basic Stage the class was approaching the 80-hour mark. With the usual course on the Primary Stage lasting about 65 hours, and that of the Basic Stage usually set at 103 hours, a long spell of weather interference in the classes will finish their training ahead of schedule.

RANDOLPH FIELD A FAIRYLAND OF LIGHTS DURING CHRISTMAS.

Dominated by its massive Administration Building, an architectural gem during the day, Randolph Field becomes a veritable fairyland of lights during the Christmas season nights. Concentric flood lights illuminate the tower, enhancing the beauty of a ready highly praised creation of architectural perfection. Near the base of the building rows of Christmas lights have been placed, the general effect being that of a gigantic Christmas tree. To further this theme, the revolving beacon on the peak of the building appears as the star of Bethlehem, blinking its message of the happy season.

Other public buildings of the Station Hospital, Air Corps mess hall, houses, each of the six enlisted men's barracks and, finally, the officers' quarters, all are gaily illuminated both inside and out. Randolph Field has numerous evergreen trees around the various buildings, and these are being used as Christmas trees.

Santa Claus arrived from the North Pole on the afternoon of the 1st of Christmas, making his first appearance atop the Administration Building, from this vantage point he summoned the children of Randolph Field to the Post Theatre, where they were presented with individual gifts. John W. Waterman, post chaplain, in charge of the arrangements.

Lieut. Colonel Clinton W. [Name], Air Corps, has been relieved from assignment and duty at Hamilton Field, and detailed as a member of the Staff Corps and assigned to the Department General Staff, effective January 4, 1939. Colonel Russell [Name] orders for duty in the Office of the Chief of Staff, Washington, D.C.

V-7933, A.C.

SONS OF ARMY OFFICERS UNDERGO FLYING TRAINING

Included in the membership of the present class undergoing instruction at the Air Corps Advanced Flying School at Kelly Field, Texas, is Flying Cadet Clarence Leonard Tinker, Jr., 22, a student in the Pursuit Section, who is the son of Colonel Clarence L. Tinker, Air Corps, U.S. Army.

Cadet Tinker, who reported at Kelly Field last October, upon graduation from the Air Corps Primary Flying School at the "West Point of the Air," was born at Schofield Barracks, Oahu, T.H., while his father was serving with the Infantry at that foreign service outpost. He received his education at the Riverside Junior College, Marin Junior College, and George Washington University, and while at the latter institution was affiliated for a year with its ROTC unit. Prior to his appointment as a Flying Cadet, he made his home with his parents at Washington, D.C., where his father, Colonel Tinker, is on duty with the National Guard Bureau of the War Department.

Colonel Tinker, who first entered the service as a member of the Philippine Constabulary in 1908, was appointed a second lieutenant of Infantry, April 24, 1912. He was promoted to First Lieutenant on July 1, 1916; to Captain, May 15, 1917; to Major, July 1, 1920, and transferred to the Air Service on November 25, 1921. He was appointed Lieut. Col. (temporary), March 2, 1935, and received his permanent appointment in that grade on August 1, 1935. He was promoted to his present grade on August 26, 1936, and was detailed to duty in the Office of the Chief of the National Guard Bureau of the War Department on December 17, 1936. He is a graduate of the Air Service Pilots' School (1921), the Air Service Observation School (1921), the Air Service Tactical School (1925), and the Command and General Staff School (1926). He is on the General Staff Corps Eligible List, and holds the aeronautical ratings of Military Airplane Pilot and Airplane Observer. He is also the possessor of the Soldier's Medal, which was awarded him in 1936 for heroism displayed in rescuing a fellow officer from a burning airplane.

Flying Cadet Tinker, who expects to graduate from the Air Corps Training Center on February 15, 1939, has great aspirations of following in the footsteps of his illustrious father.

One of the prominent students now undergoing instruction at the Advanced Flying School, Kelly Field, is Flying Cadet John Hule de Russy, who is a member of the Attack Section and who is descended from a long line of military men.

Cadet de Russy's father, Major Rene Edward de Russy, Quartermaster Corps, is now on duty in the Quartermaster Gen-

eral's Office, Washington, D.C. Before being commissioned in the Regular Army, Major de Russy served with the 71st Infantry, National Guard of New York, and accompanied that regiment to Santiago, Cuba, in April, 1898, when it was mustered into the Federal service. He entered the second Officers' Training Camp at Fort Myer, Va., and was commissioned 1st Lieutenant, Coast Artillery Corps, in 1917, serving with the 74th Coast Artillery in France.

Major de Russy is the son of Colonel R.E. de Russy, who was commissioned a Second Lieutenant of Infantry in 1862, and served with distinction throughout the Civil War and in several Indian campaigns. He was discharged for physical disability in 1886.

Colonel R.E. de Russy was the son of General R.E. de Russy, the founder of this military family. General de Russy was graduated from the U.S. Military Academy in 1812, and was commissioned a Second Lieutenant of Engineers. He served with distinction through the War of 1812, the Mexican War, and the Civil War. He rose to the grade of Brigadier General and Chief of Engineers. He died in 1865, having been on active duty in the service of his country for 63 years. He served as Adjutant and Superintendent of the U.S. Military Academy, and as Chief of Engineers, during his career. Fort de Russy, the beautiful Coast Artillery post in Kalia, Waikiki, in Honolulu, T.H., is named in his honor.

Cadet de Russy, who expects to graduate from the Advanced Flying School on February 15, 1939, was born in Baltimore, Md. He attended the University of Hawaii in 1932-1933, and the U.S. Military Academy in 1936-1937. He had prior service as an enlisted man, having served as Private in the 27th U.S. Infantry (Wolfhounds) at Schofield Barracks, T.H., from July, 1934, to June, 1935. He graduated from the Air Corps Primary Flying School, Randolph Field, last October, when he reported at Kelly Field for advanced training.

Upon successful completion of his course of instruction at the Air Corps Training Center, when he will receive his wings as Airplane Pilot and his commission as Second Lieutenant in the Air Corps Reserve, Cadet de Russy has aspirations of following in the footsteps of his illustrious great-grandfather as a commissioned officer in the Regular Army.

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Approximately 50 airplanes and officers of the 1st Pursuit Group, Selfridge Field Mich., were led in flight, under the command of Major Lawrence P. Hickey, to Langley Field, Va., on December 13th, to witness a bombing exhibition.

FLYING CADET'S REPORT ON AIRCRAFT ACCIDENT

A student of the Pursuit Section, ACAFS, who was involved in an aircraft accident recently while on a student navigation training flight, was instructed by his Chief of Section to write a report on his accident. The student reported as follows:

"Sir, the weather was cold and between Kelly Field and Tyler I lost my pipe. The P-12, as you probably know, Sir, is a very drafty airplane and rather cramped to fly in. I tell you of this, Sir, in hopes of establishing my mental condition immediately preceding my unfortunate accident.

I sighted Oklahoma City and shortly following, the airport. I turned a little south so as to give myself a little more time to look over the field. Finally, I saw the wind sock and it was parallel to the Northwest-Southeast runway with the small end of the sock to the Northeast. Being on the East side of the field I cut the gun and turned to land. All was well. I continued my glide and cautioned myself against going to slow and then settled down to the business of landing.

Am I going to clear that runway? Ah! I just will---that's fine---now easy does it---easy---easy....Ah! Down! Well, I'm glad that trip's over. Right there, Sir, I made my mistake. I had finished flying and the ship hadn't. She started to the right and not being on my toes I applied too much correction. Around to the left I went. First the wing tip, then she kind of hopped and the wheel gave way with a sad crunching sound. The motor was still running so I turned off the gas, cut the switch and pushed the throttle forward and got out. Cars began to arrive, nobody paid much attention to me they were all around in front looking at the ship. I walked around to see how it looked. It sure was a sorry sight. Lt. Bundy reminded me of the Form 1 so I filled it out and went back to the line.

These ground loops are caused mostly by the location of your head. There are several secondary things that can cause them. First and most important is to be on your toes. When you get your tail down it gives you a false sense of security. Right then is when you start having trouble. Observing the direction of the wind is also very important. Landing into the wind is considered the best form. Next your choice of the place to land. When landing with a tail skid it is best to stay off the runway. If it has been raining in the past few days it is better to land on a higher part of the field. There is one school of thought that suggests pouring the coal to her when she

starts around. Personally the uppermost thing in my mind was to stop rolling.

All of these things can be connected with my first statement on the location of your head so I figure it as the most important method of preventing ground loops."

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MANY WEEK END VISITORS AT KELLY FIELD

Kelly Field, the venerable home of the Air Corps Advanced Flying School, usually plays host to many visiting Air Corps personnel, particularly over week ends, when former "Grads" and others, while on routine training navigation flights head for San Antonio to visit old friends and haunts in the city where "The Sunshine Spends the Winter."

Last week end (Dec. 16-19) was an unusual crowded and busy one for Kelly Field and the like at Kelly. In addition to the regular crowd of visiting planes from all points of the compass, there descended upon the old airbase several flights of bombers from Hamilton, Minute and Langley Fields. A flight of seven B-18's, Captain Julius J. ... Commanding, arrived from Hamilton Field on December 17th and included a crew of twenty-three officers and enlisted men. Another flight of two B-18's arrived on December 16th from Langley Field with Major W.C. Goldsborough, commanding, and included a crew of fifteen officers and enlisted men, who came down to the good old San Antonio to bask in the sunshine and otherwise enjoy the glorious climate. Another B-18, which got away from its base to escape even for a brief period the icy cold blasts of Illinois, arrived from Chanute Field on December 16th, with Lieut. ... pilot; Lieut. Williams, co-pilot, also carried Colonel Cousin, Major Steele, Lieut. Musgrave and ... Arnold (USN).

By noon of December 19th, all planes and crews were headed for home and Kelly Field was once again happy to have played host to these as well as other groups of visitors too numerous to mention.

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Aerial gunnery practice has been started by the 27th Pursuit Squadron at Selfridge Field, Mich. This is the Squadron's first experience in firing on aerial targets with its P-30 ... planes and, says the News ... correspondent, "we find it very different from the older type airplanes."

KELLY FIELD FLYING CADET OFFICERS
By the News Letter Correspondent

Each class of Flying Cadets reporting at the Air Corps Advanced Flying School for training is supervised by a permanent Air Corps officer, who is the Commandant of the Flying Cadets. This important assignment is now ably filled by Captain John F. Wadman, Air Corps. To assist him with details, Captain Wadman has a staff consisting of permanent commissioned and enlisted Air Corps personnel, and Flying Cadets from the class itself. These Flying Cadets, who are especially selected for their outstanding qualifications, such as education, military service, ability, leadership, military bearing and neatness, and personality, are announced in orders for the assignments and given the titles of Cadet Captain and Lieutenants. They perform duties within the Cadet Unit, which their corresponding rank normally calls for. The Flying Cadet officers of the present class are Robert Dick (Cadet Lieutenant), John Hule de Russey (Cadet Lieutenant), Thomas Fletcher, Jr. (Cadet Captain), and Roy William Gustafson (Cadet Lieutenant). They have held these responsible positions since their assignment to the Basic Stage at the Air Corps Primary Flying School, and the added experience gained should serve them in good stead when they receive their permanent assignments.

Cadet Captain Fletcher, 25, the senior Flying Cadet officer, is from Scott, Ark., the residence of his parents - Mr. and Mrs. Thomas Fletcher, Sr. Fletcher graduated from Princeton University in June, 1934, with an A.B. degree. He now holds a commission as 1st Lieutenant, Field Artillery Reserve, and is assigned to the Observation Section for training.

Cadet Lieutenant de Russey, 24, is from Washington, D.C., the residence of his parents, Major and Mrs. Rene Edward de Russey. Major de Russey is on duty in the Office of the Quartermaster General, War Department. Cadet de Russey, who is a great-grandson of General R.E. de Russey, formerly Port de Russey is named, attended the University of Hawaii in 1932-33, and the United States Military Academy at West Point in 1936-37. Cadet de Russey had had prior enlisted service as a member of the famous 27th U.S. Infantry (Wolfhounds), with station at Schofield Barracks, H.I., from July, 1934, to June, 1935. He is now assigned to the Attack Section for training.

Cadet Lieutenant Dick, 24, is from Tulsa, Oklahoma. His father - Eldon J. Dick - resides there. Dick attended the University of Tulsa in 1932-33, and the University of Cincinnati in 1933-37, graduating from the latter institution with a Bachelor of Science degree in Mechanical Engineering. He has had one year of duty with the 180th Infantry,

Oklahoma National Guard; four years of ROTC work at the University of Cincinnati; and now holds a commission as second lieutenant in the Coast Artillery Corps Reserve. He is assigned to the Pursuit Section for training.

Cadet Lieutenant Gustafson, 26, is from Seattle, Washington, where his parents, Mr. and Mrs. Henry Gustafson, reside. He graduated from the University of Washington in April, 1935, with a B.S. degree in Aeronautical Engineering. He has had four years of Naval ROTC work at the University of Washington, and until quite recently held a commission as Ensign (Class DV-G), United States Naval Reserve, which he resigned in order to become eligible for appointment as 2nd Lieutenant, Air Corps Reserve, upon the completion of his course of instruction at the Air Corps Advanced Flying School. He is assigned to the Observation Section for training.

Upon graduation, these young men will receive their "wings," the rating of "Airplane Pilot," and will be commissioned as second lieutenants, Air Corps Reserve, and placed on extended active duty with tactical units of the Air Corps, where they will also have the opportunity to qualify for commissions in the Regular Army as vacancies occur.

Graduation Exercises for this Class (39-A), the largest one in the history of the Air Corps Training Center, and consisting of four Regular Army officers, six National Guard officers, and 166 Flying Cadets - present strength - will be held at Kelly Field, Texas, on Wednesday, February 15, 1939.

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LIEUTENANT MACKEY COMPLETES
REFRESHER COURSE

By the Kelly Field Correspondent

Second Lieut. Joseph Creighton Mackey, Air Reserve, who has been a student at the Air Corps Advanced Flying School, Kelly Field, Texas, since November 25, 1938, undergoing a refresher course of instruction for Air Corps Reserve officers (non-graduates of the Air Corps Training Center), successfully completed the course on December 23, 1938, with ten other classmates. He is being retained at Kelly Field for duty as a Flying Instructor at the Advanced Flying School.

Lieut. Mackey, who is 29 years of age, married, and whose home is in Columbus, Ohio, has had a very interesting and varied career in aeronautics, as evidenced by his many accomplish-

ments. He has been most prominent as an air show and racing pilot, as well as flying instructor (commercial) sky writer and author.

In May, 1936, he represented the United States in the Acrobatic Exhibition, held in Paris, France, and in December, 1936, he won the Freddie Lund Trophy for Acrobatics at a competition held at Miami, Florida - an invitational affair, participated in by five of the best known acrobatic pilots in the United States.

Lieut. Mackey was a team-mate of Colonel Roscoe Turner in both the Bendix Trophy Race (Los Angeles to Cleveland) in September, 1937, and the Thompson Trophy Race (at Cleveland) in September, 1938. He was leading the Bendix race when he was forced to drop out at St. Louis, due to engine trouble, his average speed out being 265 miles per hour. In the Thompson Trophy Race he placed fifth with an average speed of 247 miles per hour for 300 miles (30-mile course - ten laps), for which he was awarded a cash prize of \$1800.00. He piloted a Weddell-Williams monoplane, powered with a 500 horsepower Pratt & Whitney "Hornet" engine, in both races.

This young officer, who has had over 2500 hours' flying time as pilot and who attended the Ohio State University (1925-1926), has participated in every major air show held in the United States during the past five years, at each one of which he exhibited his famous bag of aerial tricks. He has in his possession about 25 trophies of all descriptions which he won at intersectional as well as National Meets.

He is the author of two well-known books - "Acrobatics" and "Sky Writing", both published by the Athens Aircraft Directory of Athens, Ohio.

He was appointed 2nd Lieutenant, Air Corps Reserve, in August, 1932, from civilian life, and has had several short tours of active duty. While at Kelly Field, he was assigned to the Pursuit Section for training.

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FLEDGLINGS HOPEFUL OF EMULATING BROTHERS By the Kelly Field Correspondent

Four Flying Cadets, now undergoing instruction at the Air Corps Advanced Flying School, Kelly Field, have brothers in the Air Corps and Air Reserve, and they are looking forward to their graduation from the Air Corps Training Center on February 15, 1939, when they can join their older brothers, who are serving with Air Corps units at widely separated stations. These Cadets are Frederick N. Philbrick of the Attack Section; and Marshall P. Camp, Gerhard J. Schriever, and Robert D. Van Auken, of the Pur-

suit Section.

Cadet Camp, 22, is from Arlington, Texas, where his mother - Mrs. Thomas J. Camp - resides. His brother, 2nd Lieut. Wilbur D. Camp, Air Corps, graduated from Kelly Field, in Pursuit Aviation, on February 15, 1936, and is now stationed at Barksdale Field. Cadet Camp attended North Texas Agricultural College in 1935-37. His military experience includes three Camps, 2 1/2 years with the Texas National Guard, and 1 1/2 years' ROTC work while a student at the North Texas Agricultural College. Prior to his appointment as Flying Cadet, he held the position of accountant.

Cadet Philbrick, 24, is from Brookline, Massachusetts, the residence of his mother, Mrs. Elizabeth M. Philbrick. His brother, 2nd Lieut. Richard W. Philbrick, Air Reserve, graduated from Kelly Field, in Bombardment Aviation, on June 16, 1938, and is now stationed at Mitchel Field. Cadet Philbrick had no prior military service upon his appointment as a Flying Cadet, being at that time employed as an auto mechanic.

Cadet Schriever, 26, is from San Antonio, Texas, where his mother, Mrs. Elizabeth Schriever - resides. His brother, 2nd Lieut. Bernard Schriever, Air Corps, graduated from Kelly Field, in Bombardment Aviation, on June 29, 1933, and is now stationed at Hamilton Field, Calif. Cadet Schriever attended Texas A&M, St. Mary's University, and the University of San Antonio, intermittently during the years 1931-1938. He has had 1 1/2 years of ROTC work while a student at Texas A&M. Prior to his appointment as Flying Cadet, he held the position of abstractor.

Cadet Van Auken, 23, is from Chicago, Illinois. His brother, 1st Lieut. Hamilton H. Van Auken, Air Corps, graduated from Kelly Field, in Pursuit Aviation, on October 12, 1929, and is now stationed at Randolph Field. His mother, Mrs. Howard R. Van Auken, resides at Fort Belvoir, Virginia, where his brother - 1st Lieut. H. A. Van Auken, Medical Corps - is stationed. Cadet Van Auken attended Guilford College in 1933-35, and the General Motors Institute in 1936-38. He had no prior service upon receiving his appointment as Flying Cadet, being engaged at that time in engineering training.

All four of these young hopeful embryo pilots reported at Kelly Field last October, upon graduation from the Air Corps Primary Flying School at Randolph Field. Upon successful completion of the course of instruction at the Air Corps Advanced Flying School

(Continued on Page 10)

AIR CORPS ACTIVITIES IN HAWAIIAN DEP'T.

The 23rd Bombardment Squadron participated in the Joint Anti-Aircraft - Air Corps Exercise, held from November 5 to 16, 1938, and the results were highly satisfactory. Returning to normal routine, Squadron personnel started looking forward to the holiday season.

The 172nd Bombardment Squadron just completed its participation in the Joint Anti-Aircraft - Air Corps Exercise, 1938, and this was considered very successful. At this writing the Squadron is engaged in demolition bombing, and it is stated that the armament section is really on the run.

In the recently completed Joint Anti-Aircraft - Air Corps Exercise, 1938, the 4th Reconnaissance Squadron enjoyed the almost unique experience of being used as a reconnaissance force rather than its normal role as a bombardment force.

The 5th Reconnaissance Squadron was called upon to perform continuous surveillance over two airports on Hawaii, and to track opposing forces of any size. It was necessary to plan on from seven to nine hour missions to accomplish this, and successful results were obtained.

The new B-18 airplanes of the 50th and 4th Reconnaissance Squadrons received their tactical baptism on November 1st, when the two Squadrons combined their forces for a day and night mission. As one squadron, they conducted the Quarterly Load Test of Aircraft and made day and night bombing attacks on objectives around Oahu.

From November 19th to December 2nd, the 4th Reconnaissance Squadron was engaged in demolition bombing conducted by the 5th Bombardment Group. All types of bombs were dropped, the weight of the demolition bombs varying from 100 to 1000 pounds. The targets used included PK and C-45 hulls, slicks and other floating targets. This bombing was unique, inasmuch as it was the first time this Squadron has dropped demolition bombs since the year 1934.

The month of November was a busy one for the 23rd Bombardment Squadron. Upon the completion of the Joint Anti-Aircraft - Air Corps Exercises, this Squadron participated in the 5th Bombardment Group Demolition Bombing Exercises. With bombing missions scheduled for the day and cooperative tracking missions scheduled for each night, airplanes and crews have been pretty busy.

The 21st Bombardment Squadron, Hickam Field, is in the rehabilitation of the post.

recently completed one of the most important buildings on any post - a "Day Room." It is certainly a great improvement over the tent which was formerly used, declares the News Letter Correspondent. He adds that a number of pieces of new furniture have been obtained for the Day Room.

The 50th Reconnaissance Squadron settled down to normal operations on November 16th, after two weeks of strenuous exercises during the anti-aircraft maneuvers. From this Squadron's standpoint, the exercises were successful, and much valuable training was provided for its personnel.

Demolition bombing exercises commenced on November 21st, this Squadron being attached to the Headquarters and Headquarters Squadron, 5th Bombardment Group, for participation.

NEW P-36's FOR 55TH PURSUIT SQUADRON

"Shuffle off to Buffalo" has been the theme song for all the ranking officers in the 55th Pursuit Squadron, Barksdale Field, La. Captain Nelson has made four trips; 1st Lieut. Sanders, three; and 1st Lieut. Saxton, one. The Squadron now has sixteen new P-36's, and it won't be long until each pilot in the Squadron will be an airplane commander.

Lieut. "Montana" Miller had his first experience as a "belly lander," when the pressure line on a P-36 broke as he tried to let the landing gear down for a landing at Oklahoma City, Okla. Very little damage was done to the plane, and no damage to "Montana."

The commissioned strength of the 55th Pursuit Squadron was increased by two Regular officers from the last graduating class of the Advanced Flying School at Kelly Field. These two officers, 2nd Lieuts. Ivan W. McElroy and Harold B. Wright, have completed their familiarization training on the P-36 and will be ready for full squadron duty when the holidays are over.

The enlisted strength of the 55th Pursuit Squadron has been materially increased since November 5th. From 64 men on that date it was brought up to 83 at the present writing. Sixteen of these new men in the Squadron have had previous service, and the other three are recruits.

Colonel Arthur S. Cowan, Signal Corps, who was identified with Army aviation in the early days and commanded the Signal Corps Aviation School, San Diego, Calif. in 1913, retired for age on April 14, '39

BOMBING PRACTICE IN HAWAII

The News Letter Correspondent of the 5th Bombardment Group, Luke Field, T.H., reports that, after several years of futile efforts to find suitable targets on which to drop live demolition bombs, this organization finally achieved success and has just completed a period of intensive bombing against a variety of water targets during which some 1,028 live bombs were expended. In addition to the regular allowance, fifty-two demolition bombs, including 600, 1100 and 2000-pounders, were made available to the Group. Bombing was conducted on eight days in accordance with a prearranged schedule.

Strange as it may seem, in this land of many islands, not one has been found that we can call our own as a bombing target, declares the News Letter Correspondent. Likewise, with all the miles of beach-line, not one foot has so far been obtainable for the placement of a water target for demolition bombs. As a result, it was necessary to obtain targets which could be towed out to sea for use as aiming points. With the cooperation of the Transportation Section of the Department Quartermaster Depot, a vessel was made available to the Group, and with its assistance various targets were towed to the bombing area south of Oahu and cast adrift. Condemned flying boat hulls, a rectangular frame type target and a "sea serpent" type all were tried with varying success. The hulls furnished a good aiming point but were only good for a short period of bombing before being sunk. A frame type target made from a B-18 wing crate equipped with empty drums for additional flotation and covered with fabric had been built for use as a moored target for practice bombing. This was tried on one day but found to be unsuitable. Due to its construction, it was difficult to tow out to the range and, as soon as the fabric was damaged by hits, was practically invisible.

As a last resort, the Materiel Section was called upon to design and build a target which could be towed out at a reasonable speed, could be seen without difficulty from bombing altitudes and which would stand up under demolition bombing. An additional requirement was that the target must be such that if broken up it would offer minimum hazard to surface vessels. The result, designed and built with the cooperation of the Hawaiian Air Depot in about one and one-half days, resembles a monster of the deep. It consists of a steel cable about 100 feet in length, to which are attached at 3-foot intervals empty oil drums painted yellow. The assembly can be towed by one end, and when in position the ends fastened together. Its visibility is good, and it is practically immune to damage. On the last day of

bombing, direct hits with 2000-pound bombs caused the target to disintegrate for 15 to 30 seconds. In spite of this, it would reappear, and was recovered on completion of the exercise. The only disadvantage of this type is that it does require the services of a towing vessel. This difficulty may be overcome by the use of condemned life rafts or flotation bags tied to a cable. These can be carried on the deck of a relatively small boat and inflated just before being cast adrift. With this type a sea anchor would probably be available to reduce drift if a limited area was available for bombing.

Results of the bombing have not yet been tabulated, but it is believed that they will be satisfactory, considering the limited recent bombing experience in the Group.

Fledglings at Kelly Field

(Continued from Page 1)

they will be commissioned as second lieutenants in the Air Reserve, awarded their hard fought for "wings" as Airplane Pilots, and ordered to extended active duty with tactical units of the Regular Army Air Corps, thereby taking their rightful place alongside their older brothers who, like themselves, successfully completed the very intensive course of instruction given by Uncle Sam's very exacting Air Corps Training Center.

AIR CORPS CHIEF VISITS RANDOLPH FIELD

Major General Henry H. Arnold, Chief of the Air Corps, visited the Primary Flying School, Randolph Field, Texas, on December 10th, while enroute to Washington, D.C., from the West Coast. During the course of his informal inspection of the School, considerable time was spent in the Cadet Detachment area, particular attention being paid to the two new barracks under construction, the first of which will be completed about March 10th, according to the contractor.

Following the inspection, General Arnold addressed the entire Student Officer Detachment. After welcoming the officers to the Air Corps and the Training, General Arnold reminisced of the early days of military aviation when, instead of the complicated instrument boards of the modern airplane, the only instrument was a piece of string attached to a strut. The string indicated, by its streamline, whether the planes of olden days were flying straight and level, climbing, gliding, or slipping.

After remaining overnight as the guest of Brigadier General Barton C. Hunt, commanding the Training Center, General Arnold left for Bolling Field, D.C.

VETERAN DISPATCHER STILL ON DUTY AT
PRIMARY FLYING SCHOOL.

Students and instructors may come and students and instructors may go, but "Sergeant Leonard stays on forever" is a saying on the Primary Stage at Randolph Field that is more truth than poetry. Since September, 1923, more than 15 years ago, the records of every student pilot, arriving with the hope of becoming a qualified pilot, has passed through the office of Sergeant Dale F. Leonard. Starting in the early days of the Primary Flying School at Brooks Field, the veteran noncommissioned officer, who is now chief clerk on the Primary Stage, has seen more than 4,000 students come and go through the school. Many of them fell by the wayside, but almost every pilot now in the service, who was a student at Brooks or Randolph Fields, has a page in the Sergeant Leonard's record book.

Not one student in a hundred who graduated knows Sergeant Leonard personally, however, unless he has served with him after graduation, for only "washouts" who report to the Stage House for their final ride with the Stage Commander have come in contact with him. The others who successfully completed the course may not know Sergeant Leonard, but he knows them for, in addition to handling their records of various sorts, he sees the Identification Boards covered with individual pictures almost daily, and thus becomes acquainted with every one of the 350 student pilots who report at Randolph Field three times each year.

Except for a short tour in Panama, Sergeant Leonard has been on duty continuously on the Primary Stage. He is now Chief Clerk on that Stage with a staff of 13 enlisted men.

CLASS 39-A REACHES HALF-WAY MARK

The present class now undergoing instruction at the Air Corps Advanced Flying School, Kelly Field, Texas, has reached its half-way mark in the course of instruction at this School, with satisfactory progress by all sections in both flying and ground school instruction.

All training was suspended from Friday, December 23rd, to Monday, January 2nd. Practically the entire membership of the class (consisting of 4 Regular Army officers, 6 National Guard officers and 66 Flying Cadets) have taken advantage of this lull in activity by availing themselves of short leaves of absence and forloughs to visit their homes over the Christmas holidays and to relax from their very active two months spent at Kelly Field.

This class is scheduled to graduate from the Air Corps Training Center on
(Continued on Page 13)

KELLY FIELD VISITED BY COLD SNAP

On the morning of December 15th, Kelly Field residents awakened with the shivers, and one and all began to stir around and "take readings" of available thermometers. These registered this year's low of 22 freezing degrees. In downtown San Antonio (where the Sunshine Spends the Winter), the more fortunate residents of that fair city enjoyed more or less balmy weather of a mere 33 degrees. As a result of this "freak" climatic condition, an unbelieving local press alternately described it in its columns as "unusual" and "phenomenon." In one of the city's newspapers, Mr. J.H. Jarboe, local United States Meteorologist was quoted as saying that this freak and unusual "phenomenon" was caused by "rapid radiation."

According to the Kelly Field Correspondent, what Mr. Jarboe had to say on the subject may be so, but it was mighty cold regardless, and all the personnel living on the field in the old, war-time, temporary quarters didn't need to read the articles appearing in the local press to learn about the said "phenomenon." All they knew and were concerned about was that there was no "radiation" present - but cold, YES!

All concerned trust that the new quarters which are now being built at Kelly Field will be completed before next winter so that they may afford the garrison a measure of protection against the vagaries of the "unusual" a la Los Angeles weather just experienced, as well as the annoying dust condition obtaining due to a seven month long Grade drought.

AERIAL GUNNERY PRACTICE FOR PURSUITERS

The 94th Pursuit Squadron, 1st Pursuit Group, Selfridge Field, Mich., started making preparations to leave on January 5th for Valparaiso, Florida, for gunnery practice, which is slated to continue until about March 1, 1939.

The advance echelon, consisting of eight trucks and one ambulance, transporting 110 men under the command of 2nd Lieut. Charles W. Stark, Jr., Air Corps, was scheduled to move toward Valparaiso on January 2nd. Thirty P-35 and P-36A Pursuit planes were to proceed to Valparaiso on the same date, while four P-36A's are to remain home for Winter Test Exercises. The remainder of the 1st Pursuit Group squadrons, consisting of the 17th, 27th and Headquarters Squadrons, will send flights at separately designated periods for attachment to the 94th Squadron.

THE ACHIEVEMENTS OF THE FLYING FORTRESS
Submitted by 1st Lieut. D.M. Kilpatrick, Air Corps

The B-17 Flying Fortress is today universally regarded throughout the Air Corps as a marvelously efficient bombardment airplane, and the once loud prophecies of pessimistic critics are conspicuous by their absence. Some of the glib announcements of these prophets of doom were that the Flying Fortress was too much airplane for any but super-pilots; that it could not be operated except from mammoth airdromes and under perfect conditions; that it couldn't be kept in commission; and that it would have a high accident rate.

We, of the Second Bombardment Group, take such pride in the achievements of our Flying Fortresses that we gladly run the risk of boring the readers of the Air Corps News Letter with a few statistics and historical facts.

The first B-17 was delivered on March 1, 1937, and the 12th B-17 on August 5, 1937. As of December 1st, these 12 airplanes have flown 9,293 hours over land and sea, in summer and winter, in fog and ice, and even in good weather on occasions. This total of hours corresponds to over 1,800,000 miles of flight, which is equal to 72 circumnavigations of the earth at the equator, or to about 122 circumnavigations of the earth on the route flown by Howard Hughes. Such a record proves that these airplanes can be and have been kept in commission a very large percentage of the time.

It is admitted that our accident rate has been high. So high, that out of the original 12 B-17's delivered to us, we have only 12 left. Furthermore, these airplanes are in as excellent flying condition today as they were when they rolled out of the Boeing Factory.

We likewise admit that we have not, as yet, operated from any cow pastures or cotton fields, but that we have landed and taken off from very ordinary airports with no trouble whatsoever. An examination of the following list of fields in which the Group Flagship, B-17 No. BB-10, had landed, will prove our contention that the B-17 airplane can operate from any field from which any other modern tactical airplane can operate:

- Langley Field, Va.
- Municipal Airport, Miami, Fla.
- Randolph Field, Texas
- Fort Riley, Kans.
- Patterson Field, Ohio
- Fort Leavenworth, Kans.
- Mitchel Field, N.Y.
- Hamilton Field, Calif.
- March Field, Calif.

- Coalinga, Calif.
- Sacramento, Calif.
- Bakersfield, Calif.
- Oakland, Calif.
- Seattle, Wash.
- Newark, N.J.
- Bolling Field, Washington, D.C.
- East Boston, Mass.
- Brainard Field, Hartford, Conn.
- Pope Field, N.C.
- Lowry Field, Denver, Colo.
- Post Field, Fort Sill, Okla.
- Cleveland, Ohio
- Minneapolis, Minn.
- Wright Field, Dayton, Ohio
- Santa Monica, Calif.
- Oklahoma City, Okla.
- Phoenix, Ariz.
- Scott Field, Ill.
- Middletown Air Depot, Middletown, Pa.
- El Paso, Texas
- Barksdale Field, La.
- Biggs Field, Texas
- Maxwell Field, Ala.
- Lima, Peru
- Buenos Aires, Argentina
- Santiago, Chile
- Albrook Field, C.Z.
- France Field, Panama, C.
- Harrisburg, Pa.
- Aberdeen, Md.
- Orlando, Fla.
- Tampa, Fla.
- Rocky Mount, N.C.
- Winslow, Ariz.
- Bowman Field, Louisville, Ky.

Our airplane commanders are selected by seniority from all Group officers, except those whose qualifications as staff officers require them to function as such, and furthermore, every officer of the Group who attains the minimum required number of years and hours of flying experience is checked off on a B-17 at the first opportunity. Our airplane commanders, therefore, are:

- Flying Fortress**
- Lt. Col. Robert Olds
 - Maj. V.J. Meloy
 - Maj. H.L. George
 - Maj. C.V. Haynes
 - Capt. H.M. Wittkop
 - Capt. R.B. Williams
 - Capt. C.B. McDaniel
 - Capt. W.D. Old
 - Capt. A.L. Harvey
 - Capt. D.H. Alkire
 - Capt. N.B. Harding
 - Capt. F.J. Lauer

Other fully qualified pilots, who have flown many hours in appropriate airplane command are:

- Maj. E.R. McReynolds
- Capt. B.W. Chidlaw
- Capt. J.S. Mills

Capt. R.E. Koon 1st Lt. E.L. Tucker
 Capt. C.E. O'Connor 1st Lt. W.H. Higgins
 Capt. F.H. Robinson 1st Lt. W.A. Matheny
 Capt. R.F. Travis 1st Lt. W.C. Bentley
 1st Lt. C.E. LeMay 1st Lt. F.E. Glantzberg
 1st Lt. J.W. Egan

Of those who have been transferred to other stations during this period, the following pioneer B-17 pilots contributed many noteworthy flights prior to their departure:

Major Barney M. Giles
 Major John K. McDuffie
 Captain Cornelius W. Cousland
 Captain Archibald Y. Smith

We remember with pride the following achievements:

The East-West continental record by Lieut. Colonel Robert Olds of twelve hours and fifty minutes.

The West-East Continental record by Lieut. Colonel Robert Olds of ten hours and forty-six minutes.

The flight of six B-17's from Miami, Fla., to Buenos Aires, Argentina, in two hops, with a total of 26 hours and 50 minutes flying time for the distance of 5036 miles. This time included time lost in assembly, landing and take-offs.

The flight of three B-17's to Bogota, Colombia.

The interception of the liner REX about 650 miles from New York.

The very successful participation in Joint Army-Navy Exercise, requiring many hours of flight hundreds of miles at sea.

The many hours of tactical operation above 20,000 feet in the recent Fort Stagg anti-aircraft exercise.

We hope that the above explains the mixture of confidence and pride with which we regard our Flying Fortresses.

FLYING CADET DETACHMENT NOTES

Almost all of the October class at the Air Corps Primary Flying School, Randolph Field, Texas, have been fitted with the trousers of the flying cadet uniform.

The initial issue consists of two pairs of trousers and one blouse. To date about eighty blouses remain to be delivered and about five pairs of trousers. Hope was expressed that the initial issue of Flying Cadet uniforms would be completed before the Christmas holidays, which began on December 22nd.

All Flying Cadets are allowed furloughs during the Christmas holidays which will last until 6:50 p.m., January 2, 1939. Judging from the number of applications for furlough which had been submitted, it is safe to point to very few Flying Cadets remaining at Randolph Field during the holidays.

MORE COMMENTS ON ARMY AERIAL PHOTOGRAPHY

Apropos of the rotaprint insert in the previous issue of the News Letter showing the reproduction of a photograph of an Army airplane in a banking position, and underneath same a quotation from the December issue of POPULAR AVIATION embodying the hint that Army aerial photographers should display more sparkle in their "shots" of airplanes in flight, the following comment was received from POPULAR AVIATION:

"We are extremely well pleased to see that the Army Air Corps can take criticism in the light in which it is given. As you know, we have been so 'starved' for fine first-class aviation photographs that we have had to use an uncommon number of British pictures to adequately illustrate articles. There have been many times when we would have welcomed shots made by either Army or Navy photographers in this country. However, you know exactly how much cooperation we have gotten along these lines in the past."

POPULAR AVIATION expresses the hope that the comments now and previously made on aerial photography will spur Air Corps photo sections into doing something about the situation which will have the effect of "pepping up" aviation photographs. Its sister publication - POPULAR PHOTOGRAPHY - has expressed its willingness to pass on any advice or suggestions of a technical nature that might help Army photographers in making a better photographic showing to the public.

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Class 39-A Reaches Half-Way Mark
 (Continued from Page 11)

February 15, 1939, when graduation ceremonies will be held at Kelly Field.

The faculty of the Air Corps Advanced Flying School consists of the following Air Corps officers:

Commandant - Colonel Frank D. Lackland
 Assistant Commandant and Commandant of Student Officers - Colonel E.H. Lohman
 Senior Flight Surgeon - Lieut. Colonel Lloyd W. Ballantyne, Medical Corps.
 Secretary - Major Harvey W. Prosser
 Director of Flying Training - Major Isaiah Davies
 Director of Ground Training - Major Albert B. Pitts.

Senior Instructors
 Bombardment Section - Major John V. Hart
 Obs. Section - Captain Russell E. Randall
 Pursuit Section - Captain Burton M. Hovey, Jr.
 Attack Section - Captain Edgar R. Todd
 Commandant of Cadets
 Captain John F. Wadman

DESIRED CYLINDER HEAD TEMPERATURES
By a Materiel Division Engineer

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Recently, in connection with cowl flap stops installed on A-17 and A-17A airplanes, the question of desired cylinder head temperatures during normal operation has arisen. Apparently some misinformation has become widely accepted to the effect that the minimum temperature for efficient operation is 200° C. Actually, 200° C. is too high for cruising temperatures. Desired temperatures should be from 140° to 180° C.

The reason for reducing the cylinder head temperatures below 200° C for cruising is not because of any difference in the efficiency of power of the engine, but to prolong the life of the cylinder head and to reduce the amount of carbon formation and sludging in the oil. There will be no measurable difference in power output of the engine, at the same r.p.m. and manifold pressure, with cylinder heads at 140° or 200° C. There is not enough difference in the temperatures of the internal parts of the engine to affect appreciably friction horsepower and, likewise, the temperature difference is not enough to cause noticeable difference in volumetric efficiencies. In other words, it makes little difference to the engine, as a power generating machine, whether its cylinder head temperatures are 140° C or 200° C, but it does make considerable difference with a number of individual parts. Obviously, cylinder head temperatures considerably below 140° C or considerably above 200° C would affect power.

Aluminum and most of its alloys have very poor high temperature characteristics. Their strength and fatigue properties drop off rapidly with an increase in temperature. For example, an aluminum casting will withstand 23,600 lbs./min. (yield point, stabilized) at room temperature, but will withstand only 17,500 lbs./sq. in. when stabilized at 200° C. Similar values for 160° C. and 220° C are respectively 19,500 p.s.i. and 16,200 p.s.i. The drop in strength is not in direct proportion to temperature; it becomes more rapid at higher temperatures. As example, the decrease in strength in the 20° C rise between 200 to 220° C is 2 1/2 per cent greater than in a corresponding rise between 160° to 180°-C. No actual values are available on the fatigue characteristics of aluminum castings at elevated temperatures. Experience indicates, however, that the fatigue limits will follow the same general trend as the tensile properties of specimens stabilized at elevated temperatures.

Commercial air line experience indicates that with normal cruising temperatures of 200° and above, cylinder head

failures become much more frequent when the temperatures are held below 200° C. The longer the cylinders are in operation the greater becomes the frequency of failure. In some instances, in the interest of safety, 100 per cent cylinder replacements were made after 1200 hours' operation.

Cylinder head temperatures in excess of 200° C under some conditions, if of necessity, be accepted. In general, such temperatures in properly coded installations will be of relatively short duration, such as during take-off climb and, in case of failure of an engine in multi-engined equipment, during operation of the single engine. Although these temperatures do affect the cylinder life, it is the continuous temperature that has the greatest effect. A temperature in excess of that specified as maximum for take-off and climb or prolonged operation at that temperature will adversely affect the tensile strength and may result in early cylinder failure.

Cylinder head temperatures as measured by the spark plug gasket thermocouple are a relative indication of the entire cylinder temperature. If the heads are excessively hot, the cylinder barrels will be correspondingly hot.

Piston heat is relieved in two ways, the major portion is conducted through the piston rings and skirt to the cylinder walls, the remainder conducted to the engine oil splashed on the under side of the piston. If the cylinder barrel temperatures are high, it indicates that the piston is hotter than desired. Under these conditions the oil contacting the pistons tends to "coke" and forms flake carbon. The carbon remains on the piston which builds up to such an extent that its weight causes it to fall off during operation and collect in the oil system. This flake carbon circulates through the tank and lodges on the oil strainer resulting in collapsed screens, plugged Cuno filters and reduction in oil pressures. In addition, the oil lubricating the piston rings becomes "coked" and causes the rings to stick. Piston rings result in blow-by, loss of power, oil loss from the breathers, and eventual piston seizure. Identical engines, installed in different airplanes in which the cooling in one has been satisfactory, and in the other unsatisfactory, have proved without question the increase in difficulties to be expected in the installations that operate with unsatisfactory cooling.

The minimum cylinder head temperatures, if ever specified, are principally for the purpose of insuring that the spark

plugs have reached a high enough temperature to burn any accumulated oil off the points. The majority of present day plugs are termed "cold running," meaning that they are built to cool under adverse conditions of high power output, and therefore are not quite as efficient in the avoidance of fouling at very reduced temperatures. Obviously, too, at very low cylinder temperatures the oil on the cylinder walls would not flow freely and inadequate lubrication might result. Cylinder head temperatures of 100° C and above are sufficient for adequate lubrication and usually for proper spark plug functioning.

Cylinder head temperature measurements are not as accurate as might be desired. Because a very rugged gauge is necessary to withstand vibration, the gauge error may be as large as 7½° C at 200° C. The accuracy is also affected by improper installation or dirt or grease under the gasket. The temperatures indicated by the spark plug thermocouples are usually less than the actual head temperatures which could only be recorded by more accurate thermocouple installations. This difference is recognized in choosing operating limits. The installation as now standard is in general satisfactory and provides a practical guide for safe operation.

In closing, it may be restated that the engine power output will not vary appreciably with cylinder head temperatures from 140° C to 200° C. Cylinder head temperatures of 200° C and above, if continuous, definitely reduce the operating life of the cylinder.

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PURPLE HEART DECORATION FOR MARCH FIELD ENLISTED MAN.

Sergeant James Barry, 8th Signal Service Company, March Field, Calif., received official notice recently that he will be awarded the Purple Heart on account of a wound received in action, August 29, 1918, while serving as a private first class, Battery C, 108th Field Artillery.

Sergeant Barry, in the face of heavy fire, rescued a wounded soldier. In effecting the rescue he received a severe shoulder wound. Recently he has been recommended for the Soldier's Medal in connection with heroic rescue work during the disastrous flood which swept over Southern California in March, 1937.

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Under Special Orders of the War Department, recently issued, Master Sergeant John Bollinger, of Base Headquarters and Second Air Base Squadron, General Headquarters Air Force, is placed on the retired list at Mitchel Field, N.Y., effective December 31, 1938, and will be sent to his home.

DISTINGUISHED VISITORS AT RANDOLPH FIELD

Randolph Field, Texas, the "West Point of the Air," received numerous distinguished visitors during the month of December. Major General Henry H. Arnold, Chief of the Air Corps, dropped in for an overnight stay, which is described in detail elsewhere in this issue.

Two officers of the French Air Force, Colonel Paul J. J. Gama, newly appointed Commanding Officer of the Istres Air Training Center, France, and Lieut. Col. Rene P. G. Weiser, French Air Attache in Washington, D. C., inspected the functioning of the Primary Flying School on December 20th and 21st. A complete tour of both Primary and Basic Stages was arranged by Brigadier General Barton K. Yount and Lieut. Colonel John B. Brooks, Commanding General of the Air Corps Training Center and Commanding Officer of Randolph Field, respectively.

Considerable interest was evinced by the visitors in the details of student training, the methods of instruction and the type of equipment used. Since the visitors spoke only French, Captain Donald B. Phillips, of Randolph Field, and Lieut. Joseph Conigliaro, Coast Artillery Corps, a student officer at the Primary Flying School, acted as interpreters.

Congressman-elect Albert L. Vreeland, of the 11th New Jersey District, was another visitor at Randolph Field earlier in the month. He made a tour of the station, accompanied by General Yount and Colonel Brooks.

Another visitor was Brigadier General A. O. Seeman, Assistant Quartermaster General in Charge of Construction, who viewed the progress of construction of the two new Flying Cadet barracks which, according to the contract, will be completed in the spring. General Seeman was accompanied by Captain E. V. Dunstan, Construction Quartermaster in this vicinity, and Captain F. H. Kuhn, Randolph Field Quartermaster Officer.

Senator Alberto Salinas y Carranza, of Mexico City, completed the list of distinguished visitors for December. A preparatory schoolmate of Colonel Brooks at Manlius Academy, N. Y., during the years 1909-10-11, Senator Salinas y Carranza, shortly thereafter, went into aviation, taking his training at the old Hempstead, Long Island, N. Y., airdrome in 1912. After serving for several years as a Colonel in the Mexican Army, he resigned his commission to become a senator

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Cold weather service tests will be conducted at Selfridge Field and Oscoda, Mich., during January, on approximately 11 airplanes of various types. The tests will be conducted on newly developed equipment and standard aircraft equipment. Engineering and operating personnel will thus be familiarized with the problems involved in cold weather operation.

STATUS OF REFRESHER TRAINING OF AIR RESERVE OFFICERS.

Of the 19 Air Reserve officers undergoing the refresher training course at the Air Corps Advanced Flying School, Kelly Field, Texas, eleven were scheduled to complete same on December 23, 1938, and then be ordered to extended active duty with tactical units of the Air Corps. These officers, who are non-graduates of the Air Corps Training Center, are rated as "Airplane Pilots," and are:

<u>2nd Lieutenants</u>	<u>Total Flying Time</u>
Armstrong, William C Lakewood, Ohio	1,000
Beckwith, James O., Jr. Burlington, Vt.	2,500
Gibboney, Lawrence R. Cincinnati, Ohio	2,700
Hawkins, Walter L. Oklahoma City, Okla.	2,400
Holmes, William W. Mineral Wells, Texas	750
Koster, Robert J. Mt. Washington, Ohio	1,600
Langmack, Charles J. Albany, Oregon	2,400
Mackey, Joseph C. Columbus, Ohio	2,500
McCurdy, Eugene Quinton, Okla.	1,900
O'Quinn, Claud A. Tifton, Ga.	700
Postal, Frederick H. Chicago, Ill.	700

(Note: Lieuts. Armstrong, Hawkins and Mackey specialized in Pursuit Aviation and the remaining officers in Attack Aviation. The flying time is approximate.)

The other eight Reserve second lieutenants who are still undergoing training at Kelly Field (seven in Bombardment and one - Lewis M. Sanders in Pursuit) are:

Fred M. Morgan	Charles W. Maynard
John A. Laird	Alvin J.H. Mueller
Lewis M. Sanders*	Luther E. Thomas
Norman K. Warner	Cloyce J. Tippet

*Sick at Station Hospital at Fort Sam Houston, Texas.

It is not known at this time when the above eight officers will complete the prescribed course.

The following Air Reserve officers reported at Kelly Field on December 19, 1938, for the advanced portion of the refresher course for Reserve officers:

Second Lieuts. Don D. Cascio, Staten Island, N.Y. (700 hours) and John A.H. Miller, Coffeyville, Kansas (1600 hours.)

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Major Charles M. Savage, Air Corps, has been relieved from duty at the Rockwell Air Depot, Coronado, Calif., and assigned to the 2nd Balloon Squadron at Fort Bragg, N.C.

CHARITY FAIR PROFIT MORE THAN \$7,500

A profit of between \$7,500 and \$8,000 was foreseen for the Langley Field Charity Fair, held on December 2nd, 3rd and 4th, by officers of the Finance Committee who are making a final report on the three-day event. They reported that the receipts exceeded last year's Fair by \$2,000.

The expenses this year trebled those of the first Fair held last year. Eight hangars were utilized instead of five, requiring increased arrangements, lighting and equipment. Although the attendance was 10,000 above last year's, it was not as high as officials had anticipated, because of the inclement weather.

A large part of the expenses were attributed to the Charity Ball, which was held on December 3rd at the Langley Field Gymnasium. This venture was said to have been one of the most impressive social affairs ever held on the Peninsula.

Mayor James V. Bickford, of Hampton, announced that the total quota realized by Hampton, Phoebus and Elizabeth City county from the proceeds of the second annual Peninsula Charity Fair was \$1,551.00. Hampton and the county received \$1,034.00, and Phoebus was the recipient of \$517.00, to be distributed among charitable institutions, and for the aid of the needy at Christmas time. York and Warwick counties each received \$200.00 as their share. The largest share - \$1,749.00 - was turned over to the Newport News authorities.

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1ST PURSUIT PILOTS IN GUNNERY EXERCISES

The following-named officers of the 94th Pursuit Squadron, Selfridge Field, Mich., will participate in the forthcoming gunnery exercises at Valparaiso, Florida, for the periods indicated:

From January 5th to 25th, inclusive:

Captain John F. Egan and 1st Lieut. Winslow C. Morse, Air Corps; 2nd Lieuts. Charles E. Trostel, Marvin L. McNickle, Charles E. Grogan, Andrew D. Moore, Melvin F. McNickle, Dale D. Brannon, George M. MacNicol, Hamilton McClure, James R. Watt and Franklin H. MacNaughton, Air Reserve.

From January 26th to March 9th, incl.:

1st Lieut. Edward W. Anderson, 2nd Lieuts. John R. Ulricson and Morton D. Magoffin, Air Corps.

To remain entire gunnery period:

Major Harold H. George, 2nd Lieut. William R. Clingerman, John G. Braksen, Charles W. Stark, Howard F. Nichols, Edward P. Dimmick and Neel E. Kearby, Air Corps.

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RANDOLPH FIELD HOST TO NEEDY CHILDREN

More than 120 needy and underprivileged children of San Antonio were guests of the six squadrons at Randolph Field, Texas, on Christmas Day for a turkey dinner with all the trimmings. The project was a spontaneous gesture on the part of the enlisted personnel of the various organizations who, realizing that there would be many children whose Christmas would be dull and dreary unless someone invited them to dinner, suggested that each squadron play host to a group.

The children arrived shortly after noon. Busses furnished by the Randolph Field Transportation Company and the Public Service Company of San Antonio. A special showing of technicolor cartoons by the Post Theater was first on the entertainment program. "Santa's Workshop," a whimsical cartoon, dealing with Kris Kringle working all year long at his home at the North Pole making toys for delivery on Christmas Day; "The Three Polar Bears," another color fantasy, and a third picture made up the movie program.

Dinner was ready in the mess halls, which were decorated in honor of the visiting youngsters. At each table assigned to the children, several enlisted men were interspersed to lend assistance should it be needed. Bags of candy, fruit and nuts were handed each child before leaving the dining room, but for the most part the bags went unopened, for every nook and cranny was already filled with roast turkey, mashed potatoes and mince pie.

A tour of the post and the hangar lines, where several airplanes were on display, wound up the program. "It is hoped," declares the News Letter Correspondent, "that this custom, started this year, will become an annual event at the 'West Point of the Air.' The San Antonio branch of the Salvation Army offered splendid cooperation in their selection of the children to be invited to the Christmas Dinner, also in their handling of the children during their stay at the field."

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FLYING ACTIVITIES AT SELFRIDGE FIELD

The 27th Pursuit Squadron recently completed an extensive period of training in interception. Much time was concentrated on improving methods of interception. While at this time the results have not been made final, the belief is expressed that important improvements were made along this line.

In the 94th Pursuit Squadron, the flying of cross-countries to Langley, Benning, Barksdale and Bolling Fields was supplemented by interception problems and aerial gunnery practice.

OBITUARIES

On the morning of December 22, 1938, while piloting a PB-2A airplane some three miles east of Oceanview, Va., on an instrument training flight, Second Lieutenant Gale E. Ellis, Air Corps, pilot, and Private, 1st Class, Charles S. Downer, Air Corps, passenger, both of the 33rd Pursuit Squadron, GHQ Air Force, Langley Field, Va., were killed when the airplane crashed and burned. Parachutes were not used and the cause of the accident has not been determined.

Lieut. Ellis was born in Pennsylvania on February 5, 1914. Following his graduation from the U.S. Military Academy, West Point, N.Y., in June, 1937, when he was commissioned a second lieutenant in the Signal Corps, he was assigned to the Air Corps for flying training. He graduated from the Primary Flying School, Randolph Field, Texas, in June, 1938, and from the Advanced Flying School, Kelly Field, Texas, where he specialized in Pursuit Aviation, on October 5, 1938, on which date he was rated as "Airplane Pilot." Assigned to station at Langley Field, Va., Lieut. Ellis was on duty as Assistant Adjutant of the 33rd Pursuit Squadron since November 2, 1938.

Private Downer was born at Pittsburgh, Pa., April 10, 1910. He enlisted in the Army Air Corps on December 11, 1929, and he served with the 99th Bombardment Squadron at Mitchel Field, N.Y., until September 27, 1933, when he was discharged by purchase. On March 4, 1932, he completed the course for aircraft armorers at the Air Corps Technical School at Chanute Field, Rantoul, Ill., and on May 15, 1932, he completed the course for parachute riggers at this same school. On August 27, 1934, he enlisted for service with the 37th Attack Squadron at Langley Field, Va., and he has been stationed at this field, performing the duties of aircraft armorer, since that time.

First Lieutenant Watson M. Frutchey, Air Corps, met his death on December 14, 1938, while engaged in aerial gunnery practice in the Hawaiian Department. The pilot preceding him having shot the sleeve target from the tow line, Lieut. Frutchey continued his gunnery practice by making diving attacks, firing at a reef about 500 yards off shore. Civilian witnesses stated that, after pulling out of one of these dives into a steep climb the airplane fell off after two or three hundred feet above the water and dived into the sea. The pilot did not use his parachute, and up to this writing his body had not been recovered.

A native of Moorestown, N.J., where he was born on March 13, 1907, Lieut. Frutchey graduated from high school at Easton, Pa.; from Drake Business College and in 1927 from the Montclair, N.J.,

Secretarial School. After being engaged in the heating business for several years, Lieut. Frutchey enlisted in the Air Corps in June, 1930, and was assigned to the 7th Observation Squadron at France Field, Panama Canal Zone. Passing the examination for appointment as a Flying Cadet, he began training at the Primary Flying School, Randolph Field, Texas, with the March, 1932, Class. He graduated from Randolph Field on October 15, 1932, and from the Advanced Flying School, where he specialized in Pursuit Aviation, on February 24, 1933, on which date he was rated as "Airplane Pilot," commissioned a second lieutenant in the Air Reserve, and assigned to extended active duty at Langley Field, Va., where he served with the 33rd Pursuit Squadron in various capacities. Relieved from active duty in January, 1935, Lieut. Frutchey enlisted as a Private in the Air Corps in order to take the examination for a commission in the Air Corps, Regular Army. As an enlisted man he served for a brief period at Bolling Field, D.C., and then at the Boston Airport, Mass.

Appointed a second lieutenant in the Air Corps, Regular Army, August 1, 1935, Lieut. Frutchey was assigned to Selfridge Field, Mich., as Armament Officer, 57th Service Squadron. In the fall of 1936, he was assigned as student to pursue the Aircraft Armament course at the Air Corps Technical School, Chanute Field, Rantoul, Ill. Following his graduation from this School on June 30, 1937, he was transferred to the Hawaiian Department for duty with the 18th Pursuit Group at Wheeler Field. While on duty with this Group, he narrowly escaped death on February 7, 1938, following a mid-air collision, and managed to reach the ground safely through the medium of his parachute.

A distressing aircraft accident in the vicinity of Uniontown, Ala., late in the afternoon of December 23, 1938, resulted in the death of 1st Lieut. James D. Underhill, Air Corps; 2nd Lieut. John W. Pollard, Air Reserve; 2nd Lieut. John H. Hyde, 30th Infantry; Captain Fred Rueb, Jr., Medical Corps; Privates, 1st Class, Sheldon S. Johnson, Humbert D. Narro and Private Ben L. Jones, Air Corps.

Lieut. Underhill, the pilot, was flying a B-18 airplane about five miles southwest of Uniontown, Ala., when a line squall was encountered and the airplane crashed. Up to this writing the cause of the crash has not been determined.

Lieut. Underhill was born in Kansas on April 26, 1910. After graduating from the U. S. Military Academy in June, 1933, when he was commissioned a second lieutenant of Infantry, he was assigned to the Air Corps for flying training. He graduated from the Primary Flying School, Randolph Field, Texas, June 30, 1934, and from the Advanced Flying School, Kelly

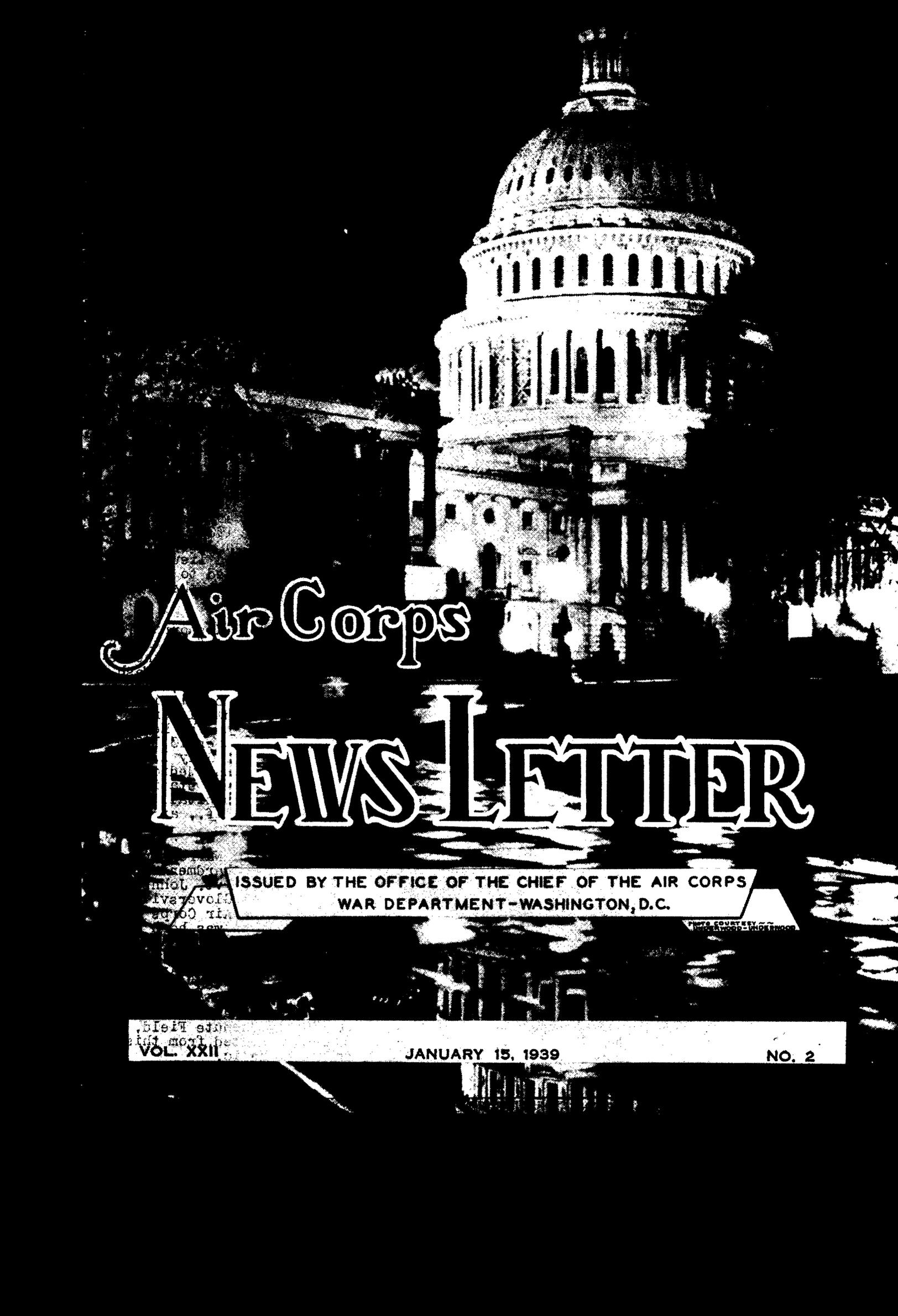
Field, Texas, where he specialized in Bombardment, on October 13, 1934, when he was awarded the rating of "Airplane Pilot" and assigned to duty with the 7th Observation Squadron at France Field, Panama Canal Zone. In January, 1937, upon the completion of his tour of service in Panama, he was assigned to duty at Hamilton Field, Calif. While stationed at this field he qualified as a Dead Reckoning Navigator in the GHQ Air Force.

Lieut. Pollard was born at Medford, Ore. May 20, 1915. After graduating from high school and attending Fullerton, Calif., Junior College for two years, majoring in Aeronautics, he was appointed a Flying Cadet in the Air Corps. Prior to this appointment he served as a Sergeant in the 115th Observation Squadron, California National Guard. Following his graduation from the Primary Flying School, Randolph Field, Texas, February 23, 1938, and from the Advanced Flying School, Kelly Field, Texas, June 16, 1938, where he specialized in Bombardment, he was rated as "Airplane Pilot," commissioned a second lieutenant in the Air Reserve and assigned to extended active duty at Hamilton Field, Calif.

Lieut. Hyde was born in North Dakota, July 23, 1914. He received appointment as cadet at the U. S. Military Academy, West Point, N. Y., July 1, 1933, and upon his graduation therefrom on June 12, 1937, he was commissioned a second lieutenant of Infantry, and was assigned to the 30th Infantry with station at the Presidio of San Francisco, Calif.

Captain Rueb was born in Missouri, February 23, 1902. He graduated from the University of Illinois in 1926, with the degree of A. B., and in 1931 from the Washington University Medical School, with the degree of M. D. He was commissioned a 1st Lieutenant in the Medical Corps Reserve June 9, 1931, and in the Medical Corps, Regular Army, September 10, 1932. He was promoted to Captain, July 1, 1934. In 1934 he graduated from the Medical Field Service School. He was stationed at the Letterman General Hospital, Presidio of San Francisco, Calif., at the time of his death.

Pvts. Johnson, Jones and Narro were all members of the 9th Bombardment Sqdn. at Hamilton Field, Calif. Pvt. Johnson was born May 11, 1912, at Gloversville, N. Y., and enlisted in the Air Corps on Aug. 29, 1936. Pvt. Jones was born at Schlater, Miss., April 20, 1904, and enlisted in the Air Corps, Feb. 15, 1937. Pvt. Narro was born at Nogales, Ariz., October 19, 1911, and enlisted in the Air Corps, May 17, 1937. He graduated as Radio Repairer and Operator from the A. C. Technical School, Chanute Field, Ill. Pvt. Johnson graduated from this School as Airplane Mechanic. The deep sympathy of the Air Corps is extended to the bereaved relatives.



Air Corps

NEWS LETTER

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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VACUUM OPERATED AIRCRAFT INSTRUMENTS

By J. P. Callahan
Materiel Division, Wright Field

The words "gyro instruments" have long since become familiar to those interested in aeronautics. Pilots have used them and have learned how to rely upon them in the form of bank and turn indicators, flight indicators, turn indicators, and automatic pilots. However, just what takes place inside of the cases of these instruments is mysterious not only to the lay person but also to many engineers.

The gyroscope is essentially a spinning wheel, the spin taking place at a high rotational speed. The two fundamental principles of gyroscopic action are those of inertia and of precession. The spinning wheel, if supported in a frictionless manner, will retain the direction of its axis in space, independent of the direction of the earth and of its magnetic fields. It is this effect which is made use of in the Sperry automatic pilot, flight indicator and turn indicator. The second principle, that of precession, is made use of in the bank and turn indicator. When a force couple is exerted on a gyroscope in an effort to change the direction of its spinning axis, the gyroscope exerts a force and moves, unless restrained, in a direction at right angles to the applied force couple. The movement is in a direction that tends to put the plane of rotation of the wheel in the same plane as that of the applied force couple, with the wheel turning in the direction that the applied couple would have it turn. In aircraft instruments the gyroscopic element consists of a brass wheel, approximately 2 inches in diameter and one inch thick, rotating at speeds of approximately 12,000 r.p.m. These brass wheels are supported on the best bearings obtainable in an effort to have the absolute minimum of friction. The bearings in turn are supported in a gimbal or ring and this gimbal again is supported in the best bearings obtainable for the same reason. If there is the slightest amount of friction in either the rotor or gimbal bearings, a gyro will tend to precess and the instruments will read incorrectly.

The above considerations have necessitated the use of air for driving the ro-

tors or spinning wheels. If electrical power were used, it would be necessary to carry wires across the gimbal bearings and probably to install commutators or slip rings in the rotor and brushes in the rotor housing. The friction of the brushes and the stiffness of the connecting wires across the bearings have meant that electrically driven gyroscopes in the past have been used without difficulty only in bank and turn indicators. If air under pressure were used, it would be necessary to remove every bit of oil introduced in the air by the pump, as well as to include safety features in order to reduce the dangers of high pressure which might result from a stoppage in the system. Therefore, buckets have been built into the periphery of the rotors and the rotors have been driven by air under vacuum which is pulled into the instrument through an orifice producing a jet of air which impinges on the buckets.

In the bank and turn indicator operating under a vacuum of two inches of mercury within the instrument case the velocity of the air in the jet is approximately 300 m.p.h. The peripheral speed of the rotor is approximately 60 m.p.h.

A large amount of development in vacuum systems for operating these instruments has taken place in recent years. In the first place the vacuum system is so designed that in case of engine or pump failure the instruments will continue to operate. In multi-engine airplanes this is accomplished by having two vacuum pumps either of which has sufficient capacity to operate all of the instruments in the airplane. A manually controlled three-way vacuum selector valve is installed in such a way that the pilot may select either or both vacuum pumps to operate the instruments. At the present time there is no check valve which has a sufficiently low pressure drop to warrant its use in aircraft vacuum lines. The development of a suitable valve has been initiated. It is confidently expected one will be available in the near

future. With two such valves, one installed in the line to each pump, the pilot could set his selector valve to connect both pumps to the instruments. Then in case of the failure of one pump or of one engine, the check valve would automatically cut it out of the circuit and the instruments would operate without interruption.

In the case of the single engine airplane, the venturi tube has been used to furnish the alternate source of vacuum. However, one type B-4 venturi tube will decrease the high speed of an airplane equipped with a 1000-h.p. engine by $1\frac{1}{4}$ m.p.h. at 200 m.p.h. and $6\frac{1}{2}$ m.p.h. at 300 m.p.h. As higher speeds are being attained, it is obvious that the type B-4 power venturi tube is too inefficient to be used. It should also be remembered that in order to enable a flight and a turn indicator to operate in an emergency glide of approximately 100 m.p.h., two such venturi tubes are necessary. Aircraft manufacturers are now working on retractable venturi tube installations so arranged that as the pilot selects his alternate source of vacuum, the venturi tubes will be thrust into the air stream.

The Air Corps specification for the installation of vacuum operated instruments requires that in single engine airplanes an alternate source of vacuum be provided for the bank and turn indicators only, on the assumption that the bank and turn indicator is the only essential gyroscopic instrument from the viewpoint of safety in descending through an overcast. The alternate source provided should be either a small type A-3 venturi tube or the suction provided by the engine intake manifold. The latter is at a disadvantage in that it is not available in case of engine failure. The type A-3 venturi tube has a drag of .50 pound at 100 m.p.h. as compared with 2.0 pounds at the same speed for the type B-4 venturi tube. This in turn means that the decrease in high speed of an airplane powered with a 1000 h.p. engine at 300 m.p.h. is only 1.8 m.p.h.

The use of the alternate source is manually controlled by the pilot by means of a four-way valve. The bank and turn indicator is connected either to the pump as in normal operation or to the venturi tube or engine intake manifold.

The Air Corps is now using one vacuum pressure regulator which serves the double purpose of regulating the vacuum pressure in the instruments and of relieving the pump when the line to the instruments is closed. It relieves and regulates. This regulator is installed not more than approximately 2 feet away from the pump and is adjusted to maintain a vacuum pressure of 4.00 .25 inches Hg. in the case of the flight indicator for all engine speeds between 1000 r.p.m. and the maximum rated engine

speed.

It is essential that a suction gauge be used with each installation of vacuum operated instruments. The pilot has no other way of knowing when the instruments may be relied upon.

The greatest difficulty encountered in the operation of gyroscopic instruments is that of bearing failure. Moisture and dust pulled into the instrument from the surrounding air cause corrosion and pitting of the bearings. Filters are now standard equipment on all instruments, but they keep out the dust only.

The Materiel Division is now working on a means of eliminating moisture as well as dust from the system. This development is being looked forward to by aircraft instrument engineers with eagerness, as it promises to increase the reliability and life of gyroscopic instruments.

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ACTIVITIES OF THE FIRST PURSUIT GROUP

"It has been noted," says the Selfridge Field Correspondent, "that several Air Corps officers are claiming flying time in excess of 5,000 hours. Selfridge Field has the distinction of having one such officer, Major William R. Sweeley, Air Corps, who has 5160 hours pilot time. In addition, he has several hundred hours' Observer time."

The Cold Weather Equipment Test, which started at Selfridge Field on January 2nd, was called off because of warm weather, and there was every indication that there would be no cold weather in the immediate future. However, on January 12th, three hours after all visiting units had returned to their home stations after the suspension of this test, it commenced snowing, and this continued throughout the day, turning colder that evening.

During the absence of Major Harold R. Wells, Air Corps, Commanding Officer of Headquarters Squadron, 1st Pursuit Group, Captain James E. Briggs, Air Corps, has taken over the Squadron Commander's duties.

Two second lieutenants of the Air Reserve, James O. Beckwith and William C. Armstrong, were assigned to the 17th Pursuit Squadron as of January 12, 1939, upon the completion of student training at Randolph and Kelly Fields. Lieut. Beckwith hails from Burlington, Vt., and Lieut. Armstrong from Cleveland, Ohio.

Sergeant King and Private, 1st Class, Koch, of Headquarters Squadron, signed on the dotted line for another three years. "Could they be thirty-year men?" the News Letter Correspondent inquires.

SOME DETAILS ON OFFICER IN WHOSE MEMORY
LOWRY FIELD WAS NAMED.

An Air Corps officer who saw Francis B. Lowry, Denver World War flyer, shot down and killed on September 26, 1918, recently paid a visit to the field which was named in honor of the Lieutenant.

He was Lieut. Colonel Asa N. Duncan, Executive Officer of March Field, Calif., one of seven surviving members of Lieut. Lowry's squadron still in the Regular Army ranks.

Lieut. Lowry was one of the crack flyers of the 91st Observation Squadron," Col. Duncan said. "I never became intimately acquainted with him because he was killed only a few days after I joined the squadron, but I remember well his being shot down.

A group of five planes had been sent up to photograph bridges near Verdun. This was on the day the Argonne drive was started.

"We were flying French observation type planes. My companion and I were at the tail end of the formation on the left. Lowry and a chap with him by the name of Kelly were in the same position in the group, only on the right."

Col. Duncan said an anti-aircraft shell struck Lowry's ship, splitting it in two. It fell apart in the air and crashed. The planes in the group had been flying at high altitude.

The Ninety-first Observation was one of the worst sufferers of casualties, Col. Duncan said. Its flights were all made over the front line trenches. German guns were constantly trained on this group because of the crack flyers that composed it.

"An example of the way we were hit by casualties," Col. Duncan declared, "was my own case. When I joined the Squadron I was the youngest man in it. Thirty days later I was the oldest."

It was no secret, he said, that Lowry was one of the crack airmen in Uncle Sam's forces, adding that that was not only his opinion but "the old-timers declared he was one of the best."

"It is certainly a fitting tribute," Col. Duncan declared, "that the field located at the Air Corps Technical School should be named after him as a lasting tribute. The Air School here appears to be destined to become one of the Army's great aviation centers."

While at Lowry Field, Col. Duncan was the guest of Col. Jacob H. Rudolph, Lowry Field Commandant. Col. Duncan was taken on an extensive tour of the field and manifested great interest in the work being done.

Col. Rudolph remarked that he was planning to have painted at the School a huge picture of Lieut. Lowry and was negotiating with officials in Washington with the view to securing the necessary permission to allow this painting to be made.

ACTIVITIES AT MARCH FIELD, CALIF.

Lieut. Colonels Benjamin G. Weir, Warner B. Gates, Majors Eugene L. Eubank, Walter R. Peck, Emil J. Kiel and Lucas V. Beau, Jr., left March Field for the Air Corps Tactical School at Maxwell Field, Ala., to pursue a thirty-day course in Naval Tactics, beginning January 9th.

Lieut. Charles M. Fischer, Air Reserve, recently announced plans to start production of a new safety airplane for private flyers. The factory will be located in Glendale, Calif. The airplane will be known as the Fischer Air Coupe.

The old blunt-nosed B-18's are rapidly being replaced on the 19th Bombardment Group's line with the "shark nose" B-18A's.

Brigadier General Barton K. Yount, Commanding General of the Air Corps Training Center, arrived at March Field on January 4th in a B-18 for a short visit.

On Thursday, December 29th, March Field was honored in a fifteen-minute "salute to a National Institution" over the Columbia Broadcasting System.

The new 350-men barracks, nearing completion at March Field, will house the 19th Bombardment Group and greatly reduce the crowded condition at March Field.

DROUGHT BROKEN IN SOUTH TEXAS

South Texas, suffering from a seven months' dry spell, finally got a respite when rain, which started falling on December 22nd, lasted through Christmas Day. Although the local dust problem has been alleviated, temporarily at least, a generalized dust storm swept down on the Primary Flying School at Randolph Field, and all of South Texas on January 5th.

Despite a cloudless sky, visibility was reduced to one-half a mile during most of the day, the local weather station reported, and for the first time this winter flying was cancelled because of dust. Previous to the Christmas holidays, the outlying airdromes used for practice work both on Primary and Basic Stages were very dusty due to the lack of rain, but after weathering this unpleasant situation, the flying personnel were forced to curtail instruction when the generalized dust storm swept down from the northwest.

GLOSSARY OF FLYING CADET TERMINOLOGY
Continued from previous issue

1944

The News Letter Correspondent from Randolph Field, Texas, presents herewith the second installment of Flying Cadet phrases, expressions, etc., which have either been originated in the Cadet Detachment at Randolph Field, or have been given special meanings by that organization. Their publication is for the general information of the Air Corps at large, that they may be acquainted with the phrases as they crop up from time to time.

Contribution of phrases which are popular at various Air Corps stations are requested by the Public Relations Officer of Randolph Field, so that eventually it may be possible to publish a complete glossary of Air Corps Terminology.

Storm -- Name applied to the condition one is in when he is excited and doesn't know what he is doing.

Dawn Patrolling -- One is said to be dawn patrolling when he arises before reveille. Also noun, the Dawn Patrol; also adjective - a Dawn Patroller.

Dodo Tom -- The janitor of B Company, whose service dates back to 1922 at Brooks Field. For the information of former Flying Cadets, Dodo Tom is now on Civil Service status, but still has never been in an airplane.

Dodo -- The name given to a lower classman, which he retains until he is promoted to Basic Stage.

Gun -- Verb. To ask a waiter in the Mess Hall for a second filling of a dish. For example - "Gun the potatoes," meaning, have the potato dish replenished.

Gunner -- One of the lowerclassmen who sit at the end of the tables in the Mess Hall and is charged with keeping all dishes replenished.

H.P. -- Abbreviation for Hot Pilot... one who is exceptionally good.

Gig -- The popular name for a demerit.

Tour -- An hour of marching on the ramp with rifle and white gloves. Given as a penalty.

"6 and 20 Tootsie" -- Any bit of young enticing femininity who is responsible for a Cadet returning late from a week end leave - "6 and 20" meaning six demerits and 20 tours.

Power Birds of War -- Another name for all Flying Cadets.

City of Wings -- Derivative term for Randolph Field, used usually during rest periods of Infantry drill.

Riding the beam -- Gazing at the ceiling after violating a custom in the Mess Hall.

Bunk Flying -- Talking aviation while in the barracks.

"Drive it in the hangar." -- "Let's stop bunk flying."

Cadet Widow -- A young lady who has

known Flying Cadets for several classes.

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RANDOLPH FIELD SETS FLYING RECORD FOR WINTER MONTH.

Amassing a total of 15,994:30 hours of flying time during the month of December, the Primary Flying School at Randolph Field set a record for time during a winter month. When it is remembered that student training was cancelled on December 22nd for the Christmas holidays, the total number of hours presents an even more imposing appearance.

Only twice in the history of Randolph Field has this figure of almost 16,000 hours in a single month been surpassed. Last August, more than 16,500 hours were flown, and during September the all time high of 17,373 hours were flown. At the time, it was computed that Randolph Field airplanes flew a distance of more than three times around the world at the equator every one of the thirty days of that month.

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SOLDIER'S MEDAL PRESENTED TO RANDOLPH FIELD SERGEANT

To the strains of martial music, Sergeant Harry M. Hayes, of the 7th School Squadron, Randolph Field, Texas, was presented with the Soldier's Medal at a review on January 7th by General Barton K. Yount, Commanding General of the Air Corps Training Center, presented the medal.

The entire command of Randolph Field was present to pay homage to Sergeant Hayes, who on July 2, 1938, rescued the pilot and two companions from a plane which crashed into the sea near Mariata Point, Mala Peninsula, Republic of Panama. The pilot, Lt. K.B. Hobson, was dazed from the crash and was in danger of drowning. When Sergeant Hays extricated him from the pilot's cockpit, dragged him to the wing of the overturned plane, and applied artificial respiration, Sergeant Hays then inflated the collapsible life raft and got the three men to the shore.

Sergeant Hays figured in the news on two occasions previous to his heroic rescue in Panama. He made an emergency parachute jump from a disabled airplane near Dryden, Texas, and ten years later made his second emergency leap this time from a Bombardment airplane.

Sergeant Hays entered the service in 1926 at Kelly Field, Texas, and most of his service has been at the Training Center and in the Canal Zone.

PERFORMANCE AND DEVELOPMENT TRENDS IN MILITARY AIRCRAFT AND ACCESSORIES

In an address before the Society of Automotive Engineers at Detroit, Mich., on January 11, 1939, Major General Henry H. Arnold, Chief of the Air Corps, discussing some recent trends in the fighting airplane and accessory development, stated that there is an insistent demand for incredible speeds in our late fighting planes. "It appears," he stated, "that no plane can be considered for future development which will not have a speed in excess of 400 m.p.h., and our engineers are talking quite seriously of 500 m.p.h. as a practical possibility. They propose to reach these speeds possibly in two ways. First, in what is called a 'clean up of design,' as the engineers say, they are going to bring everything indoors and lock the door; nothing will be left projecting or hanging outside. The other method is by a tremendous increase in the horsepower of the motive power plant. There are other accessories and adjuncts which will play vital parts, such as propellers and fuels. The definite trend for the fighter is for a smaller and lighter airplane. It will be small and as light as possible, bearing in mind that it must house a power plant of some 2-4,000 h.p., and there must be a gun platform, probably for a single small cannon of at least 37 mm. caliber. It will have but a single occupant, as the pilot will also serve the gun which will be electrically operated and controlled. There is but one slight variation from this mighty little atom of a fighter which I have just described and that may be the advent of the multi-seater fighter. There has been considerable feeling of late that the modern air war is going to require a plane of the fighter type which can carry more armament, perhaps two cannon and from two to four machine guns of 30-50 caliber, in order that it may engage in combat with the Flying Fortress on more equal terms.

"In this country we jumped to an early lead in this category when our engineers with the cooperation of the Bell Aircraft Company of Buffalo, produced the XFM-1, a multi-seater fighter with which we experimented last year and which has now been ordered in a service quantity of 13. Perhaps no airplane produced last year called forth such widespread comment both at home and abroad as this so-called 'Aircuda.' A British magazine said of it: 'The U.S. Army Air Corps' new Bell fighter is the coming thing. The technical department of every air force in the world would give a lot to have 48 hours alone with this machine.' This oversized fighter version will have one other added advantage - it will have a range which will permit it to accompany and defend our own bombardment formations on long air raids.

"Bombardment aviation is the basic subdivision of the flying arm just as the infantry is the basic ground arm. Upon bomber success will depend the eventual outcome of the air struggle. This knowledge has led us to concentrate on perfection of this type. Military strategists of every nation agree that the modern bomber must have the range to reach any vital target in the enemy nation; it must have the speed to reach that objective in the quickest possible time for efficiency in the performance of its mission and as an aid to escape from hostile pursuit; it must carry a sufficient quantity of explosives to make its errand an economical one and to give it the capacity to destroy any objective.

"These superior requirements have led us to experiment with substratosphere and over-weather flying. During the past year we have had very actively in operation our own substratosphere plane, the XC-35, which has served as a high altitude laboratory. Our success with it indicates the early probability that giant bombers will house their personnel in sealed pressure cabins and that they will be designed and equipped to fly in altitudes in excess of 30,000 feet.

"Last September the President of the United States presented to me as Chief of the Air Corps the Collier Trophy, emblematic of the outstanding aeronautical development of the year, for the work our Corps did in developing and testing the substratosphere plane, the first pressure cabin plane ever successfully flown extensively anywhere in the world. This is a fair indication of the import of high altitude flying, both for military and commercial planes. It would not be surprising, therefore, if a considerable proportion of future air traffic will be beyond the sight and sound of terrestrial inhabitants. Necessity and economy will demand this innovation.

"The great increase in size and speed of air vessels has led to tremendous changes in the dimensions and types of airdromes. There is now a general feeling that we must concentrate on a reduction in airdrome requirements by building into our planes slower landing speeds. I believe that this research will continue with all variety of flaps and slots in an effort to obtain better control and to reduce landing speeds.

"It is possible that during the next five years the airplane may take on an appearance considerably different, at least superficially, from its present form. Basically, the wing-body com-

(Continued on Page 15).

DEATH OF PROMISING YOUNG PILOT

While piloting an A-17 airplane shortly past noon on January 8th, 2nd Lieut. Wallace Embry Nau, Air Corps, was killed instantly when the plane crashed into rimrock some nine miles south of Trichere, Colo., during a snowstorm. The engine was torn from the airplane by the crash. The parachute was not used.

Lieut. Nau was born at Cavalier, N.D., September 16, 1915. He graduated from Marshall, Jr. High School, Pasadena, Calif., in 1931, and from the Pasadena Junior College in 1935. Shortly afterwards he enlisted in the Air Corps and served as a private with the Station Complement at March Field, Riverside, Calif.

Qualifying for appointment as a Flying Cadet, he graduated from the Air Corps Primary Flying School, Randolph Field, Texas, October 10, 1936, and from the Advanced Flying School, Kelly Field, Texas, where he specialized in Attack Aviation, on February 17, 1937. He was given the rating of "Airplane Pilot" and assigned to duty under his flying cadet status with the 95th Attack Squadron at March Field. He received his appointment as a second lieutenant in the Air Reserve on June 20, 1937. About a year later he passed the examination for a commission in the Regular Army, and on July 1, 1938, he was commissioned a second lieutenant in the Air Corps.

On August 26, 1938, Lieut. Nau was transferred to Lowry Field, Colo., for duty as a student at the Denver Branch of the Air Corps Technical School. At the Air Corps Training Center, the deceased young officer proved an apt pupil and he was on the way to a successful career as an Air Corps officer.

The Air Corps extends its deep sympathy to the bereaved relatives of the deceased.

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WHAT'S IN A NAME?

A telegraphic report on an airplane accident at Randolph Field, Texas, gave the name of the pilot as Flying Cadet F.R. Pancake, a student at the Primary Flying School. The accident, however, was not due to a cause such as the name of the pilot would imply. He was engaged in night flying and struck some flood lights in taking off. The Cadet suffered no injury.

In the Army, as in other walks of life, there occur many instances where the name of an individual is peculiarly coincidental with the nature of the occupation in which he is engaged. For instance, in the permanent commissioned personnel of the Regular Army such names are noted as Code, Patient, Ryder and Bridges. Now it just happens that Major James A. Code, Jr., is in the Signal

Corps; Captain William F. Patient is a medical officer; Major H.L. Ryder is a Cavalry officer, and Captain William C.D. Bridges is in the Corps of Engineers. And while touching on these interesting coincidences, what more appropriate name could there be in the Finance Department of the Army than Overcash? Actually an officer by that name has a Reserve commission in that branch of the service.

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AIR-MINDED CALIFORNIA

The Civil Aeronautics Authority of the United States recently released statistics, as of October 1, 1938, and which show that 11 per cent of the 10,091 certified aircraft of the United States is registered in California, and 19.4 per cent of the 21,526 pilots of the nation are also in this State.

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NOTABLE INCREASES IN AIR TRAFFIC

Western Air Express, Burbank, Calif., flew 665,000 passenger miles during November, 1938, to show an increase of nearly 60 per cent over the same month last year, and thus establishing an all-time November passenger record.

Nearly 2,100 passengers were carried on the Western Air Express' border-to-border system during November, as compared with 1850 who flew Western Air Express during the same month in 1937, a gain of 14 percent for November, 1938.

November's mail load of 75,000 pounds represented an increase of 18 per cent over mail poundage carried during November, 1937.

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KELLY FIELD SOLDIER RECEIVES COMMENDATION FROM U.S. COAST GUARD

Private, 1st Class, William M. Hewley, 12th Air Base Squadron, Air Corps Advanced Flying School, Kelly Field, Texas, was the recipient recently of a letter of commendation from Captain William J. Wheeler, U.S. Coast Guard, Commander, New Orleans Division, expressing appreciation for the assistance rendered following the crash of a Coast Guard airplane at Boerne, Texas, on December 19, 1938. The letter follows:

"It has been reported to the Commander, New Orleans Division, U.S. Coast Guard, that Private first class William M. Hewley, U.S. Army, attached to the Air Detachment under your command, rendered exceptionally fine assistance and cooperation following the crash of Coast Guard J2W-1 airplane, V-157, at Boerne, Texas, on the evening of December 19, 1938, which resulted in the tragic

(Continued on Page 8.)

AN "EARLY BIRD" OF PUSHER SHIP ERA.

The dangers that beset aviation's valiant pioneers - stalwart flyers who risked life and limb on every flight - are vivid memories for Clair G. Horton, of San Antonio, an "Early Bird," himself, who cheated death in the thrill-packed era of the pusher type planes.

Today, Horton is rounding out more than 30 years' continuous experience in the aeronautics game. As general foreman of the aircraft shops at Duncan Field, he comes in close contact with the most modern of planes, but he's never piloted any of them.

In fact, he has never flown any plane but those of the old pusher type because his actual flying career extended from June, 1914, to March, 1915. But during that period, and as a mechanic both before and after his pilot days, he saw unfolded, as part of his daily life, the hardships, the drama, the ingenuity and the perils and courage associated with early aviation.

Among his closest associates were such famous pilots as Charles Hamilton, Lincoln Beachey, Glenn H. Curtiss, Eugene Ely, Bud Mars, August Post, James J. Ward and John McCurdy.

Horton's career began in September, 1908, when he obtained employment with the Glenn H. Curtiss Airplane and Motorcycle Co., at Hammondsport, N.Y. There he not only worked on aircraft but assembled motorcycles and tested them on various tracks.

In 1910 he joined the Curtiss Exhibition Company at Baltimore, Md., as aviation mechanic, assembling, maintaining and disassembling exhibition airplanes being flown at various cities throughout the eastern and southern sections of the United States and Cuba.

Horton was in Havana in January, 1911, when J.A.D. McCurdy attempted to fly from Key West to Havana, a distance of 98 miles. McCurdy ran out of oil 10 miles from his destination and dropped into the Gulf of Mexico. He was picked up six minutes later by the United States Navy torpedo boat Paulding, one of five which had been stationed along the route for just such an emergency.

The Curtiss biplane was kept afloat in the shark-infested waters by two safety tanks strapped to the lower surface of the plane, - a happy foresight, for several sharks had collected by the time McCurdy was rescued from the top wing, where he had taken refuge.

Horton recalls that in those days pilots were lacking in number, and it was not unusual for a man to solo himself without any previous flying experience. Such a man was Lincoln Beachey, although it must be said that he previously had been a dirigible pilot for several years.

On his first take-off at Camp Columbia,

Havana, Beachey flew into the wind and made a successful hop, but upon his return trip he ran into disaster. When he set the plane down he mashed his front elevators and bamboo outriggers directly into the president of Cuba's French automobile.

Undaunted, Beachey developed into a daredevil and stunt flyer and in the same year, 1911, flew over Niagara Falls. Also in that year, during the Chicago Aviation Meet, he went up to 11,000 feet and won the world's altitude record.

Later, Beachey was drowned while flying at the California Panama Pacific Fair in San Francisco. The wings of his plane folded up when he was coming out of a vertical dive.

"The year before Beachey was killed," Horton said, "I had seen him flying in a 60-mile gale, dive 5,000 feet straight for the earth and, when 300 feet from the ground, push forward on his elevators and throw the pusher plane bottom up and fly with the wind for a quarter of a mile. Then he would pull the elevator back, dive down again until he came right-side-up and come in and land.

"The plane he used in his trick had no horizontal or vertical stabilizer whatever; there was no fuselage to restrict the maneuvers and I doubt if modern planes could maneuver in as close as he did," Horton said.

Horton remembers James J. Ward, while at Cienfuegos, Cuba, flying a plane with a propeller that was patched together with ordinary glue. Every once in a while the propeller would fly apart and each time it would have to be glued together again.

He recalls the coast-to-coast air race which Ward and Calbraith P. Rodgers entered in 1911 for the \$50,000 prize money offered to the first man to fly from New York to Los Angeles. After Ward had spent about \$20,000 trying for the \$50,000 prize, his backers decided to call it a day, and he went back to exhibition flying.

Rodgers finally landed at Pasadena on Nov. 5, after numerous forced landings. The race had started Sept. 17. On Rodgers' last run out to the edge of the Pacific Ocean, some sea gulls became lodged in the chain and sprocket of his elevator controls and he dove into the beach and was killed, Horton said.

Horton, himself, was nearly drowned twice in accidents involving his hydroplane, once in Lake Winnipeg, Canada, when a strap became enmeshed in the plane's mechanism, throwing the craft out of control and into the lake, and again when the plane overturned in storm-lashed Lake Ponchartrain, La.

In the latter accident Horton was under the water more than two and one-

(Continued on Page 8).

THE MUNICIPAL AIRPORT AT MEDFORD, OREGON

For the purpose of acquainting visiting Air Corps personnel with the accommodations and facilities available to transient aircraft visiting the Municipal Airport at Medford, Oregon, the following information is submitted:

Personnel: (Ninth Corps Area Air Corps Detachment):

Staff Sergeant Willie M. Daws - N.C.O., In Charge - Airplane Mechanic.

Sergeant AM 1st Class William T. Wheeler - Airplane Mechanic.

Private AM 2nd Class Joseph V. Mendrala - Airplane Mechanic.

Corporal AM 1st Class Allen P. Cross - Radio Operator In Charge WYQ.

Private AM 2nd Class Pete H. Christensen - Radio Operator.

Private AM 2nd Class John E. Nagley - Radio Operator.

Private AM 2nd Class Raymond W. Kalbfleisch - Radio Operator.

Accommodations and facilities:

There is always an ample supply of government contract gasoline (92 octane) and oil (120) available. Should more than our normal storage capacity of 2000 gallons of gasoline be required, one or more tank trucks can be sent out from the city in approximately twenty to thirty minutes. Airplanes can be serviced at the rate of about 28 gallons per minute.

Air Corps supplies are very limited but, should the need arise, spare parts can be ordered and delivered by air from the Air Corps Depot in approximately three to four hours.

The municipally-owned hangar has ample storage space, being 100' x 110' inside, and is in excellent condition.

The Air Corps Detachment is equipped with a Chevrolet Reconnaissance Car (8-passenger), which assures ample transportation to and from the city, which is about three and one-half miles from the airport. Additional staff cars and trucks can be secured from the Medford District Headquarters of the CCC, should they be required.

Two mechanics are on duty daily, including Sundays and Holidays, from 8:00 a.m. to 4:30 p.m., and arrangements have been made with the Department of Commerce Radio Operator on duty to call the Airport Superintendent, Mr. T.A. Culbertson, Jr., (2nd Lieut., Air Reserve) and one of the mechanics, should any aircraft arrive after closing hours. The men on duty meet and service all aircraft assigned the Air Corps, the Marine Corps, Navy, National Guard and the U.S. Coast Guard.

There is maintained at the Airport a weather bureau, teletype station, and Department of Commerce radio station in addition to the Army Airways Communication Station. The Department of Commerce radio station (KCX) operates on

263 kcs and stands-by on 3105 kcs. continuously. The Army Airways Communications Station (WYQ) operates on 4220 kcs to aircraft and stands-by on 3105 kcs from 7:00 a.m. to 5:00 p.m. daily, including Sundays and Holidays, but as yet has no facilities for receiving weather reports. Pilots approaching should call the Department of Commerce Station (KCX) for weather and field conditions.

There is no restaurant at the field, the nearest one being approximately two miles. There are three good hotels and three good theatres in the city, all of which have very reasonable rates.

Several pilots have expressed surprise at finding a detachment of the Air Corps on duty at this Airport and the News Letter Correspondent states: "It is believed if the information herein is distributed generally thru the medium of the Air Corps News Letter more personnel will take advantage of the excellent accommodations and facilities at this field. It might be well to stress the fact, too, that this is a regular stop for United Air Lines and the runways (one approximately 3800' x 150' and one 2800' x 100') are always in excellent condition."

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"Early Bird," From page 7.
 half minutes before he could free himself. He had a passenger with him on both occasions. In the latter accident a control cable became lodged between the back of his neck and the upper extension of his life preserver. It took the last bit of Horton's strength to pry the cable loose.

Horton, who remembers many other thrills and tragedies of the "Early Birds," has been a civil service employee since 1917, and has been at Duncan Field for the past 15 years.

"The greatest change in airplane design from 1914 to the present," he said, "is that in early models no instruments or flight indicators, engine gauges and other such things were used. They had 90 horsepower engines with top speed of 55 miles per hour, whereas modern planes have 1,800 to 3,500 horsepower, 40 or more instruments, and fly from 300 to 400 miles per hour."

- San Antonio News

Commendation for Pvt. Hewgley (Fr. P.6.)

death of two Coast Guard officers, a Coast Guard petty officer and an Army non-commissioned officer.

The assistance rendered by Private first class Bill Hewgley, U.S. Army, is very much appreciated, and it is requested that record be made of same."

WE THINK SO, TOO!

The Kelly Field Correspondent submitted the following article, which appeared in the San Antonio Evening News of December 30, 1938, and which he believes should be of interest to Army Air Corps personnel who formerly served at Kelly Field:

"Zooming over the Airdromes
By T. D. Higgins
'Veteran'

An interesting character out Kelly Field way is Mrs. W.E. Rowe, who has operated a little cafe just off the airdrome for the past 21 years, during which time she has seen thousands of Uncle Sam's soldiers and student pilots come and go.

Mrs. Rowe has operated her cafe in a modest two-room frame building since 1917, the same year that construction was started at the present Kelly Field. She was there even before the soldiers arrived.

Mrs. Rowe is very proud of the 'boys' who have called Kelly Field their home during the past two decades.

There have never been any better boys at any post in the country than those who have served here through the years, she will tell you with conviction. She has seen many of them retired from the Army at Kelly Field, she has seen others leave never to return, and she has welcomed others back after they had been transferred to other posts.

Just the other day a soldier who was a private at Kelly Field when he was transferred away 14 years ago, paid her a visit as one of his first acts in returning to the airdrome. And he came back as a first sergeant.

The enlarged classes at Kelly Field, which necessitates more flying, doesn't bother Mrs. Rowe in the least. She said there was lots more flying during the World War. The noise of the airplane motors then was so great one had to shout to carry on a conversation in the cafe.

Mrs. Rowe receives cards from the 'boys' from many distant points. This Christmas she heard from some in Panama and Hawaii. They never forget her. And while they come and go with the years, Mrs. Rowe remains in her little cafe - in the same building she has occupied the past 21 years.

We think so, too, Mrs. Rowe!

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The 74th Attack Squadron, Albrook Field, Panama Canal Zone, is planning a mass flight to Guatemala City late in the month of January, and preparations are being made for a flight to the States. The date of departure of the Albrook Field pilots on this flight has not yet been announced.

REFRESHER RESERVE OFFICERS LEAVE FOR NEW STATIONS.

The following-named second lieutenants of the Air Reserve, who satisfactorily completed the refresher course of instruction for Air Corps Reserve officers at the Air Corps Advanced Flying School on December 23, 1938, departed from Kelly Field on January 4, 1939, for their new stations:

William C. Armstrong and James O. Beckwith, Jr., to Selfridge Field, Mich.

Lawrence R. Gibboney, Walter L. Hawkins, Robert J. Koster and Eugene McCurdy to Barksdale Field, La.

William W. Holmes to Brooks Field, Texas.

Charles J. Langmack to March Field, Calif.

Frederick H. Postal to Langley Field, Va.

Second Lieuts. Joseph C. Mackey and Claud A. O'Quinn were assigned to the Advanced Flying School, Kelly Field, for duty as flying instructors, the former with the Pursuit Section and the latter with the Attack Section.

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RADIO MEN GRADUATE FROM TECHNICAL SCHOOL

Twenty six Air Corps enlisted men were graduated from the Radio Repairers and Operators class of the Air Corps Technical School, Chanute Field, Rantoul, Ill., on December 16, 1938.

These graduates were sent to the following stations:

Scott Field, Belleville, Ill., 1;
Kelly Field, San Antonio, Texas, 2;
Selfridge Field, Mt. Clemens, Mich., 4;
Barksdale Field, Shreveport, La., 4;
Fort Sam Houston, Texas, 1;
Langley Field, Hampton, Va., 4;
Hamilton Field, San Rafael, Calif., 4;
Fort Leavenworth, Kansas, 1;
March Field, Riverside, Calif., 1;
Mitchel Field, Long Island, N.Y., 3;
Chanute Field, Rantoul, Ill., 1.

Since October 7, 1938, there have been 174 men graduated from various courses taught at the Air Corps Technical School. The number of graduates and the courses from which they graduated are as follows:

Radio Repairers and operators, 45;
Airplane mechanics, 58;
Aircraft machinists, 6;
Aircraft welders and sheet metal workers, 12;
Instrument specialists, 13;
Propeller specialists, 13;
Carburetor specialists, 11;
Electrical specialists, 12;
Parachute riggers, 4.

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RANDOLPH FIELD ASSUMES ROLE OF ALMA MATER.

Randolph Field, home of the Air Corps Primary Flying School, played host to 1079 visiting aircraft during the calendar year 1938, a recent survey of Post Operations Office records disclosed.

"Although these figures do not compare in volume with some of the stations in the east and north, they indicate that the 'West Point of the Air' has assumed the role of Alma Mater to an increasing number of graduates, who are beginning to look on the Training Center as more than another school in the United States Army system, for it was at the Primary Flying School that their future careers were moulded," the Air Corps News Letter Correspondent declares.

During the last 15 days of December, pilots and crews from 21 fields in a total of 42 airplanes dropped in at Randolph Field, either for service or for an overnight stop. Among the fields which furnished visitors during this period were:

Adams Field, Little Rock, Ark.
Anacostia, D.C.
Barksdale Field, La.
Bolling Field, D.C.
Chamute Field, Ill.
Hamilton Field, Calif.
Hartford, Conn.
Hensley Field, Texas.
Langley Field, Va.
Maxwell Field, Ala.
March Field, Calif.
Miller Field, N.Y.
Newark, N.J.
Moffett Field, Calif.
Mitchel Field, N.Y.
Lambert Field, Mo.
Lowry Field, Denver, Colo.
Quantico, Va.
Pensacola, Fla.
Wright Field, Ohio.

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LOW FLYING TO READ SIGN POSTS

Just outside the main gate of Randolph Field there are a series of small arrow type road signs, with the mystic directions "Inner B," "Outer B," "Inner J," "Outer J," "Inner H," "Outer H," and many others of a similar nature. Their purpose is to direct the operators of the radio equipped trucks, used in connection with the Instrument Landing System to the proper stations, depending upon wind conditions.

Finally, one afternoon, a young lady of San Antonio asked her escort as they passed through the gate, just what was the meaning of all these mysterious road signs. He was experienced in the art of answering questions of a technical nature, and for fear of becoming involved should he attempt to describe the intricate workings of the Instrument Landing System, he merely passed the question off

with: "Oh, they're just used in connection with Instrument Landings."

Puzzled for a moment over this answer, the young lady then brightened up and said: "Well, I guess the poor pilots have to fly awfully low to be able to read those little signs."

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NEW DAY ROOM DEDICATED AT MITCHEL FIELD

The 2nd Air Base Squadron at Mitchel Field, L.I., New York, dedicated its new Day Room on December 22, 1938. Colonel T.J. Hanley, Base Executive Officer, and Major James W. Hammond, Commanding Officer of the 2nd Air Base Squadron, were among those present during the festivities. First Sergeant Russell Highley delivered an address during the course of which he presented the Day Room to the members of the organization. Refreshments were served and all members present enjoyed themselves.

The new Day Room is located in the basement of "A" Barracks and comprises approximately 3000 square feet of floor space. It is equipped with the most ultra-modern chrome trimmed upholstered furniture and indirect lighting fixtures. A fire place, floor lamps, card tables and magazines make this one of the "homiest" day rooms to be found throughout the Army.

Members of the 2nd Air Base Squadron extend their invitation to visiting enlisted personnel to spend their spare time taking advantage of this comfortable Day Room.

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MORE FUNDS FOR IMPROVEMENTS AT RANDOLPH FIELD.

The Quartermaster General of the Army has advised the Commanding Officer of Randolph Field, Texas, that the President has approved a supplemental State W.P.A. Project in the sum of \$27,390.00 to effect various improvements at that field. The sum of \$9,907.00 is provided for the renovation of twenty double sets of non-commissioned officers' quarters, \$1,003.00 for painting sash and exterior trim of twelve officers' quarters, \$1,673.00 for termite eradication in sixty-two buildings and \$14,807.00 for excavating, hauling and spreading top soil and backfilling around buildings and curbs on the post.

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Upon the completion of their tour of duty in the Panama Canal Department, 2nd Lieuts. Harry L. Donicht and Ladson S. Eskridge, Jr., are to proceed to the Air Corps Technical School for duty, the first-named at the Denver Branch at Lowry Field, Colo., and the last-named at Chanute Field, Rantoul, Ill.

WARRANT OFFICER ADOPTED BY INDIAN TRIBE

Warrant Officer Harrison Billingsley, of the 4th Air Base Squadron, March Field, Riverside, Calif., was recently adopted by the oldest tribe of the Hopi Indians in secret ceremonies conducted in Riverside. He was the 126th white man to be adopted by the tribe. Among his "pale-face" brothers are: a relative, Colonel Billingsley, who for 17 years has been closely associated with the Hopi Indians and acts as their interpreter, and United States Senator Ralph M. Cameron, of Arizona.

Mr. Billingsley now goes by the name of La-ti-so-kee (Fox Claws), and strides to and from his office "tepee" (Air Corps Supply), with the dignity and calm bearing his exalted place of honor in one of America's "first families."

Following completion of the initial ceremonies, two very hospitable chiefs of the tribe - "Looking for White Porcupine Quills" and "Displayed on the Sacred Altar" invited "Fox Claws" to visit the Hopi tribe in its native Arizona.

"Make us a visit," they urged. "Come and see us and stay for a year."

They also invited Mr. Billingsley, who has won many medals as an expert pistol shot, to teach them the use of modern firearms.

Mr. Billingsley learned the customs of the San Blas Indians of South and Central America while on a tour of duty in Panama. The secret tribal order of the Hopi traces its history back to the ancient pyramid builders of Central America who lived in 2000 B.C.

As an obligation of membership, Mr. Billingsley is to attend a gathering for the administration of higher degrees at Mesa, Arizona, in February.

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COLONEL PIRIE REVEALS OLD AMBITION

Touching upon the visit to March Field, Calif., on January 9th, of Colonel John H. Pirie, Air Corps, Commanding Officer of Maxwell Field, Ala., the News Letter Correspondent relates that the Colonel, who formerly commanded March Field, was met upon his arrival by a host of friends, all eager to offer hospitality during his stay. However, to their earnest pleas that he be a guest in one of their homes, Colonel Pirie turned a deaf ear and explained:

"During all the time I was Commanding Officer of March Field, I assigned many a visiting officer to the guest quarters in the Officers' Club, where they had the opportunity of taking a bath in the beautiful, black-tile bathtub installed there. Now it's my turn - and I mean to take advantage of it!"

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Contributions of material for the News Letter are solicited from Hamilton, Scott, Mitchell, Lowry and Chanute Fields.

AIR CORPS' LARGEST POST HAS MINIMUM OF AUTOMOBILE ACCIDENTS.

The Randolph Field Correspondent declares that if a city of almost 3,500 persons went through an entire year with only four minor automobile accidents, consisting of scratched and bent fenders, it would in all probability be nominated as "the nation's Safest City." If this city had an automobile population of one car for every two and a fraction persons, this record would be considered even more remarkable.

"The 'city' of Randolph Field, Texas," he says, "is boasting of this record, which was disclosed in the annual inspection of records in the Provost Marshal's office. The official population of Randolph Field is 2,980 persons who actually live on the post. It is estimated that an additional 500 civilians are employed on the post either on the construction of the two new Flying Cadet barracks, or as civilian employees in various capacities.

"The Provost Marshal's office reports that 1,018 automobiles are registered on the post, but this number does not include the cars operated by the temporarily employed civilians. In addition to the automobiles permanently registered, there is a steady flow of visitors to the 'West Point of the Air,' but despite the 'down town' traffic congestion that occasionally arises, only four minor traffic accidents have been reported in the year 1938."

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VETERAN NONCOMMISSIONED OFFICER RETIRES FROM ACTIVE SERVICE

Sergeant Hubert Jones, veteran of more than thirty years' service, retired at Randolph Field, Texas, on the last day of December, 1938. War Department Orders, dated December 20, 1938, authorized the retirement.

A member of the 47th School Squadron since April 23, 1931, Sergeant Jones was presented with a sporting rifle at a dinner tendered him by his colleagues in the Squadron prior to his retirement. He plans to make his home in or near San Antonio.

Sergeant Jones' service dates from August 28, 1904, when he enlisted in Company M, 29th Infantry. He served with the doughboys until January 8, 1915, when he transferred to the Medical Corps. After another short tour with the Infantry, he transferred to the Air Corps on November 13, 1923, when he was assigned to the 46th School Squadron. He transferred to the 47th School Squadron on April 23, 1931, and served with that unit until his retirement,

RETIREMENT OF TECHNICAL SERGEANT MOORE

Orders were recently received from the War Department placing Technical Sergeant John Henry Moore, 46 years of age, of Kelly Field, Texas, on the retired list of the Army, effective December 31, 1938, after more than 30 years' active service.

Sergeant Moore, who was a member of the Medical Department (Veterinary Service), first enlisted in the Regular Army on October 19, 1909, at Columbus Barracks, Ohio, during which enlistment he served with the 15th U.S. Infantry ("Can Do" Regiment) in the Philippine Islands and in China. During subsequent enlistments he served with the 20th, 8th and 31st regiments of Infantry, both in the States as well as in the Philippines and in Siberia, and in the Medical Department at a number of military posts.

During the World War, Sergeant Moore served with the American Expeditionary Forces in Siberia. He recalls that his service in that far-flung outpost of Uncle Sam was probably the most unpleasant in his career, due to the extremes in temperature. At Vladivostok, where he was stationed, the thermometer registered 110 degrees in the shade (AND NO SHADE) in the summer of 1919, and during the winter of 1918-19 it registered 63 degrees below zero - where for three days and nights the men of his organization were unable to leave their billets due to the severe cold, and of necessity wore practically all their clothing and bedding to keep from freezing. The most pleasant moment of his service in Vladivostok, according to the Sergeant, was the day he led the Armistice Day Parade in that city - which was participated in by all troops of the Allied Armies - when he was Drum Major of the 31st U.S. Infantry Band.

While in the Philippines, Sergeant Moore took personal care of Major General Omar Bundy's favorite mount, and upon receiving his discharge from his then current enlistment was given the very unusual distinction of having his discharge certificate signed personally by General Bundy.

In reminiscing over his happy 30 years of interesting and varied active service, Sergeant Moore looks back to the most pleasant service he enjoyed while serving two tours of duty with the 15th and 20th regiments of Infantry at Fort Douglas, Utah. He reiterated, however, that his more than nine years' service in the Philippines, China and Siberia were probably the most interesting and diversified.

This splendid noncommissioned officer, who has served his country in the far corners of the earth, somehow or other managed to serve at intermittent periods in the San Antonio area for about 10 years. Sergeant Moore owns a home on Monterrey Street in San Antonio, where

he and his wife intend to live part of the time. He also owns a small farm at Cotulla, and he expects to divide his time between these two places, as he has a number of relatives living in both localities.

Sergeant Moore, who is retiring at an unusually young age, entered the service at the age of 17. He benefitted considerably through the double time credit he received for foreign service. He was born and raised at Friendly, West Va. He recalls that after leaving his Friendly home he proceeded to Kentucky to win fame and fortune. He found work there, but states that it did not come up to his expectations, and looking to other fields he decided that the Army was the place for him. He thereupon enlisted, and he has served his flag continuously ever since.

The Sergeant received the grade of Technical Sergeant on December 2, 1938, and is the proud possessor of the World War Victory Medal with Siberia clasp.

During his earlier days in the service (1913-1915), he recalls with pride that he was a member of a detachment at Fort Bliss that escorted General Macado of the Mexican Army and his army of 5,000 men from Marfa, where the General had surrendered to a detachment of the 15th Cavalry, to Fort Bliss, and then to Wingate, New Mexico, for confinement at a detention camp. According to the Sergeant, when the initial muster was made of the Mexican prisoners, some 5,200 were counted, but after about a week, when the word went the rounds of how well the American Army fed its prisoners, an additional thousand prisoners managed somehow or other to "crash" the stockade of the prison.

All of Sergeant Moore's discharge certificates bear the notation of "Character - Excellent," and he has been the recipient of numerous commendations for his meritorious service, the latest being the one received last August from the Quartermaster Supply Officer, 8th Corps Area General Depot, for the efficient manner in which he performed his duties as assistant to the Veterinarian of that Depot during the conduct of the Third Army Maneuvers.

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TEMPORARY PROMOTIONS

Special Orders of the War Department, recently issued, announced the temporary appointment as of January 1, 1939, of Lieut. Colonel John B. Brooks, Air Corps, to the rank of Colonel; Major Joseph H. Davidson, Air Corps, to the rank of Lieut. Colonel, and Captain Everett S. Davis, Air Corps, to the rank of Major.

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COL MYERS TRANSFERRED TO HAMILTON FIELD

Special Orders of the War Department, recently issued, relieved Lieut. Colonel David A. Myers, Medical Corps, Flight Surgeon, from duty in the Office of the Chief of the Air Corps, Washington, D. C., and assigned him to station at Hamilton Field, San Rafael, Calif. Colonel Myers, who has been on duty in the Medical Section, Office of the Chief of the Air Corps, since February 20, 1935, became Chief of that Section on October 17, 1938, upon the relief from duty as Chief Flight Surgeon of his predecessor, Lieut. Colonel Malcolm C. Grow, Medical Corps. A native of Cambria, Wis., where he was born on June 16, 1876, Colonel Myers graduated from high school at Marshfield, Wis. He then attended the University of Minnesota for two years, and in the year 1898 he graduated from McGill University, Montreal, Canada, with an M.D.C.M. degree.

During the World War, Colonel Myers, on October 19, 1918, was appointed a Captain in the Medical Corps, U.S. Army. For several weeks he was on duty as an instructor at the Medical Officers' Training Camp at Camp Greenleaf, Fort Oglethorpe, Ga., following which he was transferred to Payne Field, West Point, Miss., where for a period of about six months he was on duty as Assistant Post Surgeon and later as Post Surgeon.

After a period of duty as a student officer at the Medical Research Laboratory at Hazelhurst Field, L.I., New York, which was then the School for Flight Surgeons, and following his graduation therefrom, he was, on July 25, 1919, transferred to Post Field, Fort Sill, Okla., for duty as Flight Surgeon. On October 18, 1919, he was transferred to Kelly Field, Texas, for duty as Flight Surgeon in connection with the Mexican Border patrol. In April, 1922, he was assigned to duty as Flight Surgeon with the 13th Observation Squadron at Fort Bliss, Texas.

For nearly three years, from April, 1923, Colonel Myers was on duty in the Hawaiian Department as Senior Flight Surgeon, with station at Luke Field. Upon his return to the United States in May, 1926, he was assigned to duty at Crissy Field, Presidio of San Francisco, Calif., as Post Surgeon. Four years later, he was transferred to Mitchel Field, L.I., New York, where he served until April, 1933, when he was assigned to station at Fort Screven, Ga., where he served as Post Surgeon, also as District Surgeon, C.C.C., for the States of Florida, Georgia and South Carolina, until his assignment to duty in Washington in February, 1935.

It was during the year 1926, when Col. Myers was stationed at Crissy Field, Calif., that he and Lieut. Colonel Wm. C. Ocker, Air Corps, conducted certain experiments and research work which led to

the introduction of instrument flying instruction in the Air Corps. It had been firmly established that individuals who were blind-folded, placed in a revolving chair and rotated for a few turns, invariably replied after the chair was gently stopped that they had started to turn in the opposite direction of prior motion. The tendency of an individual's senses to play him false in a situation of this kind is the result of induced vertigo.

Colonel Myers gave this induced vertigo test to Colonel Ocker to ascertain what the mental reactions of an old-time pilot would be when he discovered he could not tell whether he was turning or sitting still. Following the test, Colonel Ocker departed without comment of any kind, but soon returned with a view box which he carried in his hand. Colonel Ocker had realized the fallibility of the human senses as a true barometer of the actions of an airplane in flight, when the vision of the pilot was cut off by fog or other conditions. He and Colonel Myers designed a small box with a bank and turn indicator and other instruments which was intended to be used in connection with the testing of pilots in the revolving chair, in order to demonstrate the fallibility of the human senses when contact with the earth by means of sight was no longer possible.

With the view box in his possession, Colonel Ocker was again examined by Colonel Myers. The revolving chair test was repeated in all combinations of rotation, using the unlighted box to cut out the light and thus remove sight from the equilibrium senses. There was the usual induced vertigo, with the usual inability to tell correctly which way the body was turning. One of the instruments, a gyroscope, was then started, and the Bank and Turn Indicator was put into action. A flashlight bulb installed in the view box was turned on and the tests were repeated. This time every answer was correct as to direction of motion, stopping and starting. Even the confusion of reversals was absent. The sensations were felt the same as before, but by giving the answer shown by the indicator needle on the Bank and Turn instrument instead of the answer prompted by his senses, it was found impossible to confuse him.

This demonstration started the research into blind flying. It was immediately recognized that here was the answer to the inability of pilots to perform blind flying without a visual reference to gravity. By lighting the box, the equilibrium senses were restored to a coordinated action. Merely restoring sight to the equilibrium sense is not enough, however. There must be something within the pilot's range of vision that will act as a ver-

tigo stopper and tell him what position his ship is in with relation to the earth's surface; in other words, allow the pilot mentally to visualize "where is the ground," and to establish his spatial position. The needle on the Bank and Turn Indicator will accurately show motion in either direction, right or left, and will come to a dead center and remain there when there is no rotation.

Constant repetitions of demonstrations with the Ocker-Myers "Vertigo Stopper Box" finally convinced pilots that it was a real lie detector and that, on the ground at least, they could not tell which way they were turning, provided there was no visual reference on which the sense of sight could depend.

With Colonel Ocker at the controls, Colonel Myers spent many hours in the air as a "Blind Flying" observer in a hooded cockpit in which no instruments had been installed. By means of strings he communicated to Colonel Ocker what he (Colonel Myers) thought Colonel Ocker was doing with the ship from time to time. Colonel Ocker kept notes of the various maneuvers the airplane was put through, and upon returning from these flights the observations of Colonel Myers on the actual performance of the plane were checked. Invariably Colonel Myers was unable to tell with accuracy what maneuvers the plane had gone through or in what position the plane was at a certain specified time.

The value of the Ocker-Myers view box became generally recognized as the only means available of instructing pilots and prospective pilots while on the ground in the sensations they would experience and the reactions they would have if they attempted to do blind flying without an artificial horizon. The definition given for "Artificial Horizon" is set forth in the original manuscript reporting on this research work, and is as follows:

"Any instrument or combination of instruments which will quickly, easily and reliably give the pilot information which he may mentally visualize in terms of where is the ground."

Alluding to Colonel Myers as the silent partner of Colonel Ocker in working out the faulty reactions of pilots and the necessity of learning to fly by instruments, a high-ranking Air Corps officer made the statement that if it had not been for Colonel Myers' work it is doubtful whether much progress would have been made in this connection.

Colonel Myers is the author of many articles which have been published in medical journals. Following his graduation from McGill University, he was engaged for several years in post graduate work in medicine at St. Louis, Chicago and Cleveland. He was house surgeon

both at St. Mary's Hospital at Oshkosh, Wis., and St. Agnes Hospital at Fond du Lac, Wis.; Surgeon at the Southwestern Hospital, Lawton, Okla., and Consulting Surgeon at the Kiowa Commanche Indian Hospital, also at Lawton, Okla.; He was also Surgeon with the Southwestern Bell Telephone Company and with the Southwestern Electric Company. For a period of eight years he was Assistant State Health Officer for Oklahoma, and other civic positions he filled were those of City Physician of Lawton, Oklahoma, and County Physician, Commanche County, Oklahoma.

Colonel Myers is a member of the American Medical Association and a Fellow of the American College of Surgeons. He served as assistant professor of Medical Jurisprudence, Oklahoma University; also as president of the Oklahoma State Medical Association; president and vice-president of the Commanche County Medical Association, and vice-president of the Southwestern Medical Association.

A NEW CRASH BOAT REACHES ALBROOK FIELD

A new crash boat, designated as the P-18, was delivered to the Transportation Officer at Albrook Field, Panama Canal Zone, late in December, having been shipped from the States aboard the Army Freighter LUDINGTON. The new rescue boat is a 35-foot cruiser, built in Freeport, Long Island, N.Y., and is capable of speeds up to thirty miles per hour.

A larger boat, which is being rebuilt from a Navy hull, will, when completed, be turned over to the A & R Department at Albrook Field and placed at the disposal of post personnel for recreation purposes.

AN ERRAND OF MERCY IN THE CANAL ZONE

On the afternoon of December 28th, at the request of the Commanding Officer of the Fleet Air Base at Coco Solo, Canal Zone, an aerial search was initiated for a Naval officer, Captain Sherman, who was overdue at Coco Solo, enroute from David, Republic of Panama. Before the search planes had taken the air, a report came in by telephone of the forced landing of the ship, type F4B4, from the town of La Mesa, where there is an auxiliary landing field on the David route. Two A-17's followed by Lieuts. Clark and Gent, were sent to the field, with Lieut. Colonel Wood, S. Woolford, Medical Corps, to care for the injured pilot and return him to his station.

The plane had been crashed in a forced landing and the pilot, suffering from a broken leg and broken ribs, had been brought in on horseback from the

PURCHASE DATE OF FIRST ARMY AIRPLANE

A reader of the Air Corps News Letter, Colonel Charles deF. Chandler, who was affiliated with Army aviation in its early days from the very beginning, and who is now on the retired list, takes exception to the statement in the New Year greeting of the Chief of the Air Corps in the January 1st issue to the effect that July 29th is the anniversary date of the purchase of the first Army airplane. He states that that date is a bit too soon according to the official records, adding that the demonstration of the cross-country feature and speed test for the Wright airplane by Orville Wright was not conducted as part of the official trials at Fort Myer, Va., until July 30th, one day after the date referred to in the greeting as the purchase date. He adds further that after all of the tests had been completed, the Aeronautical Board held a formal meeting on August 2, 1909, which proceedings recommended the acceptance of the Wright machine. The proceedings of the Aeronautical Board were approved by the Chief Signal Officer on the same date.

Colonel Chandler contends that because of that action on the second of August, it would seem that date is the proper one to use as the beginning of Army Aviation.

The News Letter expresses its appreciation to Colonel Chandler for bringing its attention to this matter and gladly accepts the correction.

Colonel Chandler was Commanding Officer of the first Army Aviation Schools at College Park, Md., and Augusta, Ga., during the years 1911 to 1913. He was a member of the Board of Officers conducting the Wright airplane trials at Fort Myer, Va., in 1909. During the World War he served overseas as Chief of the Balloon Section, A.E.F., from November, 1917, to February, 1918, and was then ordered to Washington for duty as Chief of the Balloon and Airship Division.

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Trends in Military Aircraft and Accessories
(Continued from Page 5.)

ponents will probably change but little, as they are molded by inflexible laws governing the contours, designed to pass readily through a fluid medium. But in general arrangement, several recent developments - or more properly speaking, revival of old ideas - have begun to exert quite a large and disturbing influence. The first is the reincarnation of the nose wheel, the same in principle as the one used in 1908. The second revival is still some distance off, but it is yet a more radical change; that is, the tail-first arrangement. This consists in locating the horizontal tail surfaces ahead of the wing and thus utilizing all of the tail surfaces in a lifting effort. It goes without saying that we must im-

prove our aerodynamic cleanness of design and this entails smooth contours, low drag power units, thin wings, completely retractable landing gear, no interference, the absolute minimum of cooling drag, and the general absence of all bumps such as exposed rivets, lap joints, tail wheels, exhaust stacks, air intakes, airdials, and a host of other parasites. A smooth finish is requisite to reduced skin friction drag and all openings must be carefully sealed to prevent leaks and subsequent interference losses. Crew accommodations and arrangement must be reduced to the minimum dimensions consistent with efficient fulfillment of the military mission."

With respect to aircraft engines, General Arnold stated that no matter how aerodynamically clean aircraft may become in the near future, cruising speeds of 300 m.p.h. and above for bombardment aircraft, and high speeds of between 450 and 500 m.p.h. for pursuit planes will mean great increase of horsepower with a considerable stepup in the unit size of engines. Motors of from 3-4,000 h.p. no doubt will be built and engines of larger size will be constructed if these prove satisfactory. He added that "since in all probability we have already attained the maximum size in the individual cylinder, the problem becomes one of grouping a multiple number of cylinders in an arrangement that creates the minimum amount of aerodynamic drag. As airplanes grow larger we undoubtedly shall bury the engines completely within the wing. Mechanical layout, cooling, balance, firing order distribution, and supervising should all be thoroughly analyzed with a view to great improvement.

"Engine development and fuel development have progressed hand in hand. The improvement in anti-knock value of fuels has been largely utilized by present aircraft engines in obtaining increased power output. In this connection the engine of today burns its own weight of fuel in a four-hour flight at cruising speed. For long range airplanes one can readily see where low specific fuel consumption will become more important than specific weight of engine.

"The long range airplane will be of little value unless its power plants are able to function for long periods of time under minimum fuel consumption conditions. Such engines must be designed for extreme reliability and durability far in excess of anything available today. It is quite probable that both the aircraft structure and the propeller will have to be insulated against the abnormally severe vibrations that breed in the engine.

"It appears to me that engine development at the present time is lagging

behind many other aeronautical features and accessories and that there must be early stimulation of engine development to provide us the airplanes we require."

Pointing to the possibility of the aluminum industry being seriously handicapped in supplying all the needs of the aircraft industry in the event of a major emergency, General Arnold stated that the Air Corps is now investigating the manufacture of airplanes made of materials other than aluminum; that bakelite propellers and pulleys have been known for years and instrument boards and cases are now being satisfactorily molded. There is the possibility of molding wing spars and ribs and fuselages from thermo-setting plastics reinforced by wood and wire. "The industry," he said, "can be expected to investigate this possibility fully in the very near future, with what may perhaps be startling results."

"We are today flying a small quantity of spot-welded stainless steel wings and predict that the use of spot-welded stainless steel is on the up grade. More of it will be used, particularly around the engine nacelles to reduce the fire hazard. Perhaps we shall make a complete airplane out of stainless steel eventually."

"The spot welding of aluminum alloys is also on the increase, and may within a few years take the place of flush rivets on exposed surfaces. The Air Corps has one pair of aluminum wings flying today which are entirely spot-welded."

Declaring that the modern airplane requires materials having a high strength-to-weight ratio, General Arnold added that other factors, such as fatigue strength, yield strength, notch sensitivity, ductility, impact strength and corrosion resistance, are of importance and must be considered in designing airplane parts.

"At the present time," he said, "aluminum alloys constitute between 75 and 85 percent of the structural weight of many military airplanes and approximately 50 percent of the weight of the engine. There is room for improvement in the ability of these alloys to resist fatigue. Forging alloys of aluminum have a fatigue strength of only 25 percent of their ultimate, whereas in the forging alloys of steel the fatigue strength approaches 50 percent of the ultimate. Perhaps some brilliant metallurgist in the near future can rearrange the grain structure, or perfect a forging technique to develop further this very important physical property."

"Recent developments of an alloy of magnesium-aluminum-zinc and manganese have improved the resistance to corrosion. It appears that other metallurgical improvements may extend the application of magnesium in aircraft construction."

"The heat-treated low-alloy steels are standard materials for highly stressed airplane and engine parts. The use of SAE-4140 and 4340 steel is increasing be-

cause of their good forging properties and their ability to develop high and uniform properties in relatively heavy sections after oil quenching. There is need for a steel which will have a tensile strength of 250,000 to 300,000 pounds per square inch, together with a reasonable ductility, impact strength and a fatigue strength of half its ultimate. Such a steel has not yet appeared."

"The development of austenitic steels and the nickel-chromium-iron alloys, as well as the nickel-molybdenum-iron alloys, will probably continue in an effort to get a more suitable material for exhaust stacks. We are looking for something which will resist corrosion and scaling and yet have a high strength at elevated temperatures."

"The use of paint-type coatings on the exterior surfaces of metal covered airplanes will probably decrease. It is doubtful if the weight added by paint finishes, their cost of application and maintenance, especially with the difficulty of maintaining the coatings on leading edges of high speed airplanes and the cost of removal and refurbishing after a period of service warrants the return to painted surfaces on future aircraft."

"The replacement of rubber material, which is a strategic material, with rubber-like synthetics is being rapidly accomplished. Synthetic hose for fuel, oil and prestone lines has proved superior to the rubber hose, and the use of synthetics is rapidly extending to tires, tubes and balloon fabrics."

"We expect in the near future to fabricate our parachutes out of man-made material which promises in every respect to exceed the performance and properties of the fiber made by the silkworm. We are doing everything possible to utilize materials made in America. Research and development will continue with the objective of making ourselves self-sufficient so that we will not have to rely upon a foreign source of supply for an essential raw material in a time of national emergency."

Pointing to the prospective increase in horsepower, together with the planned increase in high altitude flying as requiring a considerable acceleration in propeller development, General Arnold stated that the solution of propellers for the smaller airplanes will probably be found in the design of propellers having four and finally six blades of relatively small diameter, mounted either in a single hub or divided equally between two hubs which revolve in opposite directions about the same center of rotation. For the larger airplanes the solution will be found in the development of propellers of three, or possibly four, blades having a diameter upward of 20 feet. The primary design problem here necessitates the satisfactory development of

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blades much lighter in weight than present types while still maintaining satisfactory blade efficiency, endurance and perfect safety. Hollow steel, hollow dural, magnesium, and plastically impregnated wood all seem to be possibilities.

Because of the high efficiency and flexibility of operation of the controllable propeller as it exists today, it will be many years before any other means of propulsion, such as rocket or jet propulsion, can be expected on a large scale.

Referring to the first completely automatic landing to be made anywhere in the world as having been accomplished at Wright Field in August, 1937, and to the fact that many have been made since then, General Arnold stated that although the present equipment has not reached that stage of development that enables us to use it on production airplanes, we hope to service test a small quantity before long. "Our engineers who developed the automatic landing device," he said, "were awarded the Mackay Trophy last September for the outstanding military flight of the year. When completely developed, this apparatus presages the time when conditions of zero visibility will be no limiting factor to the operation of the airplane, either civil or military."

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EXPANSION OF AIR MAIL OUT OF LOS ANGELES

According to statistics compiled by the Los Angeles, Calif., Chamber of Commerce, air mail originating in that city has shown a steady growth year after year. Based on official records, the figures reveal that beginning in 1933, during the era of the spacious trimotored airplanes, the total poundage originating at the Los Angeles post office during that year was 494,661. By the end of 1934, the poundage had grown to 501,168 for that period. For the year 1935, the air mail increased to 910,255 pounds; for 1936 to 1,230,730 pounds; for 1937 to 1,468,579 pounds, and for 1938 to 1,556,772 pounds. Thus, the air mail poundage in 1938 was three and one-fifth times that of 1933.

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RUNWAYS AT ALBROOK FIELD

Construction work on the proposed runways at Albrook Field, Panama Canal Zone, commenced on the morning of December 20th last. It is reported that only one-third of the landing area of Albrook Field is being used at the present time, the remainder being marked off with flags.

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REBUTTAL (Anonymous)

Last night deep in the pages of a slick papered publication which I buy each month to look at the pictures I chanced upon the discreet and dignified advertisement of a dignified insurance firm for his text the adwriter had chosen the calm efficiency of modern flying and mentioning no exceptions declared that olden days of glory and adventure have passed away in this great industry and that calm precision is the byword of the air with pilots raising kids and chickens instead of hell becoming pillars of their communities as it were the message was put across in fine style and quite convincingly but none the less was somewhat erroneous for there is no little of the old harry in everyone who has shaken hands with a stick and I wondered if that adwriter would get canned if some joe forgot his manners momentarily and snap rolled a douglas full of debutantes and other important people no doubt there would be a stink the thought is far fetched yet amusing and it serves my point for I'm certain mister adwriter would qualify his statement with a little asterisk denoting certain air corps activities were he privileged to see a p twenty six being properly maltreated in aerobatic maneuvers for there can be no calm precision when you're tail up in a loose belt and hanging onto a throttle quadrant wondering behind which cloud the ground is hiding.

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U.S. ARMY AIR CORPS GENERAL OFFICERS



HENRY H. ARNOLD
MAJOR GENERAL
CHIEF OF THE AIR CORPS



AUGUSTINE W. ROBINS
BRIGADIER GENERAL
CHIEF, MATERIEL DIVISION



WALTER G. KILNER
BRIGADIER GENERAL
ASST. CHIEF OF THE AIR CORPS



BARTON A. YOUNG
BRIGADIER GENERAL
AIR CORPS TRAINING CENTER

G. H. Q. AIR FORCE



FRANK M. ANDREWS
MAJOR GENERAL
COMMANDING G.H.Q. AIR FORCE



HAWAII



WALTER H. FRANK
BRIGADIER GENERAL
COMDG 18TH COMPOSITE WING



DELOS C. EMMONS
BRIGADIER GENERAL
COMMANDING 13TH WING



ARNOLD N. KROGSTAD
BRIGADIER GENERAL
COMMANDING 2ND WING



FREDERICK L. MARTIN
BRIGADIER GENERAL
COMMANDING 3RD WING

PANAMA



HERBERT A. DARQUE
BRIGADIER GENERAL
COMDG 19TH COMPOSITE WING

NEWS

LETTER



E. L. BROWN

ISSUED BY THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT, WASHINGTON, D. C.

VOL. XXI

FEBRUARY 1, 1939

NO. 5

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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KELLY FIELD GRADUATES ITS LARGEST CLASS

Graduation exercises for the present class (39-A) at the Air Corps Advanced Flying School, Kelly Field, Texas, were set for Wednesday, February 1, 1939. This class, which consists of 4 Regular Army officers, 6 National Guard officers and 161 Flying Cadets, is the largest to graduate from Kelly Field in the history of the Air Corps Training Center.

Plans originally called for the graduation to be held on February 15th, but due to the excellent weather during the first three months of training, the class was enabled to complete the prescribed flying hours and ground school far in advance. Only 6½ days were lost due to inclement weather (including Friday, January 20, 1939).

The roster of students who are expected to graduate is given hereinafter.

Colonel Clarence L. Tinker, Air Corps, who is on duty in the Office of the Chief of the National Guard Bureau, War Department, Washington, D.C., was announced as the principal speaker for the graduation ceremonies. His son, Flying Cadet Clarence L. Tinker, Jr., a student in the Pursuit Section, is expected to graduate with this class.

The graduation exercises will include the customary Aerial Review by the graduates, followed by ceremonies to be held at the Post Theatre, where Colonel Tinker, after introduction by Colonel Frank D. Lackland, Air Corps, Commandant of the Air Corps Advanced Flying School and temporary commander of the Air Corps Training Center, will address the class and present each graduate with his diploma.

Included in the reviewing party, in addition to Colonels Lackland and Tinker, will be Colonel E.A. Lehman, Air Corps, Assistant Commandant of the Air Corps Advanced Flying School; Colonel John B. Brooks and Lieut. Colonel Edwin B. Lyon, Air Corps, Commandant and Assistant Commandant, respectively, of the Air Corps Primary Flying School, Randolph Field, Texas; Lieut. Colonel Coleridge L. Beaven, Medical Corps, Commandant of the School of Aviation Medicine, Randolph Field; and Major John R. Morgan, Air Corps, Director of Flying, Air Corps Training Center. These officers will also occupy seats on the rostrum at the Post Theatre, as well as Colonel Edmond J. Griffin, Post Chap-

lain, and Major Harvey W. Prosser, Air Corps, Secretary of the Advanced Flying School.

Other events scheduled for the day are listed, as follows:

7:30 a.m. - Assembly of Flying Cadets to accept their commissions and accomplish oath of office as second lieutenants in the Air Corps Reserve.

8:30 a.m. - Graduates of the class report to their respective sections.

8:55 a.m. - Flying Cadets from the Basic Stage at Randolph Field to form as a guard of honor, and to witness the review, in front of Post Operations Office.

9:00 a.m. - Graduating class to take stations in airplanes.

9:05 a.m. - Airplanes to taxi out on the field.

9:10 a.m. - Take-off.

Promptly at 9:30 a.m. the Aerial Review will begin.

9:45 a.m. - Various types of airplanes used at the Air Corps Advanced Flying School will be on display in front of Post Operations Office for the inspection of spectators.

10:30 a.m. - Arrival of graduating class at Post Theatre.

10:45 a.m. - Beginning of graduation exercises.

In addition to the thousands of spectators, a large number of distinguished military and civilian guests are expected on that date.

Upon receiving their wings as airplane pilots and their commissions as second lieutenants in the Air Corps Reserve, the Flying Cadets will be placed on active duty at Kelly Field for their initial active duty period. It is expected that they will remain at Kelly Field until February 15th, by which time it is anticipated permanent orders will be received, and they will then proceed to their new stations in their extended active duty status.

The four Regular Army officers will be transferred from their present branches to the Air Corps and will be ordered to duty with tactical units of the Air Corps.

The six National Guard officers will, upon graduation, proceed to their home stations in accordance with instruc-

tions of The Adjutants General of their respective States.

ROSTER OF PROSPECTIVE GRADUATES
Regular Army Officers

Nall, Eugene*	Cav.	Atmore, Ala.
Kelly, Colin P., Jr. **	Inf.	Madison, Fla.
Broadhurst, Edwin B. **	F.A.	Smithfield, N.C.
Sebastian, Henry A. *	Inf.	Gainesville, Texas

* 1st Lieut.; ** 2nd Lieut.

All of these officers graduated from the U.S. Military Academy, West Point, N.Y., Lieut. Sebastian in June, 1934; Lieut. Nall in June, 1935; Lieuts. Broadhurst and Kelly in June, 1937. All of them specialized in Bombardment Aviation.

National Guard Officers - 2nd Lieutenants

Railsback, John Benjamin	Moline, Ill.
Hughey, Robert Jerome	University City, Mo.
Huston, Vincent George	Philadelphia, Pa.
Dunning, John Affleck	San Antonio, Texas
Cantrell, Raymond Lee	Spokane, Wash.
Jones, Robert Lee	Spokane, Wash.

All of these officers specialized in Observation Observation and are members of Air Corps National Guard units of the States as hereinafter indicated, viz: Lieuts. Huston and Railsback, Pennsylvania; Dunning and Hughey, Missouri; Cantrell and Jones, Washington.

Flying Cadets

Attack Aviation

Ellison, Holden Fowler	Altoona, Ala.
Yarbrough, Eugene Terry	Guntersville, Ala.
Breckenridge, John Preston	Paragould, Ark.
Galusha, Henry Leslie	Little Rock, Ark.
Terry, David Dickson, Jr.	Little Rock, Ark.
Gilmore, Jean Dowell	Anderson, Calif.
Hall, Byron Eugene	Campbell, Calif.
Lanford, Wm Archibald	Wood Lake, Calif.
Oliver, Ralph Lorimer	Palo Alto, Calif.
Smith, Weldon Halliwell	Berkeley, Calif.
de Russy, John Huie	Washington, D.C.
Carmack, John Edgar	Decatur, Ga.
Allen, Frank	Chicago, Ill.
Holt, Harry Joseph	Great Lakes, Ill.
Lewis, Dwight Francis	Corning, Iowa
Coyle, Lawrence William	Coffeyville, Kans.
Thornbrough, George Wayne	Lakin, Kans.
Barrow, Leonard James, Jr.	New Iberia, La.
Filbrick, Frederick Neil	Brookline, Mass.
Birchard, Glen R.	Bay City, Mich.
McClure, William Allen	Royal Oak, Mich.
Compton, Keith Karl	St. Joseph, Mo.
McKee, Seth Jefferson	Illmo, Mo.
Bloszies, Raymond Fred	Omaha, Nebr.
Gutru, George Henry, Jr.	Newman Grove, Nebr.
Saunders, Jack William	Athens, N.Y.
Johnson, James Allison	Wagoner, Okla.
Von Tungeln, Herbert A.	Norman, Okla.
Willie, Harold	Asher, Okla.
Giannatti, James	Uniontown, Pa.
Teats, Edward Charles	Pittsburgh, Pa.
Looke, Cecil James, Jr.	Austin, Texas
Crabtree, Martin P.	Decatur, Texas
Sneed, Charles Roy	Evant, Texas
Jenkins, Jack Simmons	Levelland, Texas
Lane, William, Jr.	Marshall, Texas
Dunn, Frank Lowry	San Antonio, Texas
King, Henry Preston	San Marcos, Texas
Hubbard, William Edward II	Sweetwater, Texas

Barksdale, William S., Jr.
Mathewson, Philip Lambeth
Hindson, William Simms
Wrigglesworth, William J.
Stinson, William Emmett
Potter, Philip Orville

Randolph, Va.
Richmond, Va.
Oak Hill, W. Va.
Eau Claire, Wis.
Benton, La.
Sao Paulo, Brazil

Bombardment Aviation

Chaffin, Harold Newt	Fort Smith, Ark.
Sheffield, Charles Paul	Mt. Ida, Ark.
Ford, Ernest Gordon	Pacific Beach, Calif.
McCauley, Clarence V.	Armona, Calif.
Wilson, Harold Frederick	Los Angeles, Calif.
Manson, Hugh Boyd, Jr.	Jacksonville, Fla.
Peffer, David McNair	West Lafayette, Ind.
Holsteen, Theodore F.	Burlington, Iowa
Neely, Clarence Arthur	Ames, Iowa
Price, Bruce Burns	Sac City, Iowa
Berry, James Dean	Gridley, Kans.
Crouch, Robert Edward	Mt. Washington, Ky.
Stansbury, William G.	Tots, La.
Schofield, Parker F.	Malden, Mass.
Dougherty, John Eugene	Minneapolis, Minn.
Harman, Harold M.	Grants, N.M.
Spencer, Truman A., Jr.	Carrizozo, N.M.
Doerr, John Joseph	Poughkeepsie, N.Y.
Heber, Malcolm McMillan	White Plains, N.Y.
O'Neill, Brian	Yorker, N.Y.
Busse, Raymond Joseph	Glenburn, N.D.
Gould, Campbell Henderson	Toledo, Ohio
Keiser, Donald McKay	McComb, Ohio
McNeal, Thomas Carl	Cleveland, Ohio
Worley, Earl Wilson	Littlestown, Pa.
Stiles, Joseph Erhart	Red Lion, Pa.
Aylesworth, Theodore R.	Knoxville, Pa.
Chiles, Clarence Shipe	Corryton, Tenn.
Smelser, Harold Caldwell	Nashville, Tenn.
Morgan, Maurice Allen	Austin, Texas
Banks, Wilson Harper	Brownfield, Texas
Barksdale, Ralph A.	Gainesville, Texas
Bogan, Charles William	McLean, Texas
Glober, George Edward	San Angelo, Texas
Busch, Chester Charles	Kenosha, Wis.

Observation Aviation

Fletcher, Thomas, Jr.	Scott, Ark.
Edwards, Albert Benton, Jr.	Berkeley, Calif.
Babb, Harold Thaddeus	Dalton, Ga.
Holbrook, Thomas Harber	Gonnesboro, Ga.
Jarek, Frank William	Chicago, Ill.
Setchell, James Frederick	Chicago, Ill.
Wiltjer, Clarence P.	Watska, Ill.
Hunfeld, Harold Emmett	Anthony, Kans.
Wright, Adolf Milton	Louisville, Ky.
Dechaene, Andre J.	Elizabeth, N.J.
Rouse, John Albert	Rochester, N.Y.
Schroock, Franklin E.	Buffalo, N.Y.
Tucker, Theodore W.	Cleveland Heights, Ohio
Carter, Roy Milton	Britton, Okla.
Veatch, Bernard W.	Conde, S.D.
Gimble, Sidney Bruce, Jr.	San Antonio, Texas
Gustafson, Roy William	Seattle, Wash.
Marshall, Charles S.	Grated, W. Va.

Pursuit Aviation

Gray, Leon Welton	Tucson, Ariz.
Parker, Kingsbury E., Jr.	San Francisco, Calif.
Turner, Sullins Preston	Atlanta, Ga.
Cellini, Oliver George	Chicago, Ill.
Schwind, Burton Eugene	Chicago, Ill.
Swanson, William Howard	Chicago, Ill.
Waller, William III	Chicago, Ill.

Wilcox, Woodrow Burton
 Beightol, Willis Eugene
 Van der Zee, John Jacob
 Mayden, James Daniel
 McNay, Joe Kenneth
 Moore, Paul L.G.
 Howard, James Alva
 Hardy, Otha Bennett, Jr.
 Bourgeois, Raoul Joseph
 Barnett, James Alex
 Bruce, James R., Jr.
 Evans, John Scrimgeour
 Randall, Herman Ward, Jr.
 Mueller, Robert Burl
 Armstrong, George Herbert
 Morrissey, Robert Lawrence
 Romberg, Edgar Allen
 Fendrich, Charles Nelson
 Radell, Raymond Frank
 Skow, Delmer Norris
 Brownwell, John L.
 DeBole, Arthur Ray
 Grambo, Frederick C.
 Newton, Neil Arnold
 Opeik, Charles Martin
 Rowland, Robert Richard
 Spurgeon, Raymond R.
 Brewis, Paul M., Jr.
 Dick, Newton Robert
 Jackson, J. Garrett
 Stern, Leonard Boston
 Summers, Thomas B.
 Baglier, Robert Lee
 Clark, Eugene Louis
 Camp, Marshall Pyron
 Smith, Joseph Columbus
 Faulkner, Cecil Lee
 Strickland, Eugene L.
 Gayle, Charles Afton
 Henry, John Bailey, Jr.
 Bond, Charlie R., Jr.
 Riddle, Kyle Loyd
 Jenkins, Harry Albert
 Schriever, Gerhard John
 Garrett, Sidmore Neale
 Tinker, Clarence L., Jr.
 Van Acked, Robert D.
 Mowyer, William Wallace
 Giblin, Virgil Monroe
 Marcus, Jake McDonald
 Moore, Archibald Woodrum
 Muffell, Carrell T.
 Smith, Thomas Cullen
 Weltman, John William
 Whiteman, Harold Jennings
 Wood, Curtis Edward

DuSamp, Ill.
 Webster City, Iowa
 Iowa City, Iowa
 Junction City, Kans.
 Louisville, Kans.
 Wichita, Kans.
 Bowling Green, Ky.
 New Iberia, La.
 Frenchville, Mo.
 Detroit, Mich.
 Saginaw, Mich.
 St. Paul, Minn.
 St. Paul, Minn.
 St. Joseph, Mo.
 Billings, Mont.
 Tecumseh, Nebr.
 Lincoln, Nebr.
 Staten Island, N.Y.
 Buffalo, N.Y.
 Devils Lake, N.D.
 Bexley, Ohio
 Columbus, Ohio
 Cleveland Heights, Ohio
 Lakewood, Ohio
 Cleveland, Ohio
 Lodi, Ohio
 Cincinnati, Ohio
 Oklahoma City, Okla.
 Tulsa, Okla.
 Altus, Okla.
 Norman, Okla.
 Weatherford, Okla.
 Ardmore, Pa.
 Clairton, Pa.
 Arlington, Texas
 Brownsville, Texas
 Bellevue, Texas
 Arlington, Texas
 Bellaire, Texas
 Charlotte, Texas
 Dallas, Texas
 Decatur, Texas
 Montalba, Texas
 San Antonio, Texas
 Cumberland, Va.
 Arlington, Va.
 Fort Belvoir, Va.
 Seattle, Wash.
 Shinnston, W. Va.
 Hamlin, W. Va.
 Huntington, W. Va.
 Barrackville, W. Va.
 Marlinton, W. Va.
 Rowlesburg, W. Va.
 Salem, W. Va.
 Huntington, W. Va.

Coast Artillery:
 2nd Lieuts. Barksdale, Wm. S., Jr.; Dick, Mayden and Teats.
 When this class started training at the Air Corps Advanced Flying School, it comprised 176 members. The reduction by five students at graduation time is accounted for by the fact that one Flying Cadet (Ferrell Douglas Hooks) was killed in an airplane accident; three Cadets were discharged for failure to make the necessary progress, and one lost so much time due to illness that he will probably be held over for the next class.
 The State of Texas has by far the largest representation of native sons in the graduating class. The Texans in this class number 26. The States of Ohio and Illinois have 11 students each; California and West Virginia 10 each; Oklahoma, 9; New York and Pennsylvania, 8 each; Kansas, 7; Arkansas and Iowa, 6 each; Virginia, 5; Georgia, Kentucky, Michigan, Nebraska and Washington, 4 each. Other States represented have three or less students.
 Chicago, Ill., with 7 students, leads the cities represented in the graduating class. Her nearest competitor is San Antonio, Texas, with 3 students.

NEW CARGO PLANES FOR KELLY FIELD

The Correspondent of the Air Corps Advanced Flying School reports that information was recently received at Kelly Field to the effect that ten Lockheed C-40A airplanes are being assigned this School for student twin-engine training. He adds that all personnel at this field, and particularly the Bombardment Section, are looking forward with a great deal of interest to receiving this modern type airplane from the Lockheed Aircraft Corporation, Burbank, Calif., at an early date.

KELLY FIELD ENLISTED MEN TRANSFERRED TO COMMUNICATIONS SQUADRON.

Orders were received recently from the War Department directing the transfer of the following-named enlisted men from the 12th Air Base Squadron, Kelly Field, Texas, to the 3rd Communications Squadron. All transfers were made without loss of grade and/or Specialist or Air Mechanic rating, viz:
 Staff Sgt. Francis Le Doux
 Sergeant AM 1st Class Kenneth W. Klise
 Sergeant AM 1st Class Jess R. Guthrie
 Private Spec. 2nd Cl. Oliver D. Gassett
 Private 1st Class, Specialist 4th Class, John H. Carswell
 Private 1st Class, Specialist 4th Class, Charles M. Toon
 Private 1st Class, AM 2nd Class, Bruce T. Canady
 Private, Specialist 6th Class, Walter M. Mayer
 Private 1st Class, Specialist 1st Class, Bertran Chedester.
 These men will remain on duty at Kelly Field.

Students listed above who hold commissions in the Reserve of other branches of the service are listed below, as follows:
Infantry:
 1st Lieuts. Cellini, Fendrich, 2nd Lieuts. Busch, Ford, Gould, McCauley, McNay, Riddle, Weltman, Worley.
Cavalry:
 1st Lieut. Harman, 2nd Lieuts. Thornbrough, Riggleswerth.
Field Artillery:
 1st Lieuts. Fletcher, Von Tungen, 2nd Lieuts. Cornett, Neely, Schroeck, Schwind.

AIR CORPS ACTIVITIES IN HAWAII

With the beginning of a new year, many things new and different are to be noted. The major change resulted from the issuance of General Orders No. 1, Headquarters 18th Wing, Air Corps, for 1939. In accordance with this order, the commands of Luke and Hickam Fields are combined under the Commanding Officer, Hickam Field, and the Headquarters of the 5th Bombardment Group moved to Hickam Field.

Colonel Shepler W. Fitzgerald took over the combined command on the first of January, and Lieut. Colonel Walter F. Kraus assumed command of the 5th Bombardment Group on the same date. The movement of the Group Headquarters to Hickam Field will facilitate administration, since prior to this time the "administrative" section operated at Luke Field and the operations and materiel sections functioned from Hickam Field.

The new year also finds the training program of the Group accelerated and enlarged. Schools in Navigation, Bombing and B-18 Transition for new officers and in Bombardment and Reconnaissance Aviation and Air Force for all officers will occupy at least four afternoons per week for the next three months. Much progress is being made toward the end that every mission will include dropping of some bombs.

The 72nd Bombardment Squadron is now busily engaged in preparing for the training of personnel in Aerial Gunnery. The Squadron recently completed its training of personnel in record bombing. Very satisfactory results were obtained from this bombing training.

During December, the 50th Reconnaissance Squadron continued dead reckoning navigation. Practice bombing was conducted jointly with navigation, using the Morse Field and Ahua Point targets.

On December 14th, the Squadron held a unit exercise with two airplanes and crews attached from the 4th Reconnaissance Squadron. The problem included reconnaissance search and patrol methods at sea, combat bombing and gunnery, and a test of squadron communications facilities.

Lieut. Colonel Coleridge L. Beaven, Medical Corps, is relieved from duty at the School of Aviation Medicine, Randolph Field, Texas, effective about February 15, 1939, and assigned to duty in the Office of the Chief of the Air Corps, Washington, D.C. Colonel Beaven returns to familiar stamping ground, as some years ago he served a tour of duty in the Medical Section of the Office of the Chief of the Air Corps.

COMBINATION INERTIA AND DIRECT CRANKING STARTER.

Laboratory tests at the Air Corps Materiel Division, Wright Field, Dayton, Ohio, have been completed on a new type combination inertia and direct cranking starter. This starter is designed to operate either as a straight inertia starter, a straight direct cranking starter, or a combination of both. It is of the inertia type; that is, the flywheel is energized either by hand or electrically, and the switching arrangement is such that, after the flywheel is energized, the starter can be meshed with the engine and the current held on the motor. The energy stored in the flywheel breaks the engine loose and brings it up to cranking speed, from which point the starter is sufficiently large to continue the cranking. On warm engines the inertia principle need not be used. The switch can be thrown "full on" and the operation of the starter will start immediately.

"WEST POINT OF THE AIR" IN STATE OF TEXAS MOVIE.

Texas' exhibition at the coming World's Fairs, both at New York and San Francisco, will be a continuous showing of a full length technicolor motion picture, depicting the beauty spots of the Lone Star State. The Air Corps Primary Flying School, one of the show places of the State, undoubtedly will play a prominent part in the production, for a three-man camera crew from the Fitzpatrick studios, in Hollywood, producers of the film, visited Randolph Field on three occasions to record in full color the story of Randolph Field, the Flying Cadets, and the 300 airplanes which are in daily use for student training.

The finished picture will be shown in two specially constructed theaters, one at each fair. According to estimates of the Texas State Fair Commission, the picture will be viewed by more people during the two Fairs than it would be were it released on a national basis.

"In connection with the publicity value of this picture to the Air Corps generally, there have been numerous news pictures published from time to time in papers throughout the nation concerning Randolph Field," the News Letter Correspondent states, and he makes the request that such clippings regarding Randolph Field be forwarded to the Public Relations Officer at that station.

FIELD TRAINING BY SECOND OBSERVATION SQUADRON

The 2nd Observation Squadron, Air Corps, Nichols Field, Rizal, P. I., conducted its annual 15 days of field training during the period from November 28 to December 12, 1938. Del Carmen, Pampanga, about 75 kilometers north of Manila, was the base of operations. The strength of the command in the field was 9 officers, 96 enlisted men (6 of whom were attached) and 9 airplanes. These planes comprised 6 O-46's and 3 O-19's.

The trip to Del Carmen was made by airplane and truck convoy. The commissioned personnel were housed and messed in the Pampanga Sugar Central Club. The enlisted men were quartered in a large bodega (warehouse) belonging to the Central. Administrative, Supply, Operations, Radio, Photographic and Mess Sections were established in the immediate vicinity, and all departments functioned satisfactorily. The Del Carmen landing field, located about a mile from the Squadron headquarters, was utilized for landings and take-offs. Reconnaissance cars were used to transport personnel to and from the field.

With the exception of one day of rain, and a typhoon threat which did not materialize, the weather was ideal. All flying missions scheduled were completed and the 4th Composite Group, of which the 2nd Observation Squadron is an element, training requirement of 20 hours of flying under field conditions was fulfilled by each officer.

Among the missions flown were included reconnaissance, photographic, interception and rendezvous problems; liaison with the 24th Field Artillery (Philippine Scouts) and 26th Cavalry (Philippine Scouts) at Fort Stotsenburg; strange field landings in Northern Luzon, formation and unit navigation flights. The airplanes were operated under actual field conditions, and measures for passive defense in the field were adopted. These included dispersion and concealment on and near the landing field, camouflage and organization for anti-aircraft defense. Camouflage nets were used in some cases incident to airplane concealment.

While in the field the organization was inspected on December 7th by Major General John H. Hughes, Commanding General, Philippine Department; Lieut. Colonel Ralph Royce, Department Air Officer, and William H. Crom, Commanding Officer of the 4th Composite Group. All expressed themselves as highly pleased with the encampment and the efforts that had been made for the care and comfort of the enlisted personnel.

Some of the Squadron athletic equipment had been brought from Nichols Field, including golf sets, volley ball and indoor baseball. In addition, the Nichols Field Post Exchange operated a branch adjacent to the bodega where the men were

quartered, and all sundries were available without leaving the area. A library was also provided.

General Hughes was also enthusiastic in his comment regarding the shower baths which had been devised prior to the maneuvers for use in the field, and he said that was field soldiering de luxe.

The officials of the Pampanga Sugar Central cooperated to the fullest extent in making the camp a success. Their two golf courses were available to all. They installed telephones where needed, provided electric power for the radio section when the Squadron plant was temporarily out of commission, etc. They also furnished guides for those who expressed the desire to be conducted through their huge plant to observe the mechanics of sugar making. Many took advantage of this opportunity, and it was a never-to-be-forgotten experience.

Officers on the maneuvers were Major Lloyd C. Blackburn, Squadron Commander; Captain Alden R. Crawford, Adjutant and Operations Officer; 1st Lieut. Tom W. Scott, Engineering Officer; 1st Lieuts. Charles B. Harvin, Assistant Engineering Officer; Harry N. Burkhalter, Jr., Assistant Operations Officer; Henry B. Fisher, Parachute Officer; Andrew Meulenberg, Photographic Officer; 2nd Lieuts. James R. Gunn, Mess Officer; and Edward W. Maschmeyer, Assistant Mess Officer. Second Lieut. Carl K. Bowen, Jr., of the Squadron, was unable to participate in the maneuvers, he being a patient at Sternberg General Hospital convalescing from a leg injury sustained in September. Incidentally, he recently returned to duty and resumed his office as Assistant Operations and Communications Officer.

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MORE GRADUATES OF REFRESHER COURSE

The following-named second lieutenants of the Air Reserve (non-graduates of the Air Corps Training Center), who have been undergoing a course of instruction for Air Corps Reserve officers at the Air Corps Advanced Flying School, Kelly Field, Texas, satisfactorily completed the course in Bombardment on January 21, 1939, and are awaiting permanent assignment orders: Norman K. Warner, Cloyce J. Tippett and Charles W. Maynard.

Seven additional refresher students are pursuing the course at Kelly Field and are expected to complete same at an early date. These seven students are specializing in the various branches of combat aviation, as follows: one Attack, 2 Pursuit, and 4 Bombardment.

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FIRE DESTROYS SUPPLY WAREHOUSE AT CHANUTE FIELD
By the News Letter Correspondent

Chanute Field was visited by the red tongue of Demon Fire on Sunday, January 16, 1939. At about 5:15 p.m., an explosion was heard in the Air Corps Supply Warehouse, Building #53, and immediate investigation disclosed that the building was afire.

The fire was discovered in the east end of the building amid dense smoke that prevented fighting the flames from the inside of the structure. It was believed to have originated in the vicinity of the clothing or rubber storage. Attempts to reach the blaze from the outside quickly spread the fire throughout the old frame structure, and within a comparatively short time the building was ablaze.

The local fire Department immediately responded and made heroic attempts to save the property, but were unable to cope with the situation, due mainly to the age of the building and the type of its construction. This was one of the original buildings erected at Chanute Field during 1917. The fire quickly jumped the intervening space between the Air Corps Supply and the Fire Station-Guard House, and shortly thereafter the latter building was on fire which was soon also out of control.

Upon arrival on the scene, Major William A. Worley and Captain DeWitt T. Mullett, Quartermaster Corps (Fire Marshal and Assistant Fire Marshal, respectively), requested the assistance of the Rantoul, Paxton, Champaign and Urbana Fire Departments, and all of these responded. These fire companies functioned under Major Worley, and largely through their splendid efforts it was possible to confine the blaze to Buildings Nos. 50 and 53. On numerous occasions the Post Headquarters Building was on the point of bursting into flames, but a timely wetting saved the structure. All property had been removed from Headquarters and the Photo Hut, and crews were standing by to evacuate Hangars Nos. 8, 8A, 9A and the Technical School Headquarters Building should they be endangered.

The loss of the Air Corps Supply is a serious one, and provisions have been made to house this important activity in a metal hangar pending the completion of the new construction recently authorized by an act of the last Congress. The new construction is rapidly taking shape, but the warehouse cannot be occupied until such time as the heating plant is completed and in operation.

The thanks of the command are due the Fire Departments and City Fathers of Champaign, Urbana, Paxton and Rantoul, and are cheerfully given. It is doubtful if the fire could have been successfully combated without the valuable as-

sistance given by these gentlemen. As usual in most disasters, the telephone operators maintained their stations throughout the fire. The switchboard is located in Post Headquarters and great clouds of smoke shrouded the structure for more than two hours, yet these operators managed to carry on and maintain communications. At one point it was impossible to remain on duty more than two minutes without relief. These men are especially deserving of commendation for their devotion to duty:

Sergeant Floyd Erickson, Signal Corps, Privates Merle Yard, James Keyish, B.L. Benson, Signal Corps, Private Dale Rotz, Air Corps, student, Class 10, Radio, 2d Trans. Squadron, Middletown Air Depot.

No estimate has been made of the loss, as practically all records were destroyed. A board, composed of Majors James B. Carroll, Roy A. Camblin and Captain Edgar T. Noyes, Air Corps, has been appointed to report upon this matter.

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"PEA-SHOOTERS" PLEASE LANGLEY PURSUITERS

The 35th Pursuit Squadron, Langley Field, Va., is very much pleased with the performance of the pea-shooters (P-36A's). The ships, it is stated, are exceptionally fast and are easily handled, which is what the Squadron has been wishing for all along. Only three have been received so far, but the others are expected in the very near future.

The Correspondent of the 35th Pursuit Squadron, Langley Field, states that every member of this organization, from the lowest ranking private to the Commanding Officer, has a feeling of superiority each time he sees a new P-36A rolled into the hangar for permanent assignment, for, he adds, "it has been quite a while since the 35th has had reason to boast of having real honest to goodness Pursuit airplanes and new ones at that. And there is a possibility that we will soon have enough for each pilot to be assigned to one. This, we know, will greatly increase the efficiency of the Squadron, as we have been operating with only half the number of airplanes we needed."

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During the month of December, 1938, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled a total of 10 airplanes and 51 engines, and repaired 48 airplanes and 11 engines.

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KELLY FIELD CADET LOSES LIFE IN CRASH

Flying Cadet Ferrell Douglas Hooks, 22, of Lamasco, Kentucky, a student in the Bombardment Section of the Air Corps Advanced Flying School, Kelly Field, Texas, was the victim of an unfortunate airplane accident which occurred about twelve miles southeast of San Antonio, Texas, on Saturday morning, January 14, 1939. Cadet Hooks had been on an instrument test flight with his instructor, 1st Lieut. Lawrence B. Kelley, Air Corps, in a BT-2 airplane when the crash occurred that claimed this student's life. According to Lieut. Kelley's account of the accident, he and the student were flying just under the base of clouds about 4500 feet when he noticed that his student, who was under the hood, had placed the plane in a gentle climb. He instructed the student, via interphone, to nose it down a bit to avoid getting into the clouds when, without warning, the plane made a sudden lunge into a vertical nose dive. The instructor remembers that he reached for the control stick and throttle, without success, and was catapulted forward out of the plane.

Lieut. Kelley descended safely with his chute and saw the plane continue in its vertical dive and hit the ground with terrific impact. The plane did not catch fire.

It is impossible to determine the cause of this accident, due to the demolished condition of the airplane, declared the News Letter Correspondent. He adds that Cadet Hooks was considered an "above average" student, particularly in his flying under the hood.

This student attended Western Kentucky Teachers College from September, 1935, to February, 1938, before going to Randolph Field for training. He reported at Kelly Field on October 8, 1938, for advanced training, and was scheduled to graduate with the present class on February 1, 1939. He is survived by his parents, Mr. and Mrs. Luther B. Hooks, of Lamasco, Kentucky. The personnel of Kelly Field and the entire Air Corps extend their sympathy to his parents in their bereavement.

Funeral services for the deceased Flying Cadet were held in the Hanover Funeral Parlors, San Antonio, Texas, at 3:00 p.m., January 16, 1939, and were attended by the faculty of the School and all available members of his class. The remains were escorted to Eddyville, Kentucky, by Flying Cadet James Alva Howard, Air Corps, who was Cadet Hooks' classmate at Western Teachers College as well as at Randolph and Kelly Fields.

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Lieut. Colonel Fabian L. Pratt, Medical Corps, has been relieved from duty at Hamilton Field, Calif., and assigned to duty as Commandant of the School of Aviation Medicine, Randolph Field, Texas, succeeding Lt. Col. Coleridge L. Beaven.

REUNION OF KELLY FIELD "GRADS"

Plans were projected for the holding of a reunion of the February, 1929, class, which graduated from the Air Corps Advanced Flying School at Kelly Field, Texas, in February a decade ago. This class, which consisted of 4 Regular Army officers and 82 Flying Cadets, Air Corps, on its day of graduation on February 15, 1929, has been invited by Colonel Frank D. Lackland, Air Corps, Commandant of the School, to hold its Reunion at Kelly Field. Incidentally, this is the first "home coming" of its kind to be held at that field. First Lieut. William L. Lee, Air Corps, former Chief of the Philippine Army Air Corps, and a member of the February, 1929, class (who is now stationed at Kelly Field), was placed in charge of making all the arrangements, and from all reports the Reunion should prove a huge success.

The program includes the attendance of the "Grads" in a body on Wednesday, February 1, 1939, at the graduation aerial review and ceremonies of the present class now undergoing instruction at Kelly Field; several short business sessions - at which time the election of class officers will be held - a reception, and several other very interesting events.

The hope was expressed that all visiting "Grads" will be accommodated in the Visiting Officers' Quarters during their three or more days' stay at the home of their "Alma Mater," where just ten years ago they, like the youngsters of the present class, experienced the thrill of a lifetime when handed their graduation diplomas and "wings" upon the completion of the very stiff course of instruction at the Army's very exacting Air Corps Advanced Flying School.

The present class, No. 39-A, consists of 4 Regular Army officers, 6 National Guard officers, and 161 Flying Cadets - the largest class in the history of the Air Corps Training Center.

Lieut. Lee was successful thus far in locating all but 30 of the 86 members who graduated with him, and from all indications a large representation will arrive by air and other modes of transportation to attend the Reunion, during the course of which it is expected that a great deal of reminiscing and "hangar flying" will be the order of the day.

It is interesting to note that 37 of the graduates are still in the Regular Army Air Corps, serving at far-flung posts throughout the United States and in foreign service; one is now serving in the Cavalry, having transferred to that branch due to physical disqualification for flying; nine have lost their lives in airplane crashes after graduation; two resigned from the Army to pursue civilian occupations; one retired.

(Continued on Page 9)

V-7967, A.C.

RESERVE ACTIVITIES AT OAKLAND AIRPORT

The 92nd Training Group (Air Corps Reserve), operating at the Oakland Municipal Airport, Oakland, Calif., with Captain George E. Henry, Air Corps, Unit Instructor, and twenty enlisted men from the 9th Corps Area Air Corps Detachment doing the chores for 165 Reserve officers, 23 Enlisted-Air Reservists; 7 BT-9 airplanes, 2 BT-2 airplanes and an O-47A airplane, which is assigned to the Commanding General, 9th Corps Area, takes a breather and reports:

That from July 1, 1938, to December 1, 1938, 40 Air Reserve, Group I pilots completed tours of active duty of 14 days each. The 40 pilots on active duty flew approximately 1410 pilot hours during their tours of duty, in accordance with the training program in effect at this station, and this flying time was distributed as follows:

Basic instrument flying under hood	241 hours
Radio Orientation under hood	191 "
Instrument flying instructor	431 "
Aerial gunnery on ground targets	192 "
Night flying proficiency and navigation	204 "
Formation	152 "

A total of 70 Air Reserve pilots engaged in inactive flying training at this station during the period from July 1 to December 31, 1938, flew a total of approximately 1323 pilot hours on missions listed below:

Pilot proficiency	350 hours
Air Navigation, Radio	215 "
Air Navigation, Miscellaneous	314 "
Formation Flying	143 "
Instrument Flying under hood and Instrument Instructor	302 "

The total aircraft hours flown during active and inactive training during the period from July 1 to December 1, 1938, was:

Active duty trainees	1082 hours
Inactive training	1095 "

The calendar year 1938 passed on without any injury to flying or ground personnel. Aircraft damage totaled but one damaged wing and two scratched wing tips on account of ground loop as the result of pilots quitting flying before their airplanes were safely in the hangar.

In concluding the above summary of the flying activities at the Oakland Airport the News Letter Correspondent states:

"This operative would not dare to refer to climatic conditions of this part of the country or to a new Island located in San Francisco Bay, called 'Treasure Island,' where, according to reports, there seems to be much activity and feverish resolve of exhibitors and fanciers to start off with a bang on February 18, 1939, to open what is called 'The California World Fair, 1939.' It is

anticipated that numerous Air Corps pilots on radio air navigation training flights will be anxiously listening for 'OA' and discover that they will just have time to 'take in' the Fair. They can then return back East and inform the people around New York City to 'Go West and see a Fair.' (No pipe for Treasure Island meant, but OUR Fair is going to be something no one should miss)."

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KELLY FLYING CADET IS PROMINENT ATHLETE

By the Kelly Field Correspondent

It's a long way from knocking a puck around on a Canadian ice hockey rink to winging your way across the skies in one of Uncle Sam's Pursuit ships, but that is the road traveled by Flying Cadet Raoul Joseph Bourgoin, Air Corps, 23 years of age, who will be graduated from Kelly Field with the February class.

Back in 1933, when Bourgoin strapped on his skates for the last time for St. Joseph's University of Montreal, N.B., Canada, he little dreamed that today he would be looking forward to replacing those silver skates with a pair of Uncle Sam's coveted silver wings.

Bourgoin, who is a native of Frenchville, Maine, attended St. Joseph's University for three years. He then enrolled in the Madawaska Normal Training School and two years later left there to continue his studies at the University of Maine. He was graduated from the University with a Bachelor of Science degree.

During his toils for an education, Bourgoin took time out for athletics and probably earned letters in more sports than any other Cadet now training at Kelly Field. In addition to being active in the sports commonly known to the American youth - such as football, basketball, baseball, tennis and track - he participated in rugby, ice hockey, and the winter carnivals that are so dear to the hearts of those in the north.

In the winter carnivals he won honors in the ski jumping, racing, and cross-country events. He was an eager participant in the snowshoe obstacle race, ice skating, and the sprints.

After graduating from college, Bourgoin accepted the role of teacher and coach in a high school at Dover, Foxcroft, Maine. Here he earned a reputation by coaching both his football and basketball teams to championships. During the summers he worked as a Red Cross examiner. One summer, while talking over old times with an Alpha Tau Omega fraternity brother, he learned of the "West Point of the Air" at Randolph Field and the training given young men by the United States Govern-

(Continued on Page 9.)

COYOTE LOSES TO MACHINE AGE IN BATTLE WITH AIR CORPS OFFICER
By the March Field Correspondent

Major Walter K. Burgess, Commanding Officer, Headquarters Squadron, 1st Wing, recently had an opportunity to remember and use tricks of horsemanship he learned during his youth in the cattle country of Eastern Oregon. This time, however, Major Burgess' horse was an automobile, and the object of his pursuit a large coyote.

Returning to March Field from Riverside one day not long ago, Major Burgess noticed a coyote run across the highway and enter a large, unfenced stubble field near which some sheep were grazing. Driving off the road, through the shallow ditch and into the field, Major Burgess took up the pursuit, riding off-side on the swiftly running coyote, and soon getting him into a mill. For the first three minutes of the chase, the coyote's speed was 30 miles an hour, according to Major Burgess' speedometer. Running in wide circles, the coyote kept looking back over his shoulder. He would feint a turn in one direction, but execute it in the opposite direction, while always the automobile would stay to the rear and the left of him, forcing him into tighter and tighter circles. After six minutes the coyote's speed dropped to 20 miles an hour. This gradually decreased until, at the end of 20 minutes, he was running about 6 miles an hour.

During all this time, Major Burgess kept in the off position to the left side and in the rear of the animal, closing the mill until the circles were not over a hundred yards in diameter.

At the end of twenty-two minutes, the coyote, still gamely trying to elude his pursuer, had slowed down to a mere stagger. Then, his tongue hanging out, his body exhausted, he fell directly in front of the oncoming car.

Thrilled by the coyote's game efforts to escape, Major Burgess was sorely tempted to let him go, but the fact that coyotes have done so much damage to poultry and small domestic animals on farms in the vicinity of March Field, prompted him to run over the prostrate animal. Thus, the coyote died, a victim of the very method employed by it in slaying sheep and other small animals.

The coyote, which weighed more than 35 pounds, was turned over to Major Bower, March Field Veterinary. When Major Burgess called the Riverside County Sheriff's Office, hoping to collect the \$5.00 bounty generally paid for coyotes, he learned that payment had been discontinued last year due to lack of county funds.

This method of forcing the coyote into a mill while the pursuer stays on the outside of his circle, pushing him in

tighter and tighter, is also used by two or more stockmen in running down and rounding up bands of wild horses and other wild animals. But this is probably the first time that an automobile has out-mastered a coyote at its own game.

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Kelly Flying Cadet is Prominent Athlete
(Continued from Page 8)

ment. He resolved to take the examination for entrance, and arrived at Randolph Field last March. He is now a student in the Pursuit Section of the Air Corps Advanced Flying School at Kelly Field, and will soon be graduated. His ambition is to obtain a regular commission in the Air Corps and fly the latest Pursuit ships.

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Reunion of Kelly Field Grads
(Continued from Page 7)

ed from the service due to injuries received in an airplane crash; four are now flying for Transcontinental and Western Air Transport Company; and two are on extended active duty as Air Corps Reserve officers. It is believed that several are flying in one capacity or another in foreign countries.

Very anxious to locate the thirty unaccounted for members of the class, Lieut. Lee has spread the word around that they communicate with him so that he may personally acquaint them with all of the details of the reunion.

The entire personnel of Kelly Field anticipated with a great deal of pleasure the honor and privilege of serving as host to the first Class Reunion of the Regular Army Air Corps.

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KELLY FIELD OFFICERS DELIVER LECTURES TO MEDICS.

Four Air Corps officers on duty with the Air Corps Advanced Flying School, Kelly Field, Texas, were selected to deliver lectures at the School of Aviation Medicine, Randolph Field, Texas, as follows:

January 21st - "Organization and Employment of Observation Aviation," by 1st Lieut. Robin B. Epler.

January 23rd - "Attack Aviation," by Captain Edgar R. Todd.

January 24th - "Pursuit Aviation," by 1st Lieut. Marvin F. Stalder.

January 26th - "Bombardment Aviation," by Captain Delmar T. Spivey.

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NO CHENEY AWARD FOR YEAR 1938.

So high a standard of valor and self-sacrifice has been set in previous instances, when officers and enlisted men of the Air Corps and Air Reserve officers were presented with the Cheney Award, that the Board of Air Corps officers appointed by Major General Henry H. Arnold, Chief of the Air Corps, to select the person or persons most meriting the Cheney Award for the year 1938, decided after most careful consideration that the award for the past calendar year should not be made, and that the award fund should be maintained in the custody of the trustee.

The Cheney Award, which is given each year for the most outstanding act of valor or extreme fortitude or self-sacrifice in a humanitarian interest, not necessarily of a military nature, but which shall have been performed in connection with aircraft, was established twelve years ago in memory of 1st Lieut. William H. Cheney, Air Corps, who was killed in an air collision at Foggia, Italy, on January 20, 1918. The donors of this award are Mrs. Mary L. C. Scofield, of Peterboro, N.H., and Mrs. Ruth Cheney Streeter, of Morristown, N.J., the mother and sister, respectively, of the deceased officer. They have jointly set aside a trust fund of \$15,000, the interest accruing therefrom to be used to make the award, which is bestowed annually by the Chief of the Air Corps. The sum of \$500.00 goes to the recipient, along with a bronze plaque bearing the engraved name of the individual receiving it, together with a certificate of award.

Except for the years 1930, 1934 and 1937, when no awards were made for the same reason as that prevailing in the year 1938, the Cheney Award has been made annually since 1927. In the accepted years there were no acts or incidents which seemed exactly to fit the terms of the grant or distinctly to merit it.

Thus far, twelve individuals have been honored through the bestowal to them of the Cheney Award. Master Sergeant Harry A. Chapman, then of the 19th Airship Company, Langley Field, Va., was the first to receive this award, and it was in recognition of his heroism, presence of mind and extreme fortitude during the great catastrophe on February 21, 1922, when the Airship Roma crashed and burned. Sergeant Chapman received the award in 1927, and in subsequent years the honor has gone to Captain Uzal G. Ent, Air Corps, for 1928; to Captain William A. Matheny, Air Corps, for 1929; to 1st Lieut. Robert D. Moor (posthumously) and to Private John B. Smith, Air Corps, for 1931; to Private Arden M. Farley, Air Corps, for 1932; jointly to the late Lieut. W.L. Bogen and to Staff Sergeant

Doy D. Dodd and Sergeant Thomas J. Rogers for 1933; to the late 1st Lieut. Robert K. Giovannoli for 1935, and to Major Frederick D. Lynch and Staff Sergeant Joseph L. Murray, Air Corps, for 1936.

Although the income from the trust fund exceeds \$500.00 per year, which is the amount of the cash donation which goes with the Award, unawarded sums are placed in a sinking fund for possible use in case more than a single individual in any one year is selected for the award, as was the case in several instances in the past.

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COOPERATIVE MISSIONS WITH THE U.S. NAVY IN PANAMA.

On January 12th, under operations orders issued by the 19th Wing, Air Corps, airplanes of the 44th Reconnaissance Squadron at Albrook Field, and of the 7th Reconnaissance and 25th Bombardment Squadrons at France Field, Panama Canal Zone, conducted the opening phases of a three-day mission in cooperation with the war vessels of the United States Fleet, en route to Caribbean waters for maneuvers. The long range reconnaissance planes reported the entry of the fleet into Panamanian waters and acted as a covering patrol as the ships made their way to the Pacific entrance to the Panama Canal to await transit on the following day.

On the 13th and 14th of January, the 24th and 29th Pursuit Squadrons and the 74th Attack Squadron took up the covering mission at daybreak, reporting the passage of the fleet through the Canal. Constant patrols were maintained over all sections of the Canal throughout the daylight hours.

The chief purpose of the mission was to test existing communication facilities and to provide training in the use of codes. The fleet was scheduled to remain at anchor in Limon Bay on the Atlantic coast until January 19th, on which date planes from the 6th Bombardment Group at France Field were scheduled to cover the sortie to one hundred miles at sea.

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Flight Lieutenant R.A. Cameron, of the Royal Canadian Air Force, was a visitor at Kelly Field, Texas, January 5th and 6th, inspecting training methods and installations at the Air Corps Advanced Flying School. He came to Kelly Field after a tour of inspection of other Air Corps stations in the San Antonio area, and while at this field he was a house guest of Lieut. Vance.

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Major Claude E. Duncan, Air Corps, was transferred from Mitchel Field, N.Y., to the Office of the Chief of the Air Corps, Washington, D.C.

MODEL AIRPLANE FLYING

For some time the use of a portion of the flying field on Sundays and holidays has been offered to the many Model Airplane Clubs in the vicinity of Moffett Field, Calif. As a result, hundreds of model builders, with their various types of airplanes, frequent Moffett Field every clear Sunday.

One lad is doing outstanding work in model building. His name will not be mentioned, but a description of the ship he has designed, its flying characteristics, and future developments are here given.

First, it should be understood that this airplane has been completely conceived, plans drafted, and all construction actually done by its owner. It is of monocoque design, its wings being a slight modification of the gull-wing. It has a tricycle landing gear, which has saved much damage to the airplane by preventing nose-overs and ground loops. The powerplant is a fifth horsepower motor and is very compactly placed in the nose of the ship. Fuel for the motor consists of a mixture of gasoline and seventy grade oil. The plane usually carries about two minutes' fuel; however, much more than this could be carried if there were some means of controlling the ship in flight, and thereby prevent drifting. The young designer is working on radio control in order to eliminate this trouble.

Now for a brief description of the flight. The minute engine is started and adjusted to an unbroken hum. Although the gusty wind would be dangerous to models having the conventional landing gear, the tricycle gear on this ship keeps it perfectly straight on the take-off. A short run of fifteen yards and the plane leaves the ground, starting a slow, climbing turn to the left, for which it has been trimmed. A gust of wind drops a wing and the ship slips toward the ground, but the balance and rigging has been so well engineered that the slight amount of speed picked up straightens the ship immediately.

Because of the strong wind, only 60 seconds of fuel has been put into the small tank, and after reaching an altitude of about 75 ft., the motor stops. Breath is held and fingers are crossed until the small craft starts its glide, and good reason too. Many model owners have watched their creations perform beautifully until the glide, and then have seen them start a dipping motion because the glide is slow, and at the last moment dive into the ground. Or, perhaps one wing is slightly heavy, causing a steep spiral glide until the ship crashes in on one side. The owner of this ship apparently knew of these difficulties and by careful designing and construction prevented them, for his

(Continued on Page 12.)

TIMEPIECES

By the Materiel Division Correspondent

Few people know or realize the degree of precision in design and construction necessary for the production of a satisfactory watch. The design, except for certain details of construction and materials, is very well standardized. Besides fine workmanship, however, detailed care in adjustment and regulation are required to enable the watch mechanism to give correct time indications.

The heart and brain of the watch is the escapement, which is controlled by the balance wheel. This little part does not weigh much, but every bit of that weight must be in a particular predetermined location. The design must be such that temperature and the "state of wind" of the mainspring will not affect an absolutely uniform rate of movement. This uniform movement insures accurate timekeeping.

In addition to the design and workmanship, the materials must resist wear to an unbelievable extent. All conventional watches are designed for 5 beats or ticks per second. In a day this means that the balance wheel has ticked off 432,000 beats, while in a year the number of beats is well over one hundred and fifty million. It is not uncommon for a pocket watch to indicate accurate time after twenty years of use. To enable it to do this it must, of course, have been cleaned occasionally. At the end of twenty years, the balance wheel has moved through the staggering total of over three billion beats. Accuracy to within a few seconds a day is usually expected.

Not only the precision built into a watch originally, but also the parts of a particular type of watch, must be interchangeable with any other of that type manufactured by the same company. To make this possible, all parts are made in machines or tools that must maintain the shape and size of the part to very close limits.

Very few people accord their watches the care required to insure a long and accurate life. Fortunately, watches are so constructed that they will withstand the shocks and jars incident to ordinarily careful handling.

The primary necessity for periodic cleaning is to remove the gum residue remaining after evaporation of the oil. The watch should be correctly oiled after having been thoroughly cleaned. The watchmaker knows that too much oil is as bad as no oil at all, because the oil may run throughout the movement and cause contacting parts to stick, or seep onto the hairspring and cause two coils to stick together. The result will be that the watch rate will change entirely.

(Continued on Page 12.)

V-7967, A.C.

GROUND - AIR COMMUNICATION

Major George C. Kenney, Air Corps, Commanding Officer of the 97th Observation Squadron, (Corps and Army) Air Corps, based at Mitchel Field, L.I., New York, has introduced to the Second Corps Area a system of flag signals in amplification of and as a possible substitute for the use of panels and pick up messages. This type of air-ground communication was originally used at Fort Benning, Ga., before being introduced in the Corps Area by Major Kenney.

During the past summer it was tested by the 97th Observation Squadron in field cooperative missions with various ground arm units, and appears to fulfill all the requirements of good air-ground communications.

Flag signals are executed by means of the semaphore code. If no flags are on hand, they may easily be improvised. Messages are sent from the vicinity of the identification panel of the sending unit. Four signals only are required:

- (1) a dot, made by executing "D" of semaphore code;
- (2) a dash, made by executing "R" of semaphore code;
- (3) "End of Word," by chopping flags vertically above waist;
- (4) "End of message," by moving the flags horizontally in front of the body from a dash position and back to the "dash" position several times in fast succession.

One man is required to send the message and another to read the message to him. In an emergency, one man will suffice.

From the air, procedure involves locating the identification panel, receiving the message, and dropping a written answer along with message received at panel station.

Flexibility and simplicity make the flag system more desirable than panels in many cases. It is much faster, and with very little preliminary training permits a speed of transmission of six to eight words a minute. A detail of two men can replace the six or eight men normally required for efficient panel communications. As a substitute for obtaining messages formerly received through the method of pick-up, it is superior in most instances. Troops on the march can signal from moving vehicles. Messages can be sent from almost any place, whereas pick-up requires open fields and clear approaches, often at a considerable distance from the Command Post. Flag signals also avert the danger from the suspended hook to the ground troops involved.

A recent training circular of the 1st Division at Fort Hamilton, New York, has described the system and designated the Division Air Officer and Division Signal Officer as the coordinating officers for

further testing and training in its use by all 1st Division units during air-ground communication cooperative missions in the current training year. In addition, the 97th Observation Squadron has forwarded a description of the system to all Corps & Army squadrons and National Guard Observation units, with request that it be service tested and that a report of findings and recommendations be returned for use in determination as to the final adoption of this or other methods of communication.

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Timepieces (From Page 11)

Care must be taken to prevent placing the watch in a strong magnetic field. If the watch has been inadvertently magnetized, it will be noted that the rate is considerably off. It should then be placed in a demagnetizer or alternating current field to remove the magnetism.

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Model Airplane Flying (From Page 11)

airplane settled into a very stable glide. The landing was interesting to witness because of the new type landing gear. The forward wheel touched the ground first, then the ship settled on the two rear wheels. And, although the landing was made in a strong cross wind, the tricycle gear prevented even a slight tendency to ground loop. The ship rolled to a stop, making the flight so perfect that it was hard to realize there had been no pilot except design and construction.

The young owner hopes to demonstrate a flight with radio control soon. His plans are to first place the control on the rudder for experiments as to weight and flying characteristics. Then, after these tests are run, to put controls on the ailerons and elevators.

Several men in the squadrons at Randolph Field, Texas, have taken up model airplane building with surprising results. Among a half dozen major jobs already completed, one boasts an endurance record of 45 minutes in the air.

As a matter of fact, this spare time hobby has grown to such proportions that it has been necessary to curtail model airplane flying, due to the closeness of the hangar line and the inability of controlling the flight of a model in the air.

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Major Romeyn B. Hough, Jr., having been found by an Army retiring board incapacitated for active service on account of disability incident thereto, has been retired from active service, effective January 31, 1939. He has been on duty at Bolling Field, D.C.

LIST OF NONCOMMISSIONED OFFICERS QUALIFIED FOR MASTER SERGEANT, AIR CORPS

Effective January 1, 1939

1. Adams, Hurshell B.	68. Schmidt, George E.	135. Von Euw, John B.
2. Kurutz, Paul	69. Stein, Joseph J.	136. Glasscock, Benton D.
3. Richter, Leo I.	70. Leroy, Harold P.	137. Myers, Allen G.
4. Edwards, George W.	71. Brown, Lee E.	138. Domes, John
5. Riffil, George W.	72. McCartney, George D.	139. Fitzgerald, John E.
6. Andares, Wilfred J.	73. Herb, Donald P.	140. Palmer, Clarence A.
7. Bingle, Arthur	74. Blais, James G.	141. *Kelly, Robert J.
8. Skaggs, Henry T.	75. Haffner, Hans G.C.	142. Neff, Frank D.
9. Rowell, Fred B.	76. DesMarais, William	143. Smith, Alfred N.
10. Rooney, Logan J.	77. Wiedekamp, Karl T.	144. Moorhead, William B.
11. Lamb, George S.	78. Blackden, William H.	145. Thompson, Benton T.
12. Giles, John L.	79. Hluchan, Charles	146. Cattarius, Adolph
13. Reno, Cecil F.	80. Logsdon, Jewel G.	147. Casto, Clyde R.
14. Fox, John E.	81. Auer, Adam M.	148. Hoffman, Carl
15. Horan, James J.	82. Jensen, Peter	149. Thomas, Robert H.
16. Peters, Frank A.	83. *Hill, James W.	150. Tupper, Hobson
17. Asterowsky, Kalman	84. Albin, Louis B.	151. Thomas, Edwin D.
18. Krecklau, Henry	85. Cheska, Benjamin A.	152. Sampson, Harold F.
19. Wenderwall, Julius D.	86. *Alexander, Harry	153. Hooe, Roy W.
20. *Smith, William H.	87. Graham, John	154. Baldwin, Thomas J.
21. Thacker, Charles O.	88. Crone, Carmon E.	155. Clark, Irvin L.
22. O'Meara, Peter	89. Downing, Harvey J.	156. Craig, Don J.
23. Reading, James E.	90. Miller, Fred P.	157. Ferrell, Bruce R.
24. Ballou, John G.	91. Turner, William H.	158. Bell, Charles C.
25. Stein, Jacob	92. Haynes, Paul H.	159. *Jones, William L.
26. *Hudson, Claude C.	93. Goad, Robert L.	160. Dombeck, Jacob S.
27. Brian, Dan L.	94. Leary, Vernon G.	161. Mick, Vernon
28. Robinson, Lee	95. Raymond, Edgar J.	162. Stolte, Arthur
29. Post, Leland	96. Williford, Leon O.	163. *Lawrence, Harry E.
30. *Greagor, Francis M.	97. Jones, Hurley D.	164. Rosser, John C.
31. *Crist, Harry F.	98. VanMatre, William H.	165. Johnson, Harold V.
32. Rowan, Halstead J.	99. Apple, William V.	166. Waters, Claude G.
33. Löffler, Charles H.	100. Lofley, William J.	167. Swisher, Douglas M.
34. Kendrick, Bryan J.	101. Jackson, Paul B.	168. Moore, Virgil
35. Carpenter, Ross	102. Roberts, Carl C.	169. *Casey, Patrick T.
36. Hohensee, Emmett F.	103. Hoijer, Richard E.	170. Freshwater, Glenn E.
37. *Harrison, George	104. Hopper, Walter S.	171. Parrett, Raymond C.
38. Kohn, Louis	105. *Grabsky, Walter	172. Burroughs, John J., Jr.
39. Harris, Arthur H.	106. Williams, Wallace H.	173. *Wright, Lee R.
40. *Tilton, Everett M.	107. Filkins, Joseph A.	174. Wallace, John R.D.
41. Adby, Walter G.	108. Schaefer, Chris J.H.	175. Young, Stephen B.
42. Justice, Nye P.	109. Willison, Thomas L.	176. Quinn, Ralph E.
43. Draper, Charles W.	110. Peckham, Russell C.	177. Revert, Artie L.
44. Witsch, Henry A.	111. Bush, Samuel T.	178. Waddell, Walter A.
45. Winans, Edward L.	112. Gibbins, Stanley K.	179. Forrest, James A.
46. *Millan, Homer	113. Simons, Wilbur J.	180. Walsh, Lambert C.
47. Ward, Leamon V.	114. Fisher, George H.	181. Freathy, Albert E.
48. Bogdanski, Adam	115. Jewell, Arvin B.	182. Hartley, Ernest H.
49. Lorimer, Robert R.	116. Glasscock, Harry	183. Townsend, William B.
50. Johnson, Lonnie M.	117. Boward, Richard C.	184. Fox, William B.
51. Gordon, Frederick J.	118. Koziboski, Edward A.	185. Olson, Gilbert W.
52. Mosfander, Charles E.	119. Valtierra, Leobardo	186. Redifer, Earl B.
53. Innes, Victor A.	120. Chambliss, John R.	187. Henneck, Michael P.
54. *Davids, Ewald	121. *Stanowich, Steve	188. Scott, Elliott
55. Cobb, Horace W.	122. Mitchell, George W.	189. Randles, Arthur E.
56. Swanson, Nels E.	123. Adams, Firman S.	190. Symington, Douglass
57. Wing, Richard E.	124. Lindsey, Jasper E.	191. *Bishop, Edward J.
58. Doyell, Clyde W.	125. *Warren, Luther	192. *Kilmetz, George C.
59. Lantz, Carl G.	126. Mueller, Charles	193. Hughes, Raymond J.
60. Hans, Karl L.M.	127. Christian, Walter	194. Edwards, Frank S.
61. *McGhee, Loyd F.	128. Merian, August A.	195. Pope, William E.
62. Darby, Harry	129. Hobart, Clyde J.	196. Faust, Carl M.
63. Sheppard, Delana	130. Loomis, Sidney E.	197. *Miller, Joseph J.
64. *Wentzell, James H.	131. Himes, Olin C.	198. Craft, Tennyson M.
65. Wheeler, Adam L.	132. Mathews, Daniel	199. Silvers, Lee
66. Sage, Hobson D.	133. Dreier, Elmer L.	200. Marth, Hugh J.
67. Ritenour, Ervin W.	134. Maroul, John J.	201. Reist, Emil

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|----------------------------|---------------------------|-----------------------------|
| 202. Gossett, Henry | 216. Brown, George D. | 230. Cayhue, Arthur H. |
| 203. Akers, Thornton | 217. Scott, Grover B. | 231. Brees, William M. |
| 204. Tomberlin, George D. | 218. *Axford, Leo W. | 232. Hewitt, Albert G. |
| 205. Foster, Edwin C. | 219. *Harmon, William T. | 233. Dryer, Howard H. |
| 206. Croy, William D. | 220. Crawford, Wallace W. | 234. *Gerton, William E. |
| 207. Hamilton, Robert E. | 221. *Hart, Herman | 235. Grey, Joseph B. |
| 208. Grossman, Paul | 222. Field, Charles B. | 236. Fulkrod, Benjamin F. |
| 209. Callaghan, George | 223. Dozier, John | 237. *Johnson, Lloyd N. |
| 210. Waytulonis, Victor M. | 224. Schooler, Oscar H. | 238. Totman, Theodore C. |
| 211. *Adams, James R. | 225. Philary, Russell L. | 239. *Mannion, Martin B. |
| 212. Gray, Henry H. | 226. *Holt, Jewel A. | 240. *Johnson, Leonard G. |
| 213. Herman, Leo I. | 227. Siebenaler, Frank J. | 241. *Hudson, Littleton J. |
| 214. Mitchell, Gregory A. | 228. *Hahn, Richard W. | 242. *Hartman, Ferdinand E. |
| 215. Housen, Syle W. | 229. *McKenna, Linus F. | 243. *Burke, Harry M. |

Note: Asterisk preceding name indicates rank of First Sergeant. Remaining noncommissioned officers hold grade of Technical Sergeant.

Technical Sergeant Hurshell B. Adams was appointed to the grade of Master Sergeant since January 1, 1939, as were Master Sergeants Kurutz and Richter.

The list of qualified Staff Sergeants eligible for promotion to the grade of Technical Sergeant will be published in the next or succeeding issue of the Air Corps News Letter.

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RANDOLPH FIELD NCO CLUB HOLDS ANNUAL ELECTION By Wallace H. Williams, Secretary and Treasurer

The Noncommissioned Officers' Club of Randolph Field, Texas, held its annual election of Club officers for the ensuing year at the West Club Building on Thursday, January 12th. The election was held prior to the regular Thursday stag dinner. The popularity of our genial President, Master Sergeant B.D. Booth, was obvious by the unanimous vote of the body for his reelection without further solicitation. Master Sergeant Joe Daly, of the School of Aviation Medicine, was elected Vice President; Technical Sergeant Wallace H. Williams, Secretary-Treasurer; Sergeant J. Story, Chairman of the Entertainment Committee; Staff Sergeant Ralph L. Andrick, House Director; and the members at large constituting the Executive Board, Master Sergeant W.H. Smith, Technical Sergeant Grover B. Scott and Staff Sergeant Hubert V. Valentine.

At the present time there are affiliated with the Club over two hundred active members, and its record of achievement for the past year is one of which all must be justly proud. The entire membership attributes this success in no small measure to the loyal devotion and work accomplished by Master Sergeant Booth.

Not to be outdone by the mere male, the ladies of the Club held their monthly "Get-together Family Supper" in the East Club Building and, according to reports, was enjoyed by all.

The entire club membership extends an invitation to all noncommissioned officers of the Air Corps to visit our club buildings while traveling Texas way. There you will find and enjoy the good fellowship known to this fair land and may partake of the southern hospitality practiced at our beautiful command.

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Master Sergeant Harvey H. Hewitt, Air Corps, Sergeant Major at Luke Field, Hawaiian Department, and for many years Sergeant Major at Selfridge Field, Mich., was appointed a Warrant Officer, U.S. Army, effective February 1, 1939.

TRAINING AT RANDOLPH FIELD AHEAD OF SCHEDULE

Thanks to an almost uninterrupted spell of perfect flying weather since the present classes at Randolph Field started training on both Primary and Basic Stages last October, the student training at the Primary Flying School is well ahead of schedule. As the Christmas holidays ended, a series of wet northers, dust storms and, finally, soggy airdromes, curtailed the instruction to some extent. Despite this setback, however, both stages plan on completing their program well before the normal date, which is usually the third week of February.

Acrobatics constitute the main item of instruction on the PT-13's, with final checks by the flight commanders being sandwiched in. Due to the unusually long spell of flying weather without the usual interruptions found in the winter class, a high percentage of cadets are still on the Primary Stage, more than 60 percent remaining.

Basic Stage reports that their present course is almost completed, with only instrument flying, some phases of navigation and formation flying left to be cleaned up. Upon the final completion of the class, many of the instructors and flight commanders will depart on extended navigation flights, completing this phase of the War Department Training Directive between classes.

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Air Corps noncommissioned officers who have been placed on the retired list, effective January 31, 1939, were as follows:

Master Sergeant Ernest Brown, Hqs. and Hqs. Squadron, Air Corps Technical School, Chanute Field, Rantoul, Ill.

Technical Sergeant Homer Routt, 46th School Squadron, Randolph Field, Texas.

Staff Sergeant Richard Zane, 99th Bombardment Squadron, Mitchel Field, N.Y.

Sergeant Brown was advanced on the retired list to the rank of second lieutenant under the Act of Congress, approved May 7, 1932.

THE NEW CLASS AT RANDOLPH FIELD

The Chief of the Air Corps has selected 344 Flying Cadets to begin flying training at the Air Corps Primary Flying School, Randolph Field, Texas, on March 1, 1939. Of these 344 prospective students, 29 are enlisted men of the Army Air Corps; 12 are enlisted men from other branches of the Regular Army, and the remaining 303 are from civil life.

Orders will issue directing these candidates to report to the nearest military activity for enlistment as Flying Cadets, following which they will be authorized to proceed to Randolph Field in sufficient time to enable them to report to the Commandant of the Air Corps Primary Flying School on March 1, 1939, for assignment to the new class.

The selected candidates are listed below, as follows:

CIVILIANS

Hendry, James Lozier	Auburn, Ala.	Beetcher, John Edward	Stratford, Conn.
Dorron, Charles Hill	Kennedy, Ala.	Sutcliffe, Thomas Henry	Waterbury, Conn.
Glover, Roy M.	Margaret, Ala.	Hill, James Wilborn	Washington, D.C.
Fisher, Ben Crum	Red Level, Ala.	Wilburn, Donald E.	Washington, D.C.
Smith-Mayer, Lybrand E.	Sulligent, Ala.	Bourne, Evan Francis, Jr.	Coral Gables, Fla.
Friedman, Samuel L., Jr.	Tuscaloosa, Ala.	Kennington, Thomas C., Jr.	Gainesville, Fla.
Schiel, Frank, Jr.	Drake, Ariz.	Molachlan, James	Miami, Fla.
Gardner, Paul James	Phoenix, Ariz.	Aubert, George J.	Tampa, Fla.
Habelch, Ramsey	Phoenix, Ariz.	Moe, John Gillette, Jr.	Tampa, Fla.
McRae, Ben C.	Tucson, Ariz.	Morgan, Marion C.	Tampa, Fla.
Newberry, Raymond Alvin	Tucson, Ariz.	Halle, James E., Jr.	Cedartown, Ga.
Beeth, Raymond Kingdon	Warren, Ariz.	McWhorter, William Hugh, Jr.	Decatur, Ga.
Morris, John Arville	Greenbrier, Ark.	Clarke, Leo George, Jr.	Fort Benning, Ga.
Schneider, George E.	Little Rock, Ark.	Adams, Benjamin C.	Macon, Ga.
Sullivan, Joseph L.	Little Rock, Ark.	Hilton, Corson L., Jr.	Sylvania, Ga.
Walls, James M.	Magazine, Ark.	Bevington, Frank Clark	Boise, Idaho
Gunn, James A., III	Berkeley, Calif.	Foulson, Paul Herman, Jr.	Boise, Idaho
Hundford, Jack Alva	Burbank, Calif.	Torelle, Albert Edward, Jr.	Coeurd'Alene, Idaho
Oberdorf, John William	Burbank, Calif.	Large, Jackson Douglas	Pocatello, Idaho
Hansen, Keith P.	Burlingame, Calif.	Hardesty, Harold J.	Bloomington, Ill.
Siler, Burdette Basil	Anaheim, Calif.	Parker, John Lowe	Carlinville, Ill.
Kegel, Raymond J.	Carlsbad, Calif.	Dixon, Elmer Austin	Champaign, Ill.
Cranford, James Rellis	Colton, Calif.	Arnold, Lee	Chicago, Ill.
Wynne, John Davis	El Centro, Calif.	Bankman, Jack A.	Chicago, Ill.
Clinch, Downey C.	Grass Valley, Calif.	Cavares, Nicholas L.	Chicago, Ill.
Brock, Russell K.	Los Angeles, Calif.	Hummer, Clinton Rolland	Chicago, Ill.
Herbert, Paul Wayne	Los Angeles, Calif.	Laris, James	Chicago, Ill.
Baker, Don Emery	Los Angeles, Calif.	Lindmark, George E., Jr.	Chicago, Ill.
Hallihan, George Francis	La Canada, Calif.	Mahler, William Michael	Chicago, Ill.
Benedict, Maurice Samuel	Northfork, Calif.	Martin, Glen Webster	Chicago, Ill.
Bunch, Paul W.	Oakland, Calif.	Peterson, Carl Runge	Chicago, Ill.
McLean, Jack B.	Richmond, Calif.	Priestly, Ralph B.	Chicago, Ill.
Smith, Cornelius C.	Riverside, Calif.	Smith, John Frank	Chicago, Ill.
Goff, Boyd Matthew	Sacramento, Calif.	Fleming, Francis M.	Evanston, Ill.
Fitch, Charles Wayne	San Francisco, Calif.	Lamb, Robert Stewart	Kewanee, Ill.
Hayman, Frank Pilghman	Santa Barbara, Calif.	Graves, Frank N., Jr.	LaGrange, Ill.
Mace, Wallace P.	Shaver Lake, Calif.	Ross, Dean Riner	Monmouth, Ill.
Gerhart, Quinter Paul	Tracy, Calif.	Hays, Nathan Bourne	Normal, Ill.
Payne, Robert E.	Bellvue, Colo.	Beary, Harold Abraham	O'Fallon, Ill.
Hauk, Paul Ignatius	Denver, Colo.	Corso, Leon	Ottawa, Ill.
Price, Jerald Clifton	Fort Collins, Colo.	Hansman, Louis H.	Peoria, Ill.
Denter, George Clark	Leveland, Colo.	Egloff, Frank S., Jr.	Riverside, Ill.
Wagner, Walter J.	Manzanola, Colo.	Good, Robert Ogden	Springfield, Ill.
Ciccalone, Thomas James	East Hartford, Conn.	Floyd, Harold Marcus	Tamalco, Ill.
Jakobowski, Walter	East Hartford, Conn.	Fackler, Paul H.	Tolono, Ill.
Olschky, John James	East Hartford, Conn.	Morgan, MacPherson	Urbana, Ill.
Granberg, Edwin C., Jr.	Greenwich, Conn.	LaBarbera, Salvador P.	Shelbyville, Ind.
Cavalline, Octavius John	North Haven, Conn.	Gilbert, George A.	Princeton, Ind.
		Swinehart, Marion Louis	South Bend, Ind.
		Buis, Kenneth Leon	Terre Haute, Ind.
		Underwood, Robert W.	Terre Haute, Ind.
		Eyres, William Gordon	Ames, Iowa
		Walker, George Alexander	Council Bluffs, Iowa
		Zoeckler, John L.	Des Moines, Iowa
		Payne, Paul Hugh	Hedrick, Iowa
		Trigg, William J.	Hornick, Iowa
		Parsley, Harold Vincent	West Bend, Iowa
		Ford, Eugene Matthew	Columbus, Kans.
		Steele, Gordon K.	Lawrence, Kans.
		Gorrill, Robert Barr	Wichita, Kans.
		Lowe, Robert Clyde	Winfield, Kans.
		Stuber, Lovell Swain	
		Jenkins, Charles Frank	Bowling Green, Ky.
		Frazier, Thomas W.	Jefferson Town, Ky.
		Lensing, William E.	Louisville, Ky.
		Tyler, Henry S., Jr.	Louisville, Ky.
		Gayle, Hubbard K., Jr.	Morganfield, Ky.

Cawood, Francis L.	Winchester, Ky.	Schulze, Herbert Otto	Syracuse, N.Y.
Todd, Thomas M.	Winchester, Ky.	Pratt, Harry B.	Asheville, N.C.
Bynum, Richard E.	Arabi, La.	Kingsbury, Frank	Fayetteville, N.C.
Norwood, Albert M.	Opelousas, La.	Johnson, James McLean	Greensboro, N.C.
Shea, Jim	Rayville, La.	Brown, Paul Paisley, Jr.	Raleigh, N.C.
Dow, James Frederick	Howlton, Maine	Matthews, Joseph A.	Raleigh, N.C.
Dow, Thompson Faxon	South Portland, Maine	Williams, John G., Jr.	Raleigh, N.C.
Cornier, Everett L.	Van Buren, Maine	Newsome, James Wyatt	Wake Forest, N.C.
Andrews, Stephen Elwood, Jr.	Hurlock, Md.	Rivenbark, Teal Alexander, Jr.	Watha, N.C.
Waesche, Harry Lee	Chevy Chase, Md.	Martin, Wheeler, Jr.	Williamston, N.C.
LeBois, Leo Lewis	Boston, Mass.	Leonard, Harold Thomas	Fargo, N.D.
Sullivan, John G.	Brighton, Mass.	Olson, Orville R.	Finley, N.D.
Bailey, Arnold James	Brockton, Mass.	Amstutz, Warren J.	Beaverdam, Ohio
Cunliffe, Richard King	Cambridge, Mass.	Barrow, William Robert	Dayton, Ohio
Blood, Richard William	Dorchester, Mass.	Pontius, Howard Wilmer	Wauseon, Ohio
Knoll, Helmut Julius	East Dedham, Mass.	Brown, Roderick Norman	Altus, Okla.
Doran, John William	Methuen, Mass.	Ramsdel, Joseph William	Barnsdall, Okla.
Horne, Roger W.	Shelburne Falls, Mass.	Cannon, Leo Loftus	Blackwell, Okla.
Stetson, Jefferis	West Newton, Mass.	Harkey, Paul	Idabel, Okla.
Clark, Harry A., Jr.	Wollaston, Mass.	Brett, Thomas Marshall	Norman, Okla.
Foulkes, David Robert	Worcester, Mass.	Meyer, Milton N.	Norman, Okla.
Fuller, Frank LaVern	Ann Arbor, Mich.	Mingshew, Davis	Oklahoma City, Okla.
Ball, Russell Louis	Bay City, Mich.	Phillips, Proctor Elliott	Oklahoma City, Okla.
McConnell, Benjamin F.	Benton Harbor, Mich.	Trosper, Earl Joseph	Oklahoma City, Okla.
Adams, William Carrolton	Detroit, Mich.	Wilson, Richard Rupe	Oklahoma City, Okla.
Luski, Walter A.	Detroit, Mich.	Schaller, Otto Henry	Ocmulgee, Okla.
Sofian, Peter	Detroit, Mich.	Gowins, Tim	Stigler, Okla.
Young, Howard M.	Gladwin, Mich.	Jones, Ben Henry	Sulphur, Okla.
Anderson, Wesley Alleyn	Ironwood, Mich.	Yeilding, Dan Howard	Temple, Okla.
Bayles, Glen	Romulus, Mich.	Lucas, Vernon Emmitt	Tonkawa, Okla.
Ford, Thomas R.	Shelby, Mich.	Koehne, George Henry, Jr.	Tulsa, Okla.
Crust, Robert W.	Brainerd, Minn.	Baker, Nolan Dillian	Walters, Okla.
Ferrell, Max Everett	Cass Lake, Minn.	Eilers, John Fred	Corvallis, Ore.
Gray, William	Fort Snelling, Minn.	Stidd, Elbert Northam, Jr.	Portland, Ore.
Torkelson, Elmo Prescott	Lyle, Minn.	Comito, Cosmo L.	Brownsville, Pa.
Colburn, Richard R., Jr.	Minneapolis, Minn.	Hutton, Edward M.	Chambersburg, Pa.
Schmidt, Abner Dennis	Minneapolis, Minn.	Williams, William Frederick	Pittsburgh, Pa.
Mattson, Russell	Stenckfield, Minn.	Curzi, Jedio Albert	Lyndora, Pa.
Mashburn, Leon Waddell, Jr.	Clarksdale, Miss.	Hammerle, Clarence B., Jr.	Johnstown, Pa.
Baker, Albert Buford	Cruger, Miss.	Guerrina, Albert S.	Philadelphia, Pa.
Cooke, Chester Guy, Jr.	Oxford, Miss.	Robinson, Edgar A.	Phoenixville, Pa.
Boyett, Curtiss George, Jr.	Shelby, Miss.	McCrackin, Marion Riffle	Scottdale, Pa.
Burns, Robert Wiygul	State Line, Miss.	McMullen, Harry Leo, Jr.	Uniontown, Pa.
Landaker, Walter E., Jr.	Clinton, Mo.	Hill, George Dourian	Yeadon, Pa.
Hosford, Jack Cunningham	Columbia, Mo.	Taylor, Raymond	Central Falls, R.I.
McCorkle, Leon Marshall	Salisbury, Mo.	Anderson, David Vibe	Providence, R.I.
Heron, James Redden	Billings, Mont.	Larson, Nils Rodney	Providence, R.I.
Larson, Robert Sherman	Thompson Falls, Mont.	Rodgers, Fenton	Riverside, R.I.
Williamson, Walter Henry	Beatrice, Neb.	Tyler, Charles Matthew	Charleston, S.C.
Lang, Donald Washburn	Falls City, Neb.	Riddle, Harry Duff	Columbia, S.C.
Scott, George, II	Lincoln, Neb.	Stricklin, William Joseph, Jr.	Florence, S.C.
Brown, Bahngrell Walter	Omaha, Neb.	Oliver, Harry	Hamer, S.C.
Harding, Burkley F.	Omaha, Neb.	Boatwright, Lewellyn T., Jr.,	Ridge Spring, S.C.
Pirruccello, Joseph S.	Omaha, Neb.	Carter, Landis Owen	Varnville, S.C.
Sutton, Wilburt Judson	Elizabeth, N.J.	Turner, Mannie P., Jr.	West Columbia, S.C.
Quincy, Arthur Joseph	Closter, N.J.	Taute, August Franklin	Brookings, S.D.
Bash, Robert Edwin	Maplewood, N.J.	Fuller, Stephen J.	Mobridge, S.D.
Lyons, James Raymond	Maplewood, N.J.	Sheldon, Benjamin N.	Watertown, S.D.
Chambers, Carleton Alfred	Trenton, N.J.	Womack, Edgar M.	Gallatin, Tenn.
Lane, Robert George	Hurley, N.M.	Wood, Everett Newton	Johnson City, Tenn.
Roberts, James Thomas	Arcade, N.Y.	Hall, William Lenoir	Loudon, Tenn.
Healy, James J.	Bronx, N.Y.	Milner, Robert Rutherford	Memphis, Tenn.
Angelopoulos, Evan	Brooklyn, N.Y.	Brann, Ralph Austin	Savannah, Tenn.
Hawes, Daniel G.	Brooklyn, N.Y.	Chenoweth, Max	Abilene, Texas
Messina, Alfred	Brooklyn, N.Y.	Spring, Gilbert Manly	Apple Springs, Texas
Schwartz, William	Brooklyn, N.Y.	Carlisle, Guernsey Island	Austin, Texas
Kappill, Louis Charles	Elmire, N.Y.	Floyd, John Edward	Austin, Texas
Arentzen, Thomas Oscar	Mt. Vernon, N.Y.	Potter, Edward Jack	Austin, Texas
Cranston, John F.	New York, N.Y.	Adkins, John Robert	Buffalo, Texas
Dutton, Carleton C.	Syracuse, N.Y.	Brower, Ogden	Dallas, Texas
Pearson, Burton E.	Syracuse, N.Y.	Cullum, Felder Wilson	Dallas, Texas

Husband, Howard Pershing Tonkawa, Okla.
Station Hospital, Randolph Field, Texas
Corps of Engineers
Nelson, James Percival Garrettsville, Ohio
29th Engineers, Portland, Oregon.

With a total of 30 students, Texas leads all the other States represented in the new March class at Randolph Field, although the Lone Star State is closely pressed by Illinois with 29 students and California with 28. Other States which are represented by five or more students are Oklahoma with 21; Massachusetts and New York, 14 each; North Carolina, 12; Pennsylvania, 11; Wisconsin, 10; Michigan and Minnesota, 9 each; Connecticut, Florida, Iowa and South Carolina, 8 each; Alabama, Georgia, Kentucky, Nebraska and Tennessee, 7 each; Arizona and Missouri, 6 each; Colorado, Indiana, Mississippi and New Jersey, 5 each.

Leading the cities represented in the new class by a wide margin is Chicago, Ill., with 13 students. Other cities having three or more students are Los Angeles, Calif., with 6; Brooklyn, N.Y., 5; Oklahoma City, Okla., 4; East Hartford, Conn.; Tampa, Fla.; Detroit, Mich.; Omaha, Neb.; Syracuse, N.Y.; Raleigh, N.C.; St. Louis, Mo.; Austin, El Paso and San Antonio, Texas; and Milwaukee, Wis., 3 each.

DEFYING THE PRIZE "JINK" DAY

Declaring that there ought to be a law on 13, the Kelly Field Correspondent goes on to say that Captain C.B. Overacker, Jr. (13 letters), Air Corps, undoubtedly was feeling better on Saturday. Flying ship No. 13 from March Field, Calif., he took off on Friday, the 13th, from Kelly Field, Texas, with 13 passengers for his home station. Before hopping off, Captain Overacker searched the field for one additional passenger (according to reports), in the hope of reducing the "jinx defying" numerals, but failed to find any. To top matters off, his flight plan called for a trip of about 13 hundred miles. However, word was received at Kelly Field on Saturday, January 14th, that the Captain arrived home safely with his B-18 Bomber.

FUNDS FOR HANGAR LEAN-TOS AT RANDOLPH FIELD

Advice was received from Washington that a State W.P.A. project for the construction of additions to the lean-tos of five hangars at Randolph Field, Texas, has been cleared for approval by the Works Progress Administrator. The project calls for Federal W.P.A. funds in the sum of \$28,809.00, and the sponsor will contribute \$21,203.00, thus providing a total of \$50,012.00.

Each of the proposed lean-to extensions will consist of two 20' x 60' additions of concrete and steel construction, steel deck roof, concrete floors, large glazed areas on outside walls, complete with plumbing, heating and electrical utilities.

These lean-to extensions, when completed, will provide class rooms, storage space, etc., and will extend nearly the entire length of the hangar to which they will be attached.

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RESERVE OFFICERS START REFRESHER COURSE

Eighteen Reserve officers, all second lieutenants, have started a special refresher course at the Air Corps Primary Flying School at Randolph Field, Texas.

As in previous classes of this type, advancement from the Primary to the Basic Stage will be on a proficiency basis rather than on a predetermined schedule. It is estimated, declares the Randolph Field Correspondent, that the refresher students will complete their work on the Primary Stage in approximately 20 hours, and will then be sent to the Basic Stage for additional training on the BT-9's. During this latter phase of training, instrument flying and formation will be particularly stressed, as this type of flying is not an integral part of the training of civilian fliers.

Among the officers taking the course are Second Lieutenants -

Arthur A. Aro, Berkeley, Calif.
Albert J. Baumler, Trenton, N.J.
Earl A. Field, Tulsa, Okla.
Walter R. Ford, San Antonio, Texas.
Wilson Gillis, Los Angeles, Calif.
John M. Tillman, Lorain, Ohio.
William H. Turner, Portland, Oregon.
Seth S. Strachan, Portland, Oregon.
Fred S. Shine, Claremont, Calif.
Arthur A. Goldsmith, Manchester, N.H.
Douglas N. MacOdrum, Cambridge, Mass.
George W. Ireland, Cincinnati, Ohio.
William N. Vickers, Beaumont, Texas.
James W. Stowell, Tulsa, Oklahoma.
Jesse C. Hayes, Shawnee, Oklahoma.
C.J. Jensen, Eureka, Kansas.
A.B. Walker, Miami, Fla.
Clifford W. Ludwig, San Antonio, Texas.

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FOREIGN OFFICERS VISIT TRAINING CENTER

Commander Taro Taguti, Assistant Naval Attache to the Japanese Embassy at Washington, D.C.; Colonel Pedron Zanni, Military and Air Attache to the Argentine Embassy; and Flight Lieutenant R.A. Cameron, of the Royal Canadian Air Force, visited Randolph Field during January. Their visits, separated by several days, were for the purpose of inspecting the training methods employed at the Air Corps Primary Flying School, as well as the facilities, etc.

All of the visiting officers appeared particularly impressed by the type of equipment used at the Training Center, and also by the volume of students handled. The thoroughness of the course, especially the Basic Stage training, also brought forth high praise from the visitors.

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It also highlights the need for regular audits to ensure the integrity of the financial data.

3. Furthermore, the document emphasizes the role of transparency in building trust with stakeholders.

4. In addition, it notes that clear communication is essential for the successful implementation of any financial strategy.

5. Finally, the document concludes by stating that a strong financial foundation is crucial for long-term organizational success.

6. The following section provides a detailed overview of the current financial status of the organization.

7. This includes a breakdown of revenue sources and a comparison of actual performance against budgeted targets.

8. The analysis shows that while revenue has increased, there has been a corresponding rise in operating expenses.

9. Overall, the financial health of the organization remains stable, though there are areas for improvement.

10. The next part of the report details the proposed budget for the upcoming fiscal year.

11. This budget is designed to support the organization's strategic goals while maintaining financial discipline.

12. The document ends with a summary of key findings and recommendations for future action.



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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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THE OIL DILUTION SYSTEM

By a Materiel Division Engineer

On February 6, 1936, the pilot of an O-25C airplane, which had been left out over night when the temperature was below 5° F., stepped into his airplane, started the engine, and took off in four minutes. This feat was made possible by an oil dilution system which, since that date, has been installed in most new tactical Air Corps airplanes.

The oil dilution system has been developed after a large amount of intensive research. Its primary purpose is to provide a means of decreasing the viscosity of the engine oil in order to reduce the starting torque required to start an airplane engine under cold weather conditions, and to reduce the time of warm-up prior to take-off. This result is obtained by the use of an oil dilution line with necessary valve and fittings and a hopper type oil tank. The function of these units, although described in Technical Orders, will be briefly touched upon here.

Oil Dilution Line and Hopper Tank

The oil dilution line leads from the pressure side of the fuel pump to the oil inlet line to the engine. In this line is a metering jet, which meters the quantity of fuel added to the oil, and a shut-off valve operated from the cockpit to start or stop dilution. This valve provides the pilot with a means of diluting the oil into the engine before stopping it. He should not neglect this precautionary measure if he anticipates difficulty in starting his engine due to cold weather.

The hopper tank consists of an oil tank containing a hopper with a capacity of 1½ to 2 gallons. The hopper is so installed in the tank that oil returned from the engine enters the top of the hopper with a swirling or spiral motion, passes down through the hopper to the outlet and thence back to the engine. The purpose of introducing the oil into the hopper in a swirling motion is to eliminate the air returned with the oil by the engine scavenging pump. The bottom of the hopper is so designed that oil from the hopper has a direct passage to the engine, while oil from the tank can enter the hopper through an annular opening at the bottom of the hopper,

when the static head, or oil level, in the hopper becomes less than the static head, or oil level, in the tank. In this manner the oil in the hopper is recirculated through the engine many times, and as the oil is diminished by use, new oil from the tank forces its way into the hopper.

The advantages of this type of tank are as follows:

- a. When the oil dilution valve is opened, only the oil in the hopper is diluted.
- b. After a few minutes of operation the oil in the hopper is sufficiently warm for the diluent to vaporize off and oil of the original viscosity remains.

Recirculation of Oil

It should be pointed out here that recirculation of oil through the hopper with the resultant rapid rise in temperature is not conducive to overheating of the oil, since the oil temperature is controlled by the thermostatic oil valve in the oil cooler. If the oil temperature regulator is functioning properly, the temperature of the oil out of the cooler will be held within fixed limits. The oil then returns to the tank. Since the cooling capacity of a tank is negligible, it makes no difference whether the oil returns at once to the engine through the hopper or remains for a time in the tank. It might be noted here, however, that if the engine scavenging is erratic, the oil level in the hopper may drop, allowing a comparatively large amount of cold oil from the tank to enter the hopper at one time. So far as can be determined this has no deleterious effect upon the engine. Poor scavenging on the part of the engine, however, has other more serious effects which will not be discussed here.

The effect on the average age of the oil of recirculating the same oil is interesting. Assuming a hopper of 1½-gallon capacity and an engine consuming 1½ gallons of oil an hour, it may be computed that at any time, regardless of the length of operation, the average age of the oil in the hopper will be

(Continued on Page 16)

DOUBLE BARS IN DEMAND

Special Orders of the War Department, recently issued, announced the promotion of 36 first lieutenants of the Air Corps to the grade of captain, with rank from February 2, 1939, viz:

Robert E. L. Pirtle	Leland S. Stranathan
Wilbur Erickson	Ernest K. Warburton
Lilburn D. Fator	LeRoy Hudson
Archibald M. Kelley	Roland O. S. Akre
Ralph O. Brownfield	Paul E. Shanahan
Joel E. Mallory	Roger V. Williams
Donald R. Lyon	Frederick A. Pillet
Warren H. Higgins	Wm. H. McArthur
Stanley K. Robinson	Reginald Heber
Willard R. Shephard	Homer L. Sanders
George W. Hansen	Draper F. Henry
Minton W. Kaye	Robert D. Johnston
Aubry L. Moore	Walter R. Agee
Ronald R. Walker	Hansford W. Pennington
Lloyd H. Tull	Guy F. Hix
Francis M. Zeigler	Murray C. Woodbury
Frederic E. Glantzberg	Paul B. Wurtsmith
Eugene H. Rice	Wm. A. R. Robertson

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15TH OBS. SQUADRON RECEIVES FIRST O-47A

"At long last," declares the Scott Field Correspondent, "the Fifteenth Observation Squadron received its first O-47A's. The first four were ferried in from California by Major Raphael Baez, Captain Fay O. Dice, Lieuts. J.A. Ronin and Henley V. Bastin, Air Corps. The last of the group came in on January 21st, and since that time the Squadron has been busy with familiarization flights and crewing. The Squadron expects to receive four additional O-47A's during the latter part of February to complete the quota."

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STUDY IN NAVIGATION AT LANGLEY FIELD

The following-named Air Corps officers recently completed a course in dead reckoning and celestial navigation at the Navigation School of the Second Bombardment Group at Langley Field, Va.:

Captain I. M. Palmer
Captain F. H. Robinson
Captain J. A. Samford
Lieut. T. L. Mosley
Lieut. C. W. Carlmark
Lieut. I. R. Selby
Lieut. J. A. Feagin
Lieut. J. S. Sutton

The Navigation School has commenced the first of two dead reckoning navigation courses for the junior officers of the Second Bombardment Group. The best students of these two courses will be selected for a course in celestial navigation. The following officers are attending the present course:

Lieut. J. H. Rothrock
Lieut. R. A. Ping
Lieut. C. H. W. Rueter

Lieut. W. P. Ragsdale
Lieut. W. R. Robertson
Lieut. A. H. Rogers
Lieut. C. J. Cochrane
Lieut. C. K. Longacre
Lieut. H. S. Williams, Hq. and Hq. Sqn., GHQ Air Force
Lieut. E. M. Wittan, 21st Reconnaissance Squadron, GHQ Air Force
Lieut. J. T. Winstead, 21st Reconnaissance Squadron, GHQ Air Force.

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MATHEMATICAL PUZZLE

The hangars at Langley Field, Va. are 110 feet wide. The long dimension of each hangar parallels the warm-up ramp, and the interval between hangars is only 130 feet. Can the B-15, whose wing span is 153 feet, be maneuvered into one of the center hangars? The Langley Field Correspondent declares that the answer is "yes," as the B-15 has actually been squeezed into the 49th Squadron hangar on two occasions,-- once last fall, when the hurricane threatened Langley Field, and a second time for the engine change now under way.

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LANGLEY FIELD ACTIVITIES

About a year ago, the 49th Bombardment Squadron submitted as an Air Corps News Letter item the announcement that Lieut. C. E. LeMay had just smashed his first 25 straight in skeet. Now the 49th Squadron announces that this officer has just smashed 184 straight.

Airplane B-17, No. 81, Captain R. B. Williams, commanding, representing the Second Bombardment Group at the Cold Weather Tests at Selfridge Field, Mich., is at Langley Field waiting for sufficient ice, snow and low temperature at Selfridge to justify resumption of the tests.

P-36's are still being received by the three squadrons of the 8th Pursuit Group with open arms, and most of the officers in the 35th Pursuit Squadron have been checked out in them. The News Letter Correspondent declares, however, "that we still have warm place in our hearts for the PB's and hope we will be able to keep a few around."

Lieut. Don Coupland, of the 35th Pursuit Squadron, has been working on a glider target for several weeks (a hobby), and expects to test-hop it soon. The test will be made at Langley Field and the target towed by a C-6 (Chevrolet). The results will be published in this column.

DISTINGUISHED FLYING CROSS AWARDED MAJOR HAYNES

On the afternoon of Tuesday, February 14, 1939, the Hon. Harry H. Woodring, Secretary of War, before a distinguished company of foreign officials, officers of the War Department and of the American Red Cross, awarded the Army's Distinguished Flying Cross to Major Caleb V. Haynes, Air Corps, for his feat in flying one of the Army's largest Bombers, loaded with medical supplies, from Langley Field, Va., to Santiago, Chile, after the earthquake.

Major Haynes flew to Washington from Langley Field, Va., following the aerial review and ceremonies held there in the morning, upon his arrival from Santiago, Chile. He was accompanied by the crew of ten officers and enlisted men who flew with him in the XB-15 on the long journey to the stricken South American country. These were:

Captains W.D. Old and J.A. Samford,
1st Lieuts. R.F. Freeman and T.G. Wold,
Technical Sergeant A. Cattarius,
Staff Sergeants W.J. Heldt, H.L. Hines, D.L. Spicer,
Corporal J.E. Sands, and
Private 1st Class Russell E. Junior.

The presentation was witnessed by officials of the Chilean Embassy, as follows:

Senor Don Sergio Huneus, Charge d'Affaires Ad Interim; Senor Don C. Manuel Pereira, First Secretary of the Embassy and Squadron Leader Ismael Sarhaus, Air Attache, Embassy of Chile.

Also present were the Hon. Norman Armour, the American Ambassador to Chile, and Mr. Ernest Swift, representing the American Red Cross.

Mr. Woodring's speech of presentation was as follows:

Major Haynes, it is a great pleasure to have you and the crew of the Army's XB-15 airplane here today. When, at the request of the American Red Cross, I issued orders for your ship to carry a load of 3200 pounds of medical supplies to Chile on short notice and on a flight which demanded speed, night landings and take-offs, I fully realized the difficulties of the task. At the same time I was confident that the trip would be made with the efficiency we have learned to expect of the Army Air Corps and the GHQ Air Force. The flight was so successfully accomplished and the mission carried out so completely that your achievement is acknowledged with the award of the Distinguished Flying Cross.

I want to express to you and to the members of the crew who made the flight possible the appreciation of the War Department on the high standard of efficiency you have demonstrated.

Major Haynes, I am delighted to be able to make this award."

General Malin Craig, Chief of

Staff of the Army, then read the citation for the award of the Distinguished Flying Cross to Major Haynes, and which is as follows:

"Caleb V. Haynes, major (captain), Air Corps, United States Army. For extraordinary achievement while participating in an aerial flight from Langley Field, Virginia, to Santiago, Chile, February 4, 5 and 6, 1939. As Commander and Pilot of the XB-15, Major Haynes transported without hesitation and under emergency orders, a total of three thousand two hundred and fifty pounds of Red Cross medical supplies to Santiago, Chile, under conditions which were extremely hazardous and exacting. Loaded to absolute maximum capacity, the XB-15, under the superior piloting of Major Haynes, cleared Langley Field, Virginia, before daylight, February 4, and adhered thereafter to a rigid flight schedule which involved the penetration of unfavorable flying weather, a night landing at Panama, night take-offs at Panama and Lima, Peru, and an arrival, on schedule, at Santiago, Chile, early February 6, 1939. His extraordinary ability, devotion to duty, and excellent leadership made possible the successful accomplishment of this mission of mercy and thus reflected great credit upon the military service."

After the Secretary of War pinned the D.F.C. on Major Haynes' blouse, the latter received congratulations from Brigadier General George C. Marshall, Assistant Chief of Staff; Major General Henry H. Arnold, Chief of the Air Corps; Brigadier General Barton K. Yount, Assistant to the Chief of the Air Corps, and others.

As the result of the successful flight of the XB-15 to Chile, the American Red Cross was enabled to place without delay in those areas of Chile devastated by the recent earthquake urgently needed vaccines and other medical supplies.

Major Haynes flew to Chile in 49 hours and 18 minutes, total elapsed time; and in 29 hours, 53 minutes, flying time, over a distance of 4933 miles.

Major Haynes, who was born in Mt. Airy, N.C., March 15, 1895, graduated from Wake Forest College, N.C., with an LL. B. degree in 1917, and enlisted as Private, 1st Class, Aviation Section, Signal Corps, August 15, 1917. Shortly following his graduation from the School of Military Aeronautics, Georgia School of Technology, Atlanta, Ga., November 10, 1917, he was ordered to duty overseas, and he received his flying training at aviation schools in France. He was on duty with the A.E.F.

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in France to June, 1919. He received his appointment as Second Lieutenant, Air Service (National Army), May 30, 1918, and his commission as a Second Lieutenant in the Regular Army on July 1, 1920. He was promoted to First Lieutenant on the same date; to Captain, October 14, 1932; and to Major (temporary) August 26, 1936.

Upon his return from France, Major Haynes served a tour of duty at Mitchel Field, N.Y., and other Air Corps stations in the East. He was on duty in the Office of the Chief of Air Service, Washington, D.C., from April, 1922, to June, 1924, when he was transferred to duty on the West Coast (Crissy Field, Presidio of San Francisco, Calif.), where he served to March 2, 1927. From that date to June 30, 1931, he was on duty as Air Corps Instructor with the National Guard, State of Washington. Following his graduation from the Air Corps Tactical School at Maxwell Field, Ala., he was assigned to duty at Langley Field, Va., where he served until August, 1935. He then attended the Command and General Staff School at Fort Leavenworth, Kans., until June 19, 1936, and after graduation returned to Langley Field, his present station.

Major Haynes commanded one of the six B-17 Bombardment airplanes in the Good Will Flight from Langley Field to Buenos Aires, Argentina, and return, February 15-27, 1938.

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BUSY TIMES AT KELLY FIELD

The first week of February was a busy one at Kelly Field, with the graduating class of officers and cadets holding the limelight. After months of extensive study, the Cadets' training period at the Air Corps Advanced Flying School ended in a maze of parties, receptions, and marriages, attended by families and friends from everywhere.

One of the featured events of the week was the reunion of the graduating class of February, 1929. Thirty members of this class were present at the Reunion, the details regarding which were published in the previous issue of the News Letter.

On January 21st, from 12:00 to 7:00 p.m., at the Kelly Field park, the Cadets staged a party, featuring a Dutch lunch. Sweethearts, friends, and officers and their families, from Randolph and Kelly Fields were the guests. The Cadets attended a dance at the Kelly Field Officers' Mess on January 27th, and on the night of their graduation (February 1st), a buffet supper was held at the Officers' Mess. Officers of Kelly Field and their wives were invited at 9:30 for dancing, which lasted until past midnight. This party took the place of the usual noonday reception by the graduating class.

Provided the cooperation of Air Corps Reserve officers is secured, it is proposed to devote several columns of the Air Corps News Letter to Air Corps Reserve activities.

Any items pertaining to Reserve affairs will be published under a separate heading of "Reserve News." Reserve officers having news of Reserve units or other activities of general interest for publication in the News Letter should forward such items to the Information Division, Office of the Chief of the Air Corps, Washington, D.C.

Due to the necessity for economy in publishing the News Letter, its circulation is limited, and it is not possible to mail it to individual Reserve officers. It is mailed, however, to Reserve organizations, and will be mailed to club rooms or other meeting places of Air Corps Reserve officers where a substantial number of them would evince a desire to read it. In this way it is hoped the widest possible circulation may be secured for the News Letter under the circumstances.

The permanent National Headquarters of the Air Reserve Association of the United States, formerly maintained at Columbus, Ohio, is now established at the office of the National Aeronautic Association, 1909 Massachusetts Avenue, N.W., Washington, D.C.

National Officers of the Air Reserve Association for 1939 are:

President, Lieut. Albert H. Near, Bowman Field, Louisville, Ky.

Senior Vice President, Captain B.H. Merchant, 3722 Warren St., N.W., Washington, D.C.;

Second Vice President, Major John W. Ranson, 5640 Swope Parkway, Kansas City, Mo.;

Judge Advocate, Captain Miller R. Towman, 1711 Kenneth Road, Glendale, Calif.;

Secretary, Major William L. Plummer, 901 Wm. Oliver Bldg., Atlanta, Ga.

Treasurer, Captain Lawrence J. Tyler, 201 Oakwood Manor, Dayton, Ohio.

National Headquarters is in charge of Captain Merchant. Membership applications and dues should be forwarded through Corps Area Department Treasurers, wherever possible, for transmission to National Headquarters. General communications for the Association should be forwarded to National Headquarters, but communications intended solely for the National Officers should be forwarded directly to them at the addresses above given.

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Major St. Clair Streett, Air Corps, is relieved from detail as a member of the General Staff Corps, War Department, effective June 26, 1939, and assigned as a student in the 1939-40 senior course at the Naval War College, Newport, R.I.

THE GRADUATION EXERCISES AT THE ADVANCED FLYING SCHOOL

Graduation exercises for Class 39-A were held at the Air Corps Advanced Flying School, Kelly Field, Texas, on Wednesday, February 1, 1939, the class consisting of 4 Regular Army officers, 6 National Guard officers and 161 Flying Cadets. This graduating class constituted the largest one in the history of the Air Corps Training Center.

The highlight of all the events of the day was the huge Aerial Review at 9:30 a.m., in which 111 airplanes of all types were piloted by 19 flying instructors and 135 students. This was one of the largest graduation Aerial Reviews ever flown at Kelly Field, and it was witnessed by some 7,000 spectators.

The entire student membership from the Basic Stage of the Primary Flying School at Randolph Field, Texas, and 12 Air Reserve officers (refresher students), also from Randolph Field, formed a guard of honor for the reviewing party, which consisted of the following:

Colonel Frank D. Lackland, Air Corps, Commandant of the Air Corps Advanced Flying School and temporary commander of the Air Corps Training Center;

Colonel Clarence L. Tinker, Air Corps, National Guard Bureau, Washington, D.C.;

Colonel Eugene A. Lohman, Air Corps, Assistant Commandant, Advanced Flying School;

Colonel John B. Brooks, Air Corps, Commandant of the Air Corps Primary Flying School, Randolph Field;

Lieutenant Colonel Edwin B. Lyon, Air Corps, Assistant Commandant of the Air Corps Primary Flying School;

Lieutenant Colonel Coleridge L. Beaven, Medical Corps, Commandant of the School of Aviation Medicine, Randolph Field;

Major John R. Morgan, Air Corps, Director of Flying of the Air Corps Training Center.

Thirty-five members of the class which graduated in February, 1929 (Class 3-B), were present for the exercises in connection with their first class reunion, held at Kelly Field coincident with the graduation of the present class. Many visiting planes arrived at Kelly Field, carrying "old grads" and other officers who came to witness the ceremonies. Among these were, in addition to individual flights, one Pursuit and one Attack Squadron from Barksdale Field, La.

The following distinguished guests witnessed the Aerial Review as special guests of Colonel Lackland:

Major General Herbert J. Brees, Commanding General, 8th Corps Area;

Brigadier General Frederick L. Martin, Air Corps, Commanding General, 3rd Wing, 4th Air Force, Barksdale Field, La.;

Brigadier General Walter G. Kilner, Assistant Chief of the Air Corps, Washington, D.C.

Colonel W.B. Tuttle, Senior Reserve Officer of the 8th Corps Area, and his party;

Mr. Hinkley of the Civil Aeronautics Authority.

Following the Review, exercises were held at the Post Theater at 10:45 a.m., where the class and the "old grads" were addressed by Colonel Clarence L. Tinker, Air Corps, of the National Guard Bureau, Washington, D.C., who presented each member with his graduation diploma. All graduates received their "Wings" and the official aeronautical rating of "Airplane Pilot." Hundreds of friends, relatives, and interested persons attended the various exercises. Among the members of the graduating class is Flying Cadet Clarence L. Tinker, Jr., son of Colonel Tinker.

Colonel Lackland's introductory remarks were as follows:

"On behalf of the personnel of the Advanced Flying School and Kelly Field, I desire to congratulate each member of the class on having successfully completed the course. At this time I also desire to welcome the members of the Class of 1929, who have selected your graduation date as the day of their class reunion.

I desire to introduce as our speaker an officer of the Air Corps who, through long and wide experience from Second Lieutenant to Colonel, is so eminently qualified to speak to the members of this class who are now prepared to take up their duties and responsibilities on active duty in the Air Corps. Colonel Clarence L. Tinker has served with distinction in many responsible assignments and commands. Having served as Assistant Commandant and Commandant of the Advanced Flying School, he is thoroughly familiar with the course that you have just completed, and I am sure that, in addition, it is especially appropriate that he address this class, as his son, Cadet Clarence L. Tinker, Jr., is a member of it. I take great pleasure in introducing Colonel Clarence L. Tinker, United States Army Air Corps."

Colonel Tinker's address was as follows:

"General Martin, General Kilner, Colonel Lackland, members of the faculty and members of the graduating class: I wish to compliment you on the fine Aerial Review we have just witnessed. Although I have witnessed many graduation reviews at this school, they never lose their thrill for me. With your permission, I will address my remarks to the graduating class.

I feel it a distinct honor, as well as a pleasure, to be allowed to officially congratulate you upon your success-

ful completion of the rigid course of instruction at the Air Corps Training Center. Any man, be he military or civilian, must of necessity feel himself especially privileged if allowed for even a short moment to expound his theories to such a representative group of young American manhood.

I beg your patience for a few minutes while I offer some observations on flying and military life. I know you are anxious to complete this ceremony, therefore I will try to be brief.

You have just successfully landed on the first rung of the ladder of your flying career. You have mastered the manipulation of the airplane. The evidence of such mastery is that you are here today - graduating from the finest flying training school in the world. I say advisedly that you have landed on the first rung of the ladder, because I have found by my own experience and the experience of my contemporaries that for the pilot, flying training never ends. There is no successful pilot, regardless of his age and the amount of his experience, that does not learn something from each new cross-country flight or each new tactical mission.

The mastery of pilot technic is a fundamental essential to the military pilot but does not of itself constitute the military pilot. Regardless of our pilot proficiency, and still further, regardless of the proficiency of the aircraft which science provides us, we are still valueless as a defense unit to our country unless we master the tactical application of the airplane. The B-17 is useless unless its crew can navigate it to a target on land or sea and destroy the target promptly once it is found. It is possible, but not necessary, to carry this exemplification on for each type of military flying. Suffice it to say that the pilot to be of military value must master the tactical employment of the airplane. This means a never ending study of navigation, bombing, gunnery, reconnaissance, photography, and a myriad of other details that are necessary to the successful accomplishment of a tactical air mission. Just when we think we are at long last about to master the details, science and aircraft design upset our calculations. The methods of tactical employment of a 100 MPH airplane are obsolete for a 200 MPH airplane, and by the same token the methods evolved for a 200 MPH airplane will become obsolete as the speed ratio of the airplane sufficiently increases.

Modern American life tends to make us impatient and over-anxious to accomplish our purpose in life by rapid strides. This impatience when applied to flying is fraught with potential disaster. The attempt to cut corners or expect pilot skill to take the place of air sense more often than not is expensive in both life and equipment, I do not for one mo-

ment wish to give the impression that I am advising you to become four-hour-a-month airframe pilots. Such pilots are not only useless from a military point of view, but are very often dangerous to the rest of us. I am simply advising that you balance pilot technic with a background of flying experience before attempting each new flying venture.

I naturally suppose that the most of you expect to make military flying your career and that you will spend your lives as officers of the Army Air Corps, and in due course of time will be guiding the destiny of our air defense as our older hands weaken their grip on the reins of guidance. This supposition leads me to discuss briefly a few fundamentals of military life. Any discussion of the military eventually brings up the word loyalty. It is so interwoven in our lives that you will hear it coupled with the word discipline in practically every talk by an Army officer to military personnel. From the dictionary definitions of the word loyalty I have selected two to offer you for your consideration - One, 'To be faithful and true to lawful government.' Two, 'To be true to any person or persons to whom one owes fidelity.' These two definitions form a solid foundation upon which to build a military career. To be faithful and true to lawful government is a part of our oath of office as officers of the Army. To be true to the persons to whom we owe fidelity is a requisite to a happy association with our contemporaries. Of all the ramifications of loyalty in military life, the one that appeals to me most is the loyalty of the superior for his subordinates. Show me the unit whose commander is intensely loyal to his men, and I will accept their loyalty and discipline as unquestionable. Loyalty downward automatically produces loyalty upward.

Military law and Army Regulations place in the hands of officers certain powers and prerogatives which increase as rank increases. The right to command and to demand obedience is expected to be exercised, otherwise it would not be part of our law. However, in exercising command over other men, we should ever be watchful that we act with understanding and justice, and with a complete lack of bluster and pomp.

I wish to thank you for your patience in listening to me and if anything which I have said is in any way helpful to you in the future, I will feel more than repaid for deserting my normal role and masquerading as a speaker.

We are happy today to have the pleasure of being present at the class reunion of the class which graduated just ten years ago. I was present at their graduation and have served with several of them at various times since. Many of the class have already become outstand-

ing officers of the Air Corps, and the School should feel justly proud of its product. I wish at this time to congratulate the class of February, 1929, and to wish you continued success.

For the present graduating class, I hope for each of you a successful career as good soldiers and useful citizens of our country. May you have blue skies, following winds, and many happy landings.

The graduates comprising Class 39-A were listed in the previous issue of the Air Corps News Letter. The Flying Cadet graduates received their appointments as second lieutenants in the Air Corps Reserve and were discharged from their enlisted status on February 1, 1939. They were then ordered to active duty at Kelly Field for their initial 15-day tour of such duty, effective February 2nd. Later, orders will be received reassigning these newly commissioned Reserve officers to tactical units of the Regular Army Air Corps throughout the country as well as in the insular possessions.

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CUPID DOES A LAND OFFICE BUSINESS

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Forty-eight hours after the graduating exercises of Class 39-A, Air Corps Advanced Flying School, Kelly Field, Texas, on February 1st, the Army chaplains and the clergymen in the San Antonio area were kept busy as members of the graduating class and their fiancées, who came from far and near, took the plunge into the sea of matrimony.

Sixteen young men, brave and true, took this plunge, the News Letter Correspondent stating that, according to present information, the following named newly commissioned Reserve officers were married: Second Lieutenants James D. Berry, Andre J. Dechaens, John S. Evans, Otto B. Hardy, Jr., Harry J. Holt, William E. Hubbard, II, William Lane, Jr., Dwight F. Lewis, P. L. G. Moore, Maurice A. Morgan, Ralph L. Oliver, Brian O'Neill, Gerhard J. Schriever, Delmar N. Skow, George W. Thornbrough, and Herbert A. Von Tangeln.

The News Letter Correspondent also mentions the marriage on February 11th at the Fort Sam Houston Chapel of Miss Louise Simmons and 2nd Lieut. John H. de Bussy, and adds that 2nd Lieuts. Harry B. Galusha, Frederick C. Grambo, Leon W. Gray, Harold E. Humfeld, Hugh B. Mansfield, Jr., Robert L. Morrissey, Leonard R. Storm and Harold J. Whiteman will be married during the following month.

All of the above add up to just 25 candidates amongst the ranks of the young bachelors in the graduating class. Apparently the young couples involved have taken scant consideration of the month of June as the popularly considered occasion for such permanent unions.

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FLYING CADET TERMINOLOGY

Continued from previous issues

BISCUIT GUN - An imaginary appliance which is said to be rolled out on the flying field to shoot biscuits and other food up to the Dodos who have made several approaches to the field and overshoot on each attempt to land.

BLINDERS - The mail orderly, a lower classman of the Cadet Detachment, must shield his eyes with his hand while collecting the upperclassman's mail.

GIG GETTER - A rifle which, in spite of all the time, effort and energy spent on it, fails to pass inspection. (See GIG in previous issue).

HOLY FLAW - An expression of extreme surprise, disgust, joy, or just plain expression.

HOLD IT DOWN - Suppress the noise. Term is used throughout the day in many various forms, such as in class rooms, mess hall, at drill, etc.

SLUG, OR QUILL - Same as Gig.. a demerit.

THE JEEP - The Link Trainer for instrument flight training. The bane of every upper classman.

WHOOFIN - To tell a rather tall fable.

WHAT THE HORRIBLE H....!!! An expression of extreme surprise. More expressive than Holy Flaw. (See above).

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RANDOLPH FIELD VETERAN NON-COMS RETIRE

Two veteran noncommissioned officers of Randolph Field, both with thirty years' service to their credit, retired on January 31st. Master Sergeant William B. Pulliam, 47th School Squadron, and Technical Sergeant Homer Routt, who entered the Air Corps during its early days, will make their homes in or near San Antonio following their retirement, they both declared.

Sergeant Pulliam, who entered the then Air Service at Rockwell Field, Calif., in 1916, after more than a decade of service with ground troops, was not present for his final day of duty at Randolph Field. He was in a hospital bed at Fort Sam Houston Hospital, recovering from a fractured hip received in a fall from a bicycle.

Sergeant Pulliam's first service dates back to August, 1903, when he enlisted in Troop 1, 14th Cavalry, at Camp Yosemite, Calif. After six years' service at Camp Yosemite, he spent several years in civilian life, returning to the service at Rockwell Field in December, 1916. His career in the Air Corps includes duty at Rockwell Field, Kelly and Selfridge Fields, Camp Nichols, P. I., March Field and, finally, Randolph Field, where he has been stationed since December, 1929.

(Continued on Page 19).

THE DIVISION AIR OFFICER

By Major Roland Birn, Air Corps,
Instructor, Air Corps Tactical School

On the staff of every Infantry division, there is, or should be, a Division Air Officer. The Tables of Organization provide for a Lieutenant Colonel, with a force of five Air Corps enlisted men for this air section on the division special staff.

The Infantry division, as it is now organized, has no organic aviation, but depends upon the corps' aviation for the support or attachment of observation aviation and even lighter-than-air units. In our school situations we have the division G-2 and G-3 sit down and werry together, then recommend the attachment of one Observation Squadron and a Balloon Squadron to their division, due to the fact that the division is going into action and must have close control over the operations of the air units upon which it relies for information. As far as we know, such attachment would be satisfactory for a division in actual combat; a division really in the combat zone and not one just being bandied about by a service school student.

With a force of five enlisted men there is little danger of the Air Officer building up an elaborate scheme of paperwork or interior administration. Of all officers on the division staff he should be the least sedentary; there is so much to do outside the confines of division headquarters that he needs an exceptionally able Master Sergeant to head his section force and hold the fort for him while he is away from headquarters on business.

In situations which can be visualized, the Division Air Officer would probably be his busiest just prior to the division going into combat. There are so many jobs for him to perform, so many "actions taken and orders issued" by him that perhaps we can best demonstrate by a chronological chart for a typical situation.

MOBILIZATION PERIOD

1. DAO reports to Division Hq.
 - a. To Adjutant General, signs in, presents orders.
 - b. To Chief of Staff, introduces himself as member of staff.
 - c. To G-3, under whose supervision the mobilization is being carried out.
 - d. To G-1. Discusses personnel of Air Section.
 - (1) Headquarters Commandant called in to take care of DAO's living arrangements.
 - (2) Air Corps Master Sergeant ("Sergeant Air Office") called in to discuss personnel of new section with DAO and receive G-1's approval for procurement of certain individuals for section personnel.
 - e. To G-2 and G-4, in turn. Introduces self.
 - f. To Division Commander. Introduced by Chief of Staff.
2. DAO organizes and trains section.
 - a. Trains section in duties. Uses Training Regulations and old ACTS mimeos. to train in staff organization, paperwork,

duties, etc.

- b. Reports progress of training to Chief of Staff and G-3.
 - c. Arranges with A.G. and G-1 for replacements if any of section unsuited for duties.
3. DAO orients division staff. Relations with staff.
 - a. Conference with G-2. Fix extent of each one's responsibility in:
 - (1) Intelligence Annex.
 - (2) Evaluation of aerial information.
 - b. Conference with G-3.
 - (1) G-3 directs training directive for division to be in more detail than is found in the corps directive.
 - (2) DAO asks for aviation conference with staff.
 - c. Aviation conference. G-3 presides. Other G's and most of Special Staff present.
 - (1) DAO outlines needs in supplies, maps, communications cooperation. Also gives his conception of his relation with Special Staff.
 - (2) DAO then discusses proposed training directive. Makes revisions as discussion proceeds.
 - d. Later aviation conference. Chief of Staff presides. Division Commander present, also Brigade Commanders.
 - (1) Tentative training directive outlined.
 - (2) Approved by Division Commander, after minor revisions suggested by Brigade Commanders and staff members.
 - e. Reports results with training directive to Corps Chief of Aviation.
 4. DAO trains division troops.
 - a. Conference with Brigade, Reg'tal and some Bn S-3's. G-3 present.
 - (1) Explains training directive.
 - (2) Announces standard of proficiency in cooperative work, ground units with air service.
 - b. Arranges for simulated missions when mobilization will have been completed.
 - c. Co-ordinates with G-4, Signal and Ordnance Officers: supply needs for future; panels, pyrotechnics, air signal equipment, etc., for troops.
 - d. Co-ordinates with other staff officers in matter of proposed simulated missions.
 - e. Reports progress to G-3 and Corps Chief of Aviation.

MOBILIZATION COMPLETED-TRAINING PERIOD BEGINS

1. Troops training, preliminary period.
 - a. Observes execution of training in cooperative missions (simulated air service)
 - b. Reports progress continually to G-3, or accompanies G-3 on tactical inspections.
2. Confers with G-3 on use of aviation from corps' groups (still being mobilized).
3. Confers with Corps Chief of Aviation on employment of Observation and Balloon Squadrons.

4. Confers with Corps Chief of Aviation and Group Commanders on assignment of squadrons for troop training.
5. Gets decision from Chief of Staff as to extent of command he exercises over airtroops attached to division (division air service). (Staff Officers' Field Manual, part one, par. 23, i. 1.)
6. Troop training, employing actual air units.
 - a. Arranges liaison officer training between Observation squadron and all troops and between Balloon Squadron and artillery. Reports training progress to Squadron Commanders.
 - b. Conference, troops. Group Commander and S-3, Observation and Balloon Squadron Commanders and S-3's, and S-3's of brigades, regiments and as many battalions as possible. Subject: Progress in training in cooperative missions, standards of proficiency, needs. Presided over by G-3, with G-4, G-2 and Signal and Ordnance Officers present if available.
 - c. Reports to Corps Chief of Aviation on accomplishment in troop conference.
 - d. Observes execution of cooperative training, accompanying G-3 on tactical inspections or reporting progress to him.

IN THE COMBAT ZONE. IMMEDIATELY PRIOR TO COMBAT.

1. Situation: Division is advancing toward enemy. Corps G-2 reports are inadequate. Division needs closer cooperation by air service.
2. Attachment of air service to division.
 - a. G-2 suggests to G-3 the attachment of air service to division.
 - b. DAO suggests to G-3 the most desirable squadron for attachment.
 - c. Division Chief of Staff requests Corps G-3 for attachment.
 - d. Division gets one flight attached for operations within three hours.
3. DAO to Squadron C.O. (at group airdrome area) by phone.
 - a. Needs of flight?
 - b. Needs of division?
4. DAO checks availability of previously reconnoitered advanced landing field and message dropping ground.
 - a. Near CP.
 - b. Others up near present head of column.
 - c. Gets approval by G-3.
5. DAO asks G-4 for engineers and other labor to improve landing field.
6. Landing field arrangements.
 - a. Information on adequacy, etc., of advanced landing field phoned to squadron. Sergeant AO keeps squadron informed as to progress.
 - b. Messenger service and wire communications landing field and division CP arranged between DAO, G-3, Sig. Off. and Hq. Cmt.
7. Supplies on advanced landing field.
 - a. Group S-4 to DAO; "When move supplies to new field?"
 - b. DAO to Group S-4; "Will inform you when division rear area less congested."
8. G-3 to DAO and G-2. "Use all planes on reconnaissance missions."
9. DAO confers with G-2 on missions for obser-

10. DAO in G-2's office evaluating observers' and squadron operations reports as to trustworthiness, etc., of each report.
11. DAO leaves G-2 office to reconnoitre balloon beds and other arrangements for Balloon Squadron and interview observation teams at advanced landing field. Receives information on possible landing fields up forward from team of command plane and others.
12. DAO returns to Division CP. Informed by G-3 rest of Observation Squadron will be attached to division at 3:00 p.m. Given movement order of Balloon Squadron in division area.
13. Division Commander decides to attack in morning. Staff works up order for attack.
14. DAO to Group S-4, (after consultation with G-3 and G-4) "attach emergency supply truck to Balloon Squadron truck train moving into division area tonight."
15. DAO to G-1. Shows areas, on map, where best available landing fields are located, (to assist G-1 in recommending site for new CP for attack).
16. From G-3, ascertains gist of division plan of attack.
17. Conference with G-3 and Artillery Commander.
 - a. Recommends attachment of Balloon Squadron to Artillery Brigade, as soon as Squadron arrives in division area.
 - b. Recommends 3 airplanes for artillery support, 2 for command missions.
 - c. Artillery Commander asks for Liaison Officer from Observation Squadron.
18. Checks G-2 Intelligence Plan (aviation section thereof), makes recommendation thereon to G-2.
19. DAO to Observation Squadron Commander asks for 3 Liaison Officers to report that evening to Division CP.
20. To G-4 and Provost Marshal. Requests that they expedite movement of aero supply truck from division rear boundary to advanced landing field.
21. To 1st Sergeant, Special Troops. Sergeant AO arranges for care of four men in advanced landing field crew.
22. Signal Officer notifies DAO of new CP and advanced landing field location, and time of opening of both. They confer on wire communications between field and Division CP.
23. DAO to Engineer. Arranges for labor in improvement of new advanced landing field.
24. Conference with G-3, Headquarters Commandant, and Signal Officer. Arranges for switching of messenger service from old to new landing field, between field and CP.
25. Intelligence Annex approved.
 - a. DAO adds explanatory notes and forwards copy to Observation Squadron Commander.
 - b. DAO notifies G-2 and G-3 copy being forwarded.
26. Liaison Officers arrive from Observation Squadron.

- a. One officer to Artillery Brigade S-3.
 - b. One officer to S-3 of Inf. Brig. making enveloping (main) attack.
 - c. One officer remains at Division CP until specially needed.
27. DAO and Liaison Officer #3 to G-2 office.
- a. Scan observers' and squadron operations reports.
 - b. DAO instructs Liaison Officer in evaluation of reports, how far he should go in evaluation, not to assume responsibilities of G-2 who evaluates them according to their military importance.
 - c. Leaves Liaison Officer at G-2 office to continue such work.
28. To new advanced landing field.
- a. Makes sure emergency supplies satisfactory.
 - b. Inspects improvement work on landing field by engineers.
 - c. Estimates time when field will be available for use.
 - d. Inspects progress on establishing wire communications.
29. To G-4. "Need more labor in preparing advanced landing field."
30. Arranges with Liaison Officer #3 to share duties throughout night.
- a. Evaluation of observers' reports.
 - b. Progress on advanced field.
31. DAO to quarters and sleep.

DURING COMBAT

1. Inspects G-2 and G-3 situation maps.
2. G-2 complains of inadequacy of reports.
 - a. Enemy reserves not located.
 - b. Two dropped messages lost at old dropping grounds during night.
3. DAO to Observation Squadron S-3 (by phone); arranges for latter to read copy of missing reports to Assistant G-2, when such copies have been located.
4. Receives an observer's report that Division CP easily seen from air; not well camouflaged and too much in-and-out traffic, easily observed by enemy observation aviation.
5. DAO reports:
 - a. Poor camouflage to Headquarters and Commandant and Engineer.
 - b. Excessive traffic near Division CP to Headquarters Commandant.
6. Observation Squadron Commander and Balloon Group Commander visit Division CP.
 - a. DAO introduces Balloon Group Commander to Artillery Brigade S-3.
 - b. DAO conducts Observation Squadron Commander through G-2 office, then to advanced landing field, together with representative of G-2 section, latter to interview reporting observation teams at advanced landing field instead of at squadron airframe in rear areas.
7. DAO turns transportation and driver-guide over to Squadron Commander who goes forward to reconnoitre possible sites for new advanced landing fields (sites satisfactory to Squadron Commander) and consult Liaison Officer with attacking brigade.
8. DAO returns with G-2 transportation to Division CP.

9. Conference with G-3 on assignment of command airplanes on missions.
10. With G-2 revises aviation section of Intelligence Plan to conform to rapidly changing situation.
11. Notifies Squadron S-3 of such changes.
12. Squadron Commander returns to Division CP. Takes Liaison Officer #3 with him on return to Squadron CP.
13. DAO arranges with QM, disposition of wreckage of friendly airplane crashed in division area. Coordinates with Group S-4.
14. Conference with Division Commander, Chief of Staff, G's, and Engineer Officer on passive means of defense of division establishments and reserves against possible enemy air attack.
15. Continues work with G-2 in evaluating reports.
16. Instructs Ass't G-3 prior to general reconnaissance flight by latter in command of airplanes.
17. Memo to general staff sections on aviation matters, material for their section reports.

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WEATHER OFFICE GOES PLACES

Recently the weather personnel of Randolph Field, Texas, were both surprised and delighted to see a trailer, full of weather instruments, drive in. It was an exhibit of the Frieze Instrument Company. The operator conducted interested visitors through his "Weather Office on Wheels" and explained all the latest weather instruments. The one instrument which received more attention than any of the others was the radio-meteorograph. It has long been known at Randolph Field just what a radio-meteorograph is but, until then, most of the men had never seen one. Mr. Stevenson, the operator, gave a very good explanation as to its working parts.

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LOST AND FOUND

On the afternoon of November 25, 1938, Major A.B. Custis, Ordnance Dept., Barksdale Field, La., turned in at the Store-Keeper's Window of the Flight Division, Naval Aircraft Factory, Philadelphia, Pa., the following listed flying equipment:

- 1 ea. Helmet, Flying, Type B-3.
- 1 pr. Goggles, Flying, Type B-7 (one lens at corner broken).
- 1 ea. Head-Set, Radio, Flying, Type RS-18.

On the afternoon of November 27th, Major Custis returned to draw out flying equipment, and the above listed items were found to be missing. The Store-Keeper, Mr. J. Barton, explained that to facilitate the speedy issue of equipment and as a courtesy to the Army pilots, he had allowed several of them to come into the cage and get their own equipment, and that he thought it was possible the missing equipment had been taken by them by mistake.

Major Custis has sent out letters of inquiry to all the visiting Army personnel at the Naval Aircraft Factory regarding this equipment.

ALBROOK FIELD N.C.O's GO RIDING IN A CAYUCA
By the News Letter Correspondent

As you know, "cayuca" is the Panamanian name for a boat hewn out of a log and is the chief mode of transportation of the natives along the rivers and the coast of Panama, but for ocean travel - well, that is the reason for this story.

It all started back in April, 1938, when the Indians in the lower Darien Province of Panama made and gave to Master Sergeant W.D. Lucy a "cayuca," 28 feet long, 4 feet wide, and 4 feet deep, hewn from the heart of a hardwood tree. When first launched it was just about as stable as a log. Being round-bottomed, with a narrow beam, it would roll in the water upon the least provocation. The boat was towed to Balboa and hauled out to Albrook Field, where Master Sergeants Anderson and Lucy, Technical Sergeant Johnson and Staff Sergeant Richard W. Davenport spent most of their off-duty hours fixing it up, which involved the installation of two 25-gallon gasoline tanks, an ice box, dry lockers, seats, windshield, an 8-inch keel, anti-rolling checks, decking, electric lights, and a well for a 25-horsepower, 4-cycle out-board motor.

The boat was finished and launched during the latter part of November. The builders were so confident in their handiwork that they put in for, and obtained, a 27-day furlough to visit Central American countries, with the intention of making the trip in the "cayuca."

So on Sunday, December 4, 1938, Master Sergeants Anderson and Lucy and Staff Sergeant Davenport set out before daylight on a trip to anywhere down the Pacific coast of Central and South America, with a full load of gasoline, provisions for a month, a week's supply of water, cooking utensils, dishes, fishing tackle, guns, ammunition, clothing, medical kits, cameras, etc., which altogether weighed slightly over a ton, and by noon that day they were sixty miles down the coast, forty miles out to sea and going strong.

Anderson and Davenport acted as Captain and Chief Engineer, respectively, and Lucy as the Deck hand and Chief "Locker Officer."

The first day proved uneventful, and the first night was spent at Gorda Point, about 85 miles from Panama.

The second day was a duplicate of the first, except that upon arrival at "Carachine," a native town of 2,000 persons, the lone member of the National Police, who acts as Customs, Immigration, Judicial and Military Authority there, in a most courteous manner ascertained their identity, mission, place of departure, destination, etc., and after having found that they were not deserters or felons fleeing from the law, insisted

upon being allowed to furnish a house for the weary voyagers to sleep in, and arrange for someone to do the cooking. This offer was accepted with thanks, and the gang settled down for the night, but not for long, as one of the Indians had recognized Lucy as the gringo they call "El Doctor" down the coast at Jaque, and passed the word that there was a doctor in town. Almost immediately the three gringos were besieged by Indians and other natives asking for medicine for every known kind of ache or pain, and before the night was over many cuts, burns, bruises, etc., had been taken care of. A minor operation was performed on one of the natives who had a large splinter in his foot that the local Indian medicine men had been unable to remove, so now all three members of the party were village doctors. There being no medical service or medicine available in the interior or out of the way places in Central America, anyone who paints a cut with iodine or gives someone a CC pill is looked up to by the natives and called "Doctor."

The second night, our adventurers were many miles from any roads or means of fast communication, and they were hearing the sound of the Indian signal and dance drum that was to be the evening music for many more nights. The sound of these drums carries for many miles, and makes your hair stand up, if you are alone in the hills.

The next day they shoved off and again headed out to sea and farther down the coast. Smooth sailing was enjoyed for about three hours; then Mother Nature and the Weather Man came to the party and brought with them a high wind, strong current and specially made waves with white hats on them. After battling the elements for a distance of 65 miles, they dropped anchor in the Bay of Puerto Pina, about 25 miles from the Colombian border, an ideal place to spend a vacation, and there established their base camp in an Indian hut that had been built for them by the local tribe of Indians. The hut was about 25 feet square, raised up on poles ten or twelve feet from the ground to keep the animals out, and covered with a palm-like leaf which made the hut waterproof and is supposed to last from five to ten years. There were no doors or windows in the hut - in fact, there were no sides, and the only way to get into it was to climb a notched log which acted as steps and front door. When you wanted to be alone, all you had to do was just to turn the log over with the notches down. The hut was located on the shore of a small cove where the Pinas

River flows into the ocean. Fresh water for drinking and cooking purposes was available within a few yards of the hut.

Camp was established. The automobile battery type radio, which was something the natives had never seen, was set up by stringing an aerial to the top of a tree and hooking on a 6-volt battery. A native was engaged as a cook and caretaker. Fishing tackle for deep sea fishing, and the shot guns that were taken along for hunting were assembled, and general preparations were made for a real vacation.

Early the next morning the voyagers became fishermen and went out where the wild "Pez Gallo" (meaning rooster fish), corbina, dolphin, and many other species of fish hold forth. Davenport won the honors for the day by landing ten assorted species and sizes and, needless to say, the boat was welcomed back by the natives, as they had been told that all of the fish that the Americans did not want for one meal would be divided amongst them. In return, they gave the gang oranges, limes, chickens, etc.

The majority of the natives in that part of the country consist of Indians who are descendants of the Aztecs, and they are a very primitive people. The clothing problem for them is easily taken care of, as the men wear an abbreviated gee string of cloth or beads, and three yards of colored cotton cloth, wrapped around the hips and tucked in at the waist, constitute the morning, afternoon and evening dress for the ladies, augmented by painting the body and limbs with vegetable dyes. Coin, shell, and animal-teeth necklaces are worn on special occasions. The children up to about ten years of age are not hampered by any clothes at all.

They all live on fresh water streams where fish and wild game abound. Corn, yacca, sugar cane, yams, plantains and rice complete their menu. The women raise the rice, corn, etc., and the men furnish the home larders with fish and game. Salt is obtained from the various traders who go to the villages on the coast, and cane juice is boiled down to a syrup and used as sugar.

Fish are caught with traps and spears made of black palm wood, and game is killed with either bows and arrows, traps, or 28 gauge shot guns. Ammunition for these guns (trade guns) is a problem, but they seem to get on very well by buying brass shells, caps, powder, and sheet lead from the traders.

Shot for the shells is made by punching holes in a can and pouring hot lead through these holes into coconut oil, and then the tear-drop shaped shot is trimmed to the size wanted. The beak of a banana bird is used as a powder measure; wild cotton is used for wadding; and beeswax used to seal the shell so that the powder will not get wet when they swim the streams or get caught in

the rain. They always bring home the bacon.

There are no horses or mules in that part of the country, but they do have domestic animals such as hogs and cows, also fowls - a few chickens and ducks. Chickens, ducks and turkeys are hard to raise, due to the fact that tigers and snakes raid the chicken coops frequently.

The other natives are mostly Panamanians or Colombians, who live near the ocean and subsist on what they raise or buy from the various traders who stop there. They are all very friendly to white men, and everywhere a white man goes he is made welcome and assisted in every way possible. They are excellent boatmen, guides and packers, and our party took full advantage of their willingness to help by using them on trips up the rivers, either in the "Patulita," Lucy's boat, or in the shallow native river "cayucas," which, by the way, are so shallow, narrow, over-sensitive on the trigger that, when loaded, if you change your chewing gum from one side of your mouth to the other they will ship water.

Wild game in the Darien country is plentiful, and consists of turkey, a sort of grouse, pigeon, dove, deer, rabbit, "conejo" (which means rabbit in Spanish, but the size and shape of the animal is nothing like our States' rabbit), tapir, tiger, wild dog, river otter, squirrel, wild hog (which consist of the pecarri, cienna and the regular old razor-back hog) and, of course, there are many species of monkeys, parrots, birds, snakes, and butterflies in the woods.

Many interesting experiences were enjoyed by our explorers, and two of them should be classed as "Believe it or not," which were:

One evening as the gang went into one of their camps, a large conejo ran out on the beach toward the water with a tiger weighing about 150 pounds right behind him. The two Indians who were in camp grabbed up rocks and went into the water and killed the conejo. The tiger got away, as the guns were locked up in a dry locker and could not be assembled in time to bag the beast. Even though there was grumbling about locking guns up where they could not be reached in a hurry, our gang had conejo for supper.

The second "Believe it or not" happened in another camp where the water at high tide was just a few yards from the hut. One of the Indians, who had just received a course of instruction in the operation of the gun with the two cannons (double-barreled shot gun to you) as he called it, saw a movement in the water, grabbed the gun and fired, then climbed down the notched log used as steps and retrieved a ten-pound snook he had shot. Our gang, thanks to

the shotgun and not the fishing rod, had fish for supper.

After a stay of fifteen days in the Darien country, during which they traveled over 250 miles down the coast in waters of Panama and Colombia that would make many an old salt comment about rough water, our gang came back home telling many and varied tales of adventure, some of them being verified by photographs taken on the trip and others being just adventure tales.

Now don't get the idea that our adventurers did not have to climb mountains, wade streams, swim rivers, cut trails, and carry equipment in order to see the many interesting things that are in that wild and primitive country, for they really did, but from all we hear it was worth the effort.

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AMAZING PERFORMANCES WITH THE BIG PINS

Although items relating to sports are generally placed under the heading "Keeping Fit," in the last page or so of the News Letter, the following contribution from the March Field Correspondent deserves a big headline, viz:

"Tie this if you can. Private First Class Robert Ammerman, 4th Air Base Squadron, March Field, amazed spectators when he bowled a perfect game on January 24th. It created quite a bit of talk, as it was the second "300" score to be rolled in the four-year history of March Field's regulation alleys where many an expert bowler has flung hard rubber at uncomplaining pins.

But the amazed spectators became dazed when Ammerman repeated his feat on January 25th.

Everyone admired Ammerman. They conceded he was a mighty fine bowler. But it was just luck, they said. It won't happen again in a long time, they added.

On January 31st, Ammerman calmly chalked up another perfect game. The dazed, amazed spectators were flabbergasted (fooled you).

On February 5th, the amazed, dazed, flabbergasted spectators watched Ammerman bowl 281, then 287, and then another 300. (Confidentially, the spectators are now completely befuddled; they offered no comment this time - they only grinned.)

If Ammerman keeps this up we'll soon run out of adjectives."

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The 1st Observation Squadron, Marshall Field, Fort Riley, Kansas, stood inspection and passed in review the morning of January 25th, in honor of Brigadier General Guy V. Henry, the Commanding General of Fort Riley, who retired from active service on January 31st. Band music furnished by the 9th Cavalry Band, added to the occasion.

TRAINING BY THE 5TH BOMBARDMENT GROUP

The intensified program of training under way by the 5th Bombardment Group in the Hawaiian Department since January 1st is proceeding at high speed, with all units dropping bombs on practically all flights and perfecting themselves in the other phases of training, such as gunnery, navigation and instrument flying. In the latter, since no suitable radio beam station is available at present, technique of ascent and descent through overcast, using the homing loop and a local broadcasting station, is being emphasized. Due to the character of weather conditions encountered in this vicinity, this method appears to be feasible. The system used is as follows: after arrival at a point over the station, the formation flies away from it on a predetermined course for three minutes. At the expiration of this time, the leader turns 180 degrees and returns to the station and begins his descent. Remaining planes turn at one-minute intervals and follow in trace. Each airplane in making the descent loses altitude at 500 feet per minute at an indicated airspeed of 130 miles per hour, and flies out from the station for a time necessary to lose one half of the difference between ceiling and the initial altitude, then turns 180 degrees and retraces the course, maintaining the same rate of descent until station is reached or "break through" is accomplished. A variation of this system has been tried in which the return leg of the descent does not return to the station but is so placed that it clears the Island land masses.

Record bombing and gunnery by the squadrons of the 5th Bombardment Group, under the provisions of TR 440-40, is being conducted as follows: gunnery by the 23rd and 72nd Bombardment Squadrons and bombing by the 31st Bombardment Squadron. The Group gunnery range, situated in an area from six to twenty miles off the west shore of Oahu, includes sufficient space for simultaneous firing from three airplanes. Interference by bad weather is not often encountered in this area. The present bombing target is not so well located in this respect, being situated at Ahua Point, about one mile southeast of Hickam Field. The almost ever present trade wind blowing from the northwest produces a cloud bank that often covers the target. Another adverse factor is the proximity of populated areas, which allows approaches to be made from two directions only. One of these, paralleling the shore line and starting from the vicinity of Diamond Head, is made particularly difficult by the varying air conditions caused by the

(Continued on Page 20).

RANDOLPH PERSONNEL STAGE RADIO PROGRAMS

A series of four fifteen-minute interviews, held once a week, concerning Randolph Field and the Flying Cadet Detachment, are being heard in the San Antonio area over KTSA, the local outlet for the Columbia Broadcasting System. Starting soon after Christmas holidays, the programs are designed to tell the story of a Flying Cadet from the day he reports to the Secretary's Office to matriculate until eight months later when he completes his training on the Basic Stage and is sent to Kelly Field for his final training.

According to the present plans, representatives from the Advanced Flying School will take up the program and in an additional series of interviews, will tell the story of the final four months of the one-year course. On the first of the four radio programs, Colonel John B. Brooks, Commanding Officer of Randolph Field, and also Commandant of the Primary Flying School, answered numerous questions concerning the entrance requirements for Flying Cadets, the physical examination, the pay and allowances of a Flying Cadet, and the method of making application.

Colonel Brooks then turned the program over to Captain James S. Stowell, Commandant of Cadets, who told of the housing facilities for the student pilots, the clothing issued them, and the problems of the Mess Officer. When questioned on traditions of the Cadet Detachment and Cadet "slanguage", Captain Stowell reeled off a typical sentence in Cadet parlance that surprised even the station announcer.

The second of the programs featured Captain James W. Andrew, Primary Stage Commander and Captain Charles A. Harrington, his assistant, who told of the course as given during the first four months, and the maneuvers used for instruction purposes. The third program dealt with the Academic Department. Major C.W. Pyle, Director of Ground Training; Captain Guy B. Henderson and Lt. Don Zimmerman of the Ground School Department covered this phase. The final program of the series will cover Basic Stage, and their training program. Captain B.A. Bridget, Basic Stage Commander, and Lieutenant Robert W. Burns, Assistant Stage Commander, will be the speakers.

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RANDOLPH SEWAGE PLANT GIVEN TOP RANKING

Randolph Field's sewage disposal plant was given top ranking in the State of Texas by the Texas State Health Officer, Dr. George W. Cox, in his annual Honor Roll, issued recently. The announcement

stated "PRODUCING THE BEST SEWAGE EFFLUENT FOR THE YEAR...RANDOLPH FIELD".

Nominations for the Honor Roll are submitted by the District Medical Directors of the Texas State Department of Health from more than 600 Texas municipalities, and selections are made on the basis of accomplishment and record of operation, treatment and production, as reviewed by the State Department of Health at the close of each year. The State Health Officer, in transmitting the Honor Roll, remarked that the placement is a distinct compliment to the post and is the "result of definite achievement in competition with all of the other systems and plants in the State".

The Sewage Disposal Plant, located on the west side of the Cibolo Creek, just off and across the County Road from the main reservation, about one-half mile south of Schertz, Texas, was constructed in 1931.

"Monthly report is submitted by the Post Surgeon to the Texas State Department of Health, covering wind direction, daily sewage flow, settleable solids and stability of effluent from filter bed, chlorine used, residual chlorine and outlet stream stability.

Suggestions and instructions received frequently from the State Board of Health, based on monthly report of the Post Surgeon, are closely followed and have proved to be extremely helpful in the efficient operation of this plant", Major F.D. Shawn, Q.M. Corps, Post Quartermaster, stated.

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COMMUNICATIONS AT RANDOLPH FIELD

Several changes have recently occurred in the Post Communications Section at Randolph Field due to circumstances described, by means of the alphabet, as E.T.S. This section could make headlines in the "Believe It Or Not" column by the statement that their operators "are too ambitious". In recent months, three enlisted men have left the section when their term of enlistment expired, and have returned to civilian life for the purpose of continuing their education. As a result, it has become necessary to train new operators to fill the vacancies.

Apprentice operators are picked with the utmost care from available applicants. Special attention is paid to the individual's education, personality, his adaptability to radio operation, speech, typing speed (touch system) and interest in radio. Prospective operators are given voice instruction in enunciation, voice speed, and before he is allowed to make regular broadcasts over the air. Special atten-

tion is also paid to alertness, accuracy, and promptness in the dispensing of information to pilots. After prospective operators have served their apprenticeship, they become Junior Operators. A Senior Operator is in charge of each watch, with a Junior Operator as his assistant. The Chief Operator, or one of his assistants, is always on duty to supervise each watch. Operators make hundreds of contacts each week with permanent personnel flying on local and cross-country missions, and with transient aircraft.

A Collins 45-A, 40 watt transmitter, operating on 4280 kilocycles, is used for cross-country work, and contacts with airplanes within a 500-mile radius of Randolph Field is not unusual. However, due to atmospheric conditions at times and occasional dust storms, it is not unusual to fail to make contact at 15 miles from the station.

Pfc. 3cl. Allen H. Carlisle of the 53d School Squadron, one of the old timers in the station, is returning to civilian life February 24th, for the purpose of completing his education. Carlisle came to the radio station in May, 1936, as an Apprentice Operator and worked his way up to Assistant Chief Operator.

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LANGLEY FIELD'S AMATEUR RADIO STATION HANDLES CONSIDERABLE TRAFFIC

By Norman E. Noll

Radio DX'ers throughout the country have often heard the hum-drum like dot and dash system of the amateur radio station W3GTS (WLMG), but only recently were they apprized of the fact that the local station was awarded the honor of being listed as one of the nation's leading amateur traffic handlers.

Owned and operated solely by Private First Class, AM First Class, William H. Stull of the Administrative Section, Base Hq. and First Air Base Squadron, this station was organized in 1936 for the purpose of standing by and being fully prepared for immediate operation in case of any emergency.

The call letters WLMG were assigned by the War Department at Washington for the use of this station in army amateur work, on special army frequencies, and to assist station WLM of Washington in administrative and message handling, the latter being the national net control station for all AARS.

When it became a member of the American Radio Relay League (organized to band together the amateur radio stations for emergency and message handling), W3GTS' transmitter was rated at 200 watts output

on amateur frequencies.

An important function performed by the Langley station is to train amateur operators in procedure and to furnish emergency set-ups, in case of any disaster. Being directly affiliated with the American Red Cross, the medical supplies, boats and any other outside help could be obtained within a short period of time.

While no local emergency operation has been necessary, station WLMG stood by in preparedness for operation during the recent hurricane scare. Then, too, the operator has worked directly in other disasters, similar to the flood of 1936 that swept Pennsylvania, Connecticut, Maryland, West Virginia, Ohio, and many other neighboring states.

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THE TENTH ORDNANCE SERVICE COMPANY

By Norman E. Noll

It is now a little more than two years since the Tenth Ordnance Service Company, located at Langley Field, Virginia, has established itself among various units in the General Headquarters Air Force.

Headed by Major Edison A. Lynn, Ordnance Department, this unit began its important role at the time of the organization of the GHQ Air Force. At that time it was deemed necessary to furnish Ordnance service equivalent to that provided for the major components of the Army. After a series of conferences between various Air Corps and Ordnance representatives, the Tenth Ordnance Company began to render their service to the GHQ Air Force.

The original plan provided six platoons in the entire company; one at each of the air bases included in the organization of the GHQ Air Force. These six platoons in the organization of the GHQ Air Force are still in effect, the main platoon being at Langley Field, Va.; the Second Platoon at Mitchell Field, N.Y.; the Third Platoon at Selfridge Field, Mich.; the Fourth Platoon at March Field, Calif.; the Fifth Platoon at Hamilton Field, Calif. and the Sixth Platoon at Barksdale Field, La.

The First Platoon comprised an initial strength of one officer and 43 enlisted men. In addition to all other duties as Air Base and Second Wing Ordnance Officer, Major Edison A. Lynn was assigned as commanding officer of this organization.

This outfit was organized from enlisted personnel who voluntarily transferred to the various platoons from the Third Ordnance Service Company, the Sixth Ordnance Maintenance Company, Air Corps organizations and through recruiting.

As soon as the men and officers were provided with the basic fundamentals, the necessity for training men to handle the new problems of modern aviation was realized and, through the personal efforts of both Colonel Russell L. Maxwell and Major Lynn, the Tenth Ordnance Service Company School of Aviation Ordnance was established. Classes moved underway on October 1st, 1937, with a complete faculty of two officers, three noncommissioned officers and one civilian, viz.: Colonel Russell Maxwell, Chief Director; Captain Edward P. Mechling, Director; Mr. Thomas L. Gaines, ammunition inspector of all items pertaining to ammunition; Technical Sergeant Robert F. Tokoly, Chief Instructor of the entire class; Staff Sergeant Francis E. Rogan, Instructor of Small Arms, and Sergeant Fred Riley, Assistant Instructor of Small Arms.

The extensive bombing with both practice and demolition bombs in the fall of 1937 presented the Ordnance Department a splendid opportunity to study the technique of bomb service.

Upon return from the March, 1938, Second Wing Exercises in Florida, it was necessary for the Tenth Ordnance Service Company to prepare for the General Headquarters May maneuvers throughout the Northeastern Section of the United States. This exercise called for the full participation of the Ordnance members, 25 officers, 80 enlisted men, and approximately 40 trucks being employed. Bombs were available for Pursuit, and Ordnance service was faithfully provided at twenty air fields.

Later, the October Anti-aircraft Exercises kept the Langley Field Platoon busy providing all needed Ordnance service for both Langley Field and the Pope Field, N.C., areas.

Dropping all the cares and worries behind, members of the 10th Ordnance Service Company recently celebrated "Organization Day" with a banquet in a prominent restaurant at Hampton, Va. The principal guests included Lieut. Colonel Edward Montgomery, Chemical Warfare Officer of the Second Wing; Major Steward H. Elliott, Ordnance Officer of Fort Monroe, Va.; Major Edison A. Lynn, Second Wing Ordnance Officer; 2nd Lieut. Harry R. Melton, Jr., Assistant Air Base Adjutant of the Peninsula Airdrome; Mr. Jefferies, civilian employee of the Ordnance Department at Fort Monroe; Thomas L. Gaines, Ammunition Inspector of the GHQ Air Force, and Warrant Officer Henry C. Wathen.

Members of the First Platoon, Tenth Ordnance Service Company, who were present, included: Technical Sergeants Ernest Beseler, Robert F. Tokoly;

Staff Sergeants Roger R. Fitzwater, Lester E. Cummings, George A. Arnold, John A. Dolan, Herbert V. Jones, Leroy

Maher;

Sergeants Marvin G. Cooley, John E. Gillespie, Pete Kovacevich, Fred A. Riley;

Corporals Jake D. Robbins, Stanley J. Shaffer, Nick Zarzeski;
Privates First Class Samuel W. Barnett, John Dziubek, Charles R. Mills, Harry M. Powell, George S. Shearin, Harold S. Smith, Arthur R. Thomas;

Privates Wilbur W. Boyd, Wright D. Bradshaw, William A. Brown, Robert V. Dimmig, Anthony Dirlenz, Joseph A. Drobinski, Paul W. Fowler, Jasper S. Goodwin, Frank Guskay, Elmer S. Hahn, William C. Hall, Gunnar Idland, Charles E. Jackson, Richard C. Jones, Jesse P. King, Bennie Kinley, Cleatis Lambert, Frank Pepe, Earl S. Pierce, Eugene P. Reed, Marley J. Thogmartin and Harry G. Williams.

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The Oil Dilution System (From Page 1)

one-half hour and less than one-half of one percent of the oil will be over five hours old. It is this effect that makes it unnecessary to change the oil in a hopper type tank.

Oil Dilution Tests

Recently a test was run at the Materiel Division to determine the fire hazard created by diluting the oil with gasoline. A BC-1 airplane was used for the purpose. After warming up the engine, the oil dilution valve was held open for seven minutes to obtain as severe a condition of oil dilution as possible. A gasoline-soaked rag was lighted and thrust under the cowling over the engine breather. There was no flame visible under the cowling when the burning rag was removed. A further test was run by diluting the oil as before and igniting the fumes at the breather with a spark plug. The fumes ignited and burned at the breather, although no fire or explosion in the crankcase resulted. On further tests with normal dilution of four minutes, no fire could be secured. From these tests it was concluded that the oil dilution system contributes to a fire hazard only in the case of malfunctioning of other equipment. For example, an oil dilution valve sticking open in combination with a broken exhaust manifold might result in a fire. Since the engine breather is outside the fire wall and cowling of the accessory compartment of an airplane, such a fire would not necessarily be of serious consequences.

The oil dilution system has been developed to meet a vital need of the service. It has been proved capable of meeting that need. It is possible that improvements in the present system can be made as difficulties with the

(Continued on Page 17)

ACTIVITIES AT POPE FIELD, N. C.

Breaking into the columns of the Air Corps News Letter, after a long period of silence, the Correspondent from Pope Field, N. C., declares that many interesting events have transpired during that period and proceeds to touch upon those considered most notable.

Concerning the air traffic situation at Pope Field, he submits figures showing that from November 1, 1938, to January 31, 1939, the enlisted personnel serviced a total of 450 transient aircraft, included among which were 327 from the Regular Army and the National Guard. Of the remaining 123 visiting ships, 95 were from the Marine Corps, 18 from the Navy and 10 from neighboring Coast Guard bases. "We know," he says, "that there are other fields that handle much more transient traffic, but we feel that this is a pretty good number of ships, and we are proud of the way in which they were handled."

At the present time the personnel consists of 95 members of the 16th Observation Squadron and 124 members of the 2nd Balloon Squadron. However, only two flights of the 16th are at Pope Field, the third flight being at its neighboring field to the south - Fort Benning, Georgia.

The commissioned personnel at the present time includes the following heavier-than-air pilots: Lieut. Colonel Vincent B. Dixon, Commanding; Captain R. R. Selway, 1st Lieut. E. H. Rice and J. T. Mosby, and 2nd Lieutenants (Air Reserve) A. L. Logan, M. W. Schoephoester, N. H. Ranck, E. L. Hormell and D. Chalmers. The members of the Balloon Squadron are Major Neal Creighton and Captain S. B. Edwards. Two additional officers are expected to report in the next month or so, Major Charles Savage, of the Lighter-than-Air branch, and 1st Lieut. George F. Knerr, Heavier-than-Air.

In the line of flying equipment, the 16th Observation Squadron has at the present time 3 O-47A's, with two more expected to be delivered early in February; one C-19, a C-8, a B-10, a BT-2B, and a new Grumman OA-9 Amphibian due to be delivered sometime in February. The Balloon Squadron has a type C-13 captive balloon in constant service. Plans are now being made to have a motorized balloon of the C-6 type at Pope Field, and already the men of the balloon outfit have practically completed the helium compression system.

The Air Corps Station Supply has grown too big for its present set of quarters, so in the near future they will move from the one half of Hangar One now being occupied to Hangar Three, where the whole structure will be at the disposal of this activity.

Building projects have been going on in various places. On January 28th,

last, the officers and men with their families were invited to a barbecue party at the new Skeet Range, Golf Driving Range and Volleyball Courts. These places of recreation will be the scene of many a happy hour in the future, and will furnish entertainment and exercise heretofore found lacking.

In conclusion, the Pope Field Correspondent wishes to announce to the rest of the Air Corps in big bold type "that we have a brand new and modernly furnished HOTEL DE GINK! We are proud of this new establishment, which has been completed and is adjacent to the hangars of Pope Field. We have accommodations for seven persons, with two adjoining showers, and a third room that functions as a recreation and reception room. Won't you come by and spend the night with us?"

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PURPLE HEART DECORATION FOR SGT. SCHULTZ

Staff Sergeant Steve J. Schultz, of the 13th Attack Squadron, 3rd Wing, GHQ Air Force, Barksdale Field, La., recently received official notification from the War Department that he will be awarded the Purple Heart for wounds received in action during the Meuse-Argonne offensive, while a Private of Company E, 9th Infantry, U. S. Army.

Sergeant Schultz participated in the following engagements during the World War: Toulon-Troyon; Aisne, Chateau Thierry, Aisne-Marne, Marbadie, Limey, St. Mihiel, and Meuse-Argonne.

"It is of interest to note that the Order of the Purple Heart is the oldest decoration in the history of our military services," declares the Barksdale Field Correspondent. "It was originated by General George Washington in August, 1782, and first awarded to certain officers and men of the Continental Army for singularly meritorious action."

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The Oil Dilution System (From Page 16)

system develop in the service. It is believed, however, that an understanding of the functioning of the oil dilution system will assist in proper discrimination between malfunctioning of the system and other engine ailments which have frequently been attributed to the oil dilution system.

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Special Orders of the War Department, recently issued, relieves Colonel Hugh J. Knerr, Air Corps, from his present assignment and duty at Fort Sam Houston, Texas, February 17, 1939, and directs that, for the convenience of the Government, he will proceed to his home and await retirement.

AERIAL GUNNERY BY PURSUITERS IN FLORIDA

"B" Flight of the 27th Pursuit Squadron, 1st Pursuit Group, Selfridge Field, Mich., proceeded under the command of 1st Lieut. Murray C. Woodbury, Air Corps, to Valparaiso, Florida, on January 6th, a distance of about 850 miles, on an attempted non-stop flight. The flight, however, was interrupted, due to a baggage compartment door on one of the planes becoming unfastened, and a landing was made at Louisville, Ky. At this writing, "B" Flight is engaged in an intensive gunnery program on the range at Eglin Field, Valparaiso, Fla.

A friendly rivalry in gunnery proficiency between "A" and "B" Flights was created when Major Willis B. Taylor, Air Corps, Commanding Officer of the 27th Pursuit Squadron, suggested that the highest scoring flight might be able to go cross-country to the San Francisco Exposition. "We are looking forward to see some very interesting scores as a result," declared the News Letter Correspondent. "A" Flight made preparations to leave Florida on or about February 1st.

The scribe of the 94th Pursuit Squadron, Selfridge Field, writing from Eglin Field, Valparaiso, Fla., states that it was erroneously reported and published in the Air Corps News Letter of January 1st that the men of that Squadron were transported to Eglin Field by truck. Seventeen came by private automobile, 77 were transported in B-18A's, under the command of Major Connell. He adds: "This was a real treat to many of us who get little air travel. Visibility was good, and we stopped at Maxwell Field for dinner, continuing on to Eglin Field in the afternoon."

The first week at Eglin Field was spent in making conditions at the camp liveable and workable. The pilots were engaged in practice firing on aerial tow targets and ground targets. During the second week, work started in earnest, with plenty of activity for all personnel. Record firing started at dawn and continued until dusk. In two weeks of activity, only one morning's work was interrupted, the weather man putting a complete stop to all operations.

Enumerating as present at Valparaiso "B" Flight of the 27th Pursuit Squadron, "B" Flight of the 17th Pursuit Squadron, and Flights "A" and "C" of the 94th Pursuit Squadron, the News Letter Correspondent declared that these units should complete their course so as to be able to return to Selfridge Field about February 1st. He added that "B" Flight of the 27th completed the 30 cal. phase of the aerial gunnery course and turned in a 631 average for qualifications.

Touching upon an entirely unexpected incident which occurred during the aerial gunnery practice, the Correspondent

states that Friday, January 20th, will be a long remembered day. A fire was started, presumably by 50 cal. tracers going through the back stop of the bere sighting target. At first, no one took it seriously, having had little previous experience with brush fires. Soon, however, the fire spread, and a general alarm was turned in. The dry grass, aided by a brisk wind, carried the fire through a wooded area, and at one time the blaze was headed for some ammunition chucks. All men and officers pitched in with shovels, and it was only by quick work, along with a change in the wind, which prevented the fire from reaching the quarters of the personnel. Personnel of the CCC arrived on the scene with a truck and spread chemicals. After about two hours' work, the fire was under control. Many witnessed the conflagration and cheered and applauded the fire fighting efforts.

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HEAVY AIR TRAFFIC AT BARKSDALE FIELD

The Barksdale Field Correspondent states that so many stations have had their little brag about the volume of traffic handled that it seems about time that Barksdale should join in the chorus. He adds that without any intention of committing plagiarism and with no fear of misusing the expression, Barksdale Field has become a veritable "Air cross-roads of the United States."

During the past calendar year there were serviced at Barksdale Field 3681 airplanes, 393 of these being Navy planes and 3288 Army planes. Every station in the Air Corps was represented, and practically every National Guard Air Corps unit.

Of transient enlisted men of various classes who remained overnight, there were over 1200. These were taken care of in practically every case by the 79th Pursuit Squadron, which was designated as the organization to furnish such accommodations.

"So it can be seen," the Correspondent states in conclusion, "that the handling of both transient aircraft and transient soldiers has become a large and serious proposition for this station."

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The Selfridge Field Correspondent states that the gunnery training being conducted at Eglin Field, Fla., by "B" Flight of the 27th Squadron has been greatly hampered by inclement weather and rough air. "A" Flight will proceed to Eglin Field on the return of "B" Flight. Lieut. H.E. Kofahl seems to be the most accurate gunner of the "B" Flight, he having obtained the highest score so far.

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DEMONSTRATION OF LIFE RAFTS

The 18th Pursuit Group, Wheeler Field, T.H., held a demonstration of life rafts and life saving equipment, just off the new Hickam Field pier, on Saturday, January 14, 1939. All the officers of the 18th Pursuit Group motored down to Hickam Field to witness the exercise.

Taking part in the demonstration were Captain George R. Acheson, 1st Lieut. R.W. Puryear, 2nd Lieuts. C.D. Vincent, R.D. Denson, J.C. Tuell and W.W. Sparks, Jr. It was estimated that approximately fifty Air Corps officers witnessed the demonstration, including General Walter H. Frank, commanding the 18th Wing, and Lieut. Colonel William E. Lynd, commanding the 18th Pursuit Group.

Each tactical squadron of the 18th Pursuit Group demonstrated its method of rescuing pilots who had been forced down at sea, or who had made a parachute jump over water. One pilot from each squadron was rowed out from the pier in turn and dived into the water, while his squadron officer flew by and dropped him a life raft. Several methods were used.

The 6th Pursuit Squadron used a one-man pneumatic rubber raft folded into a metal case, designed by 1st Lieut. L.I. Davis, that fastened to the bomb rack on the P-26 airplane. There was just enough air in the boat to keep it afloat, and the pilot, Lieut. Puryear, flew low over Lieut. Tuell in the water and released the boat by use of the bomb release handle. Lieut. Tuell then swam to the boat, inflated it with the attached CO₂ bottle and climbed in.

The same size boat was used by Lieut. Vincent, of the 19th Pursuit Squadron, in dropping a raft to Lieut. Sparks. However, the system designed in the 19th Squadron by Corporal Shultz provides for the filling of the raft by the CO₂ bottle upon release of the boat from the P-26 bomb rack. Here a great lesson was learned. In this type of equipment the raft must be dropped directly up wind of the man in the water, as the inflated boat is very easily drifted by the wind, and it was only after a very sustained and tiring sprint, amid none too helpful cheers and jeers from the pier, that Lieut. Sparks was able to overtake his fast drifting raft.

Captain Acheson, with Staff Sergeant Brechtel as passenger, in an A-12, threw from the rear seat a large five-man rubber raft. At this point the spectators were afforded a bit of amusement, and two excellent lessons were very forcefully driven home. The raft was dumped out by the Sergeant as the plane passed over the pilot in the water, and naturally came to rest some good distance beyond Lieut. Denson, who finally reached the raft, as it was not inflated. However, due to sheer exhaustion and in an effort to inflate the raft hurriedly

and get aboard, Lieut. Denson did not secure the boat to his body in some manner, and the minute the large raft was inflated it went sailing away with the breeze. The row-boat standing by returned the raft and it was brought to the fatigued pilot who, by now, was depending on his own life vest for support.

The demonstration was both interesting and beneficial to the pilots of the 18th Pursuit Group, and they will now have more confidence in the life-saving equipment should the occasion ever arise to necessitate the use of the rafts.

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Veteran Noncoms. Retire (From Page 7).

Sergeant Routt started his military career in December, 1903, with the 15th Infantry, transferring to the Air Corps and the 68th Service Squadron in February, 1924. His Air Corps service includes duty with the 68th Service, the 48th School, the 72nd Bombardment Squadrons and, finally, the 46th School Squadron at Randolph Field, where he has been stationed since February, 1933. A testimonial dinner was given by the 46th Squadron in honor of the veteran noncommissioned officer, and on February 4th, a squadron review was held, with Sergeant Routt taking the review along with the Squadron Commander, Major Stanton T. Smith.

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LIEUT. DENSFORD ONE OF NATION'S BEST PISTOL SHOTS.

According to press dispatches, 1st Lieut. Charles F. Densford, Air Corps, on duty at Kelly Field, Texas, with the Observation Section, has been named to the select list of the nation's best pistol shots. The National Rifle Association, governing body of the sport of target shooting, which annually makes the selection of the year's outstanding handgun experts, places Lieut. Densford as seventh of the U.S. .38 caliber marksmen, with a season's average of 280.45. In building up his high average, he fired in 23 events at four registered tournaments.

In top position of U.S. shooters is Alfred W. Hemming, Detroit police officer, whose performance with all three calibers of handguns brought him the All-Around Championship rating. Hemming holds many world records, and is easily the outstanding pistol shot of the country today. Falling below Hemming on the All-Around listing is Emmett Jones, member of the Los Angeles police force, with Charles Askins, handgun wizard of El Paso, Texas, third. To the Los Angeles group went the lion's share of the honors, as they placed

seven of their men on the roll of honor, accounting for nine of the thirty places making up to top ten in each division.

The annual selection is compiled by the National Rifle Association on a basis of averaged scored fire in all registered pistol competition during a year.

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CLASSES ON PRIMARY AND BASIC STAGES AT RANDOLPH FIELD COMPLETE COURSES.

Class 39-B, Randolph Field's twenty-second class on the Basic Stage, completed training and will transfer to Kelly Field, Texas, for the final four months' of instruction at the Advanced Flying School, about February 25th, it has been announced. Entering Randolph Field last July with almost 350 Flying Cadets and Student Officers, this is the second class in succession to complete the Basic Stage without a serious accident or fatality. Due to the unusually fine weather that has prevailed since the start of both the Basic Class and the Primary Class (39-C), the schedule of flying instruction has been caught up with and passed.

The present Basic class is composed of four student officers, four foreign students, and 158 Flying Cadets, a total of 166 student pilots.

Meanwhile, training on the Primary Stage will end on February 14th - also ahead of schedule. Of the 336 student officers and Flying Cadets who started training on the Primary Stage last October, approximately 227 of them have successfully completed the first four months' work and will be transferred to the Basic Stage. This number, comprising more than 67% of those who actually started training, constitutes one of the highest records attained at Randolph Field in the matter of students successfully completing the Primary Stage. This class also completed its training without any accident to mar its record. More than 18,000 hours will have been flown by the Primary Class when the course ends, and more than 20,000 hours will have been flown on the Basic Stage, all for a grand total of more than 38,000 hours, with only a few damaged wing tips and an occasional bent propeller blade on the work sheet of the Aero Repair.

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Training by the 5th Bombardment Group (Continued from Page 13)

trade wind coming over the Koolaus at right angles to the course. Up and down drafts seem to alternate and provide no end of trouble for the bombing teams. However, the experience gained under these conditions more than compensates for any possible adverse effect on the bombing scores.

LANGLEY FIELD AIRMEN'S READINESS TO AID "CAVALIER" SURVIVORS.

Shortly after midnight of January 22nd, Major E.E. Glenn, Executive Officer of the Second Wing at Langley Field, announced he had received information from the Pan-American Airways that several survivors of the stricken flying boat "Cavalier" had been picked up by the tanker ESSO BAYTOWN. He said that, due to the rescue, a proposed flight of seven B-17 "Flying Fortresses" scheduled to have taken off at 6:30 in the morning was cancelled.

The mission was to have been led by Major Harold H. George. Each plane was to have carried nine men, and life rafts were to be dropped in the event any survivors were located. The flight had been fully organized and was ready to take off at a moment's notice, if needed.

The flight preparations included arrangements for two-way communication with the Langley Airdrome and the Coast Guard, whereby the latter agency might be notified so that nearby ships could proceed to the rescue. The life rafts were provided, it was explained, because of information received to the effect that the passengers of the "Cavalier" were provided only with life belts.

Flying a B-17, Major Vincent J. Meloy had taken off from the airdrome at five o'clock the previous day to go to the rescue of the "Cavalier" survivors. He took off after notification was given by the airline company that the airliner had been forced down about 180 miles off the coast. When Major Meloy was about 150 miles out on the mission of mercy, another communication from the airline company gave the position of the "Cavalier" about 300 miles due east of Langley Field. It was then that Major Meloy was ordered to return to the airdrome, because of bad weather conditions. He was about 20 to 30 miles short of his objective. He returned to Langley Field at 8:30 p.m.

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THE LANGLEY FIELD AMATEUR RADIO STATION

Supplementing the article on the above subject on page 15 of this issue, it may be stated that at present plans are being made for the construction of portable equipment for use in an emergency, and which could be moved to the vicinity of a disaster on short notice and set up for immediate use.

For the past ten years, Private Stull has been operating amateur radio stations, first at Williamsport, Pa., and then at Honolulu, Hawaii; Washington, D.C., and finally at Langley Field, Va.

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 AIR CORPS 
NEWS LETTER



DISTINGUISHED FLYING CROSS AWARDED MAJOR HAYNES

15892 A. C.

ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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MAJOR HAYNES RETURNS FROM MISSION OF MERCY TO CHILE
By the Langley Field Correspondent

Major C.V. Haynes, Air Corps, who was welcomed home to Langley Field, Va., on February 14th, after transporting medical supplies to Chilean earthquake sufferers, flew the modern super-bomber of the General Headquarters Air Force to Washington where, later in the day, he was presented the Distinguished Flying Cross for proficiency in leading the mercy mission.

All available ground troops, as well as 54 airplanes, were in formation on the concrete ramp at Langley Field as the huge craft put in its appearance shortly before 10:30 a.m. The ceremonies were not scheduled until 11:00 a.m., and Major Haynes, with his crew of four officers and six enlisted men, circled the airplane around the Peninsula until the time for him to descend.

Amidst the plaudits of fellow officers and the several hundred spectators, he made a perfect landing and taxied up to the big plane's usual resting place on the ramp, whereupon Major General Frank M. Andrews, Commanding General of the GHQ Air Force, and other high officials, went out to greet the returning airman.

Major Haynes was the first to alight. He was greeted informally by General Andrews, who joked:

"Hello, C.V.; where've you been?"

The husky Commanding Officer of the 49th Bombardment Squadron smiled. "Just been on a little trip, Sir," he replied:

"You did a grand job," General Andrews told the airmen, who were also greeted by Brigadier General Arnold N. Krogstad, Commanding Officer of the Second Wing, and Lieut. Colonel Robert Olds, Commanding Officer of the Second Bombardment Group.

Shortly afterwards, General Andrews extended Major Haynes and the other flyers a formal welcome from the 8,400-mile trip, which was begun from the Peninsula airdrome. The B-15 arrived at Langley Field from Miami, Fla.

Mr. W.D. Millner, Field Director at Langley Field for the American Red Cross, read a message from Mr. Norman Davis, Chairman of this organization, who praised the mercy flight, stating:

"The brilliant execution of your mission of mercy in transporting by air Red Cross medical and surgical supplies to

aid the thousands of injured in the Chilean earthquake has thrilled and inspired the people of our country. Although in line of duty, the task was performed so generously that it has won the admiration of everyone and will always remain a splendid chapter in the history of the Red Cross. The Red Cross is most grateful. Would you be good enough to extend our thanks to members of your crew."

The medical supplies, consisting mostly of bandages, serum, ether, chloroform and surgical appliances, were taken to Santiago, Chile, at the request of President Roosevelt, who had been asked by Red Cross Headquarters to authorize the flight. The plane left Langley Field on February 4th and arrived in Santiago several days later.

Members of the flight stated that the weather conditions on this long journey were generally good, although they ran into several periods of rough and rainy weather. They stated they saw little evidence of the earthquake in Santiago, which is 200 miles away from the most severely stricken area. Langley Field was in contact with the airplane by wireless during most of the flight.

The presentation of the Distinguished Flying Cross to Major Haynes was to have been made upon the arrival of the flyers at Langley Field, but the plans were changed when the War Department announced that the award would be made by the Secretary of War, the Honorable Harry H. Woodring, in Washington.

In welcoming the returning flyers, General Andrews said:

"We are glad, indeed, to have you back home after your successful flight to aid the Chilean earthquake victims, and I had hoped to have the pleasure of presenting you with the Distinguished Flying Cross.....I extend my sincere congratulations and hope in the future you will have many more opportunities of being rewarded for meritorious flights."

Among the civilians who lined the edge of the field were Major Haynes' wife; his parents, Mr. and Mrs. C.H. Haynes, of Mount Airy, N.C.; and his sister, Miss Rachel Haynes, of Beaufort, N.C.

Fifty-two airplanes went aloft in the

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aerial review which followed the welcoming ceremonies. They taxied along the concrete runway in single file, then soared into the air and gathered in mass formations. In the review were three B-17's and six B-18's from the Second

Bombardment Group; six B-18's from the 21st Reconnaissance Squadron; 24 P-36 Pursuit airplanes from the Eighth Pursuit Group, and nine B-18 airplanes from Mitchel Field, New York.

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XB-15 FLIGHT TO CHILE - LINKING OF THE AMERICAS
By Captain William D. Old, Air Corps
Co-Pilot on the Flight

About midnight on January 24, 1939, a section of Chile, extending from Santiago south for about 400 miles, was rocked by a terrific earthquake. The center of this shock occurred in the Concepcion-Talca-Chillan area. Chillan, a thriving city of some 40,000 population, was completely demolished, and some 12,000 of its inhabitants are dead, with many more injured. The quake actually lasted a little over two minutes, but for hours afterward weakened buildings continued to fall. Casualties for the damaged area were estimated to be 25,000 dead and 40,000 injured. The injured required great quantities of medical supplies. All available in the Argentine were rushed by air and rail to the stricken area. Two United States Army bi-motored Bombers from France Field flew south with a Red Cross representative and all of the serums and medical supplies that could be gathered up in the Panama Canal Zone. Then, on February 1, 1939, there came an urgent call from the Red Cross in Santiago to the Red Cross in Washington for certain additional medical supplies. The only way to transport these supplies to Santiago, a distance of some 5,000 miles, in time to be of value, would be by air, so the Red Cross requested the President to send a Flying Fortress. This request was immediately approved.

Orders for the trip reached the headquarters of the 2nd Bombardment Group at Langley Field, Va., late in the afternoon of February 1st. Things began to hum. Colonel Robert Olds, the Commanding Officer, designated Major Caleb V. Haynes to accomplish the mission. Major Haynes, the Squadron Commander, selected a crew as follows:

Co-pilot, Captain William D. Old;
Navigator, Captain John A. Samford;
Engineer-Pilot, 1st Lieut. Richard S. Freeman;
Weather Officer, 1st Lieut. Torgils G. Wold;
Chief Aerial Engineer, Technical Sergeant Adolph Cattarius;
Assistant Aerial Engineers, Staff Sergeants William J. Heldt, Harry L. Hines, David L. Spicer;
Radio Operators, Corporal, A.M. 1st Class, James E. Sands and Private 1st Class, A.M. 1st Class, Russell E. Junior.
As it was not definitely known what

the weight or the cubic volume of the supplies would be, three planes were made ready, two B-17's and the XB-15. The XB-15 is the largest land plane in the world today. It has a wing spread of 150 ft. and is powered by four Pratt and Whitney double row radial engines that develop 1,000 horsepower each.

It has four Pullman bunks and a galley where hot food can be prepared.

Colonel Olds' plan was to load the XB-15 and, if all supplies could not be placed aboard this plane, any remaining were to be loaded into a B-17. Work was immediately begun to groom the planes for the flight - twenty-hour checks were made; one bomb-bay tank was installed in each of the B-17's; platforms for the cargo were built in the bomb-bays; 72-hour kits and emergency overwater kits were loaded, and the planes serviced with gas and oil. The navigators assembled the necessary maps, charts, and equipment for the flight. All was in readiness by 2:00 o'clock on the morning of February 2nd.

At about 3:00 p.m., February 3rd, the supplies arrived - 69 cartons containing cotton, bandages, surgical gloves, ether chloroform, ray films, hypodermics, and two buckets of Plaster of Paris, and needles. After checking, the loading began. Captain Wittkop was designated to fly the B-17 that was to take what could not be put aboard the B-15. His disappointed expression was unforgettable as he watched the last carton hoisted in the nose of the XB-15, for he was anxious to make the trip.

At 6:35 A.M., E. S. T., Saturday, February 4, 1939, the XB-15 started rolling down the runway into the wind as the throttles were opened. After a normal run she lifted into the air and was soon headed for Panama, via Miami, a distance of 1945 miles.

Climbing, we were soon over a lower cloud layer that obscured the ground, and at 5,000 feet the Major "leveled off." About an hour later, the clouds began to dissipate and we got a check on our drift as we crossed the coast at Bogue Inlet, just west of Cape Lookout. About 8:00 a.m., the radio range station at Charleston, South Carolina,

gave us the winds aloft, and we discovered that at our 5,000-foot level we had a head wind of 52 miles per hour, while at 2,000 feet it was more of a cross wind, with a velocity of only 20 miles per hour, so down we went to take advantage of the lesser wind. Palm Beach, Florida, was identified as we passed to the east of it, well to sea. As our course and the east coast of Florida were converging, the coast line became more distinct, and at 11:45 a.m., we were five miles east of Miami Beach, Fla. From that point, Captain Samford set a course straight for Panama, which took us south almost along the 80th meridian.

The waters between Miami and Cuba were a beautiful sight that day - glassy, calm, and so clear that the sandy bottom could be seen beneath us as far as the Nicholas Channel, just north of Cuba. Cuba was sighted at 12:48 p.m., and before long we were crossing the low marshy coast. The interior of this island along our course was a checker board of sugar cane fields, haciendas, sugar centrals and palm trees.

We soon passed the southern shores of Cuba a little east of Cienfuegos and headed south across the Caribbean Sea. For the next 150 miles the sky was clear and on the sea enough white caps were visible to make the reading of drift through the drift meter a simple matter. The breaking of the white caps told us that we had a surface wind from the east. We passed to the east of Little Cayman Island, and from there until we picked up the France Field radio beacon, navigation was entirely dead reckoning.

We were in and out of clouds and rain for the next 500 miles. Radio reports indicated that the rain at France Field had passed, but that the ceiling was 2,000 feet, so we dropped to 1,000 feet. At about 6:00 p.m., Panagra, a branch of the Pan-American Air Lines, gave us two radio bearings indicating that we were to the west of our course, and shortly thereafter we picked up the France Field radio beacon, which also indicated we were to the west, so we brought the needle back to vertical by swinging the plane a few degrees to the left, and at 6:45 p.m., we saw a flash of light at the entrance to the Panama Canal. It was a most welcome sight. At 6:55 p.m., we landed, and soon thereafter servicing and routine maintenance began.

We were up at 3:00 a'clock the next morning, and after getting the latest weather from Panagra, the big plane, loaded with 3,000 gallons of gasoline, started its run for the "take-off" at 4:00 a.m. Lima, Peru, 1560 miles distant, was the destination. All of the field was used. After climbing to the north until we had 1,000 feet altitude, we started a slow turn to pick up our

course to the south. Due to the high mountains along the West Coast of South America, and the perpetual bad weather along the coast of Ecuador, caused by the meeting of the Humboldt current and the Dos Ninos, we did not set a course for Lima but headed for Paita Point, near the most western part of South America.

We climbed to 5,000 feet, and in the moonlight watched the dark jungle beneath flit by. Soon the Isthmus was crossed, and we were over water once more. About 30 minutes later we crossed Punta Mala, our last pilotage check for some 600 miles. Shortly after leaving Punta Mala, the navigator got out his octant and made his first celestial fix, using Alpha Crux in the Southern Cross, which was straight ahead, and the moon low in the heaven to the west. Shortly after daylight we flew over lower cloud bank and before long we could see indications ahead of the bad weather that we were expecting. However, it was no more turbulent than that which we had encountered the afternoon before coming in to Panama - just clouds and moderately heavy rains. At 7:31 a.m., our DR position showed that we were crossing the equator. Captain Old, the only member of the crew who had not crossed before, was duly initiated by Lieut. Wold, who took a rag that was used to mop up the rain that leaked through the front windows of the cockpit and wrung it out over the novice's head.

Just as a safety precaution, to insure that we were not drifting toward the land and the high mountains each time we "went on instruments," we turned 10 deg. to the west and then, when we broke out in the clear, we headed for the point. Five times we turned out and back. Then land was sighted through a break. Our DR position showed that it should be St. Elena Point, and a better view verified this. After crossing the Gulf of Guayaquil we came out into the clear again, and from there to Lima we practically followed the coast under clear skies. However, the massive Andes to the east were practically shrouded in clouds. Some portions appeared to be a section of a huge layer cake - a layer of clouds, a layer of mountains and a layer of clouds.

There is a surprisingly large strip of arid desert land along the Peruvian Coast, but it is equally surprising how fertile and productive are the areas in this desert where water from the mountain streams make irrigation possible. We passed over numerous villages, some along the coast, some back a few miles from the Pacific. From our altitude, three things impressed one about these villages; first, the apparent sturdy type of construction; the square with its walks connecting

the opposite corners, and the inevitable cemetery near the towns.

At 12:50 p.m., we were on the excellent airport at Lima, Peru, and by the time the chocks were under the wheels the crew from the Panagra Air Lines was ready to service and assist in any necessary maintenance. On the Limatambo Airport, Panagra maintains a very modern repair shop. After a leisure and very delightful luncheon at the Country Club, we returned to the Airport to check on the servicing. Our schedule called for an arrival in Santiago about 8:00 a.m., the following morning, so Major Haynes set 10:00 p.m. as the time of take-off. From the American Embassy, where we had dinner with Ambassador and Mrs. L.A. Steinhardt, we again returned to the Airport and made ready for the take-off.

Due to the mountains around Lima, one must be careful on a night take-off. After we cleared the ground we started our climb and headed out to sea for 15 miles, then set a course direct to Santiago, 1545 miles to the southeast. This course took us about 300 miles to sea. At 6,000 feet, we were over a lower cloud bank, with the moon and the bright stars of the southern skies above. The extremely smooth air greatly facilitated the work of the navigator in making his "shots" to determine a fix. In aerial celestial navigation a bubble octant is used, and due to the acceleration of the bubble a series of observations must be made, averaging the time of the observation, and the altitude of the body. The smoother the air the fewer observations are required. Celestial fixes were obtained every two hours, but position reports were transmitted hourly to Panagra, where they were relayed to France Field, then on to Langley Field.

At daybreak, we were still over a lower cloud bank but, as more light from the sun began to appear in the east, we could see the outline of the Andes about 175 miles to the east. At first it was very difficult to determine whether they were low mountains fairly near, or large ones very distant. Our slow rate of closing on them proved the latter. It was a beautiful sight to watch the sunrise over the Andes - the irregular silhouette of the mountains stood out like the teeth of a saw, and the clouds that obscured their base gave them an appearance of being set in snow.

About 15 miles from the coast the lower layer of clouds ended, leaving the coast clear and distinct. We got out our detailed map of the west coast of South America and located our position definitely. It was found to be about eight miles to the left of the Lengua de Vaca, the point for which we were headed. From there to Santiago the problem of navigation was a simple one of pilotage.

We arrived over the beautiful and very modern city of Santiago at 7:30 a.m.,

Monday, February 6, 1939, and after two circles around its edges, we landed at Los Cerrillos, a very modern airport used by Panagra. There to greet us were Mr. Wesley Frost, from the American Embassy; Colonel Ralph H. Weston, Air Corps, the American Military Attache to Chile; Commodore Castro, Chief of the Chilean Air Force; Commander Herreros; other officers of the Chilean Air Force; officers and men of the flight from Panama, and representatives of the Red Cross. Shortly after landing, the unloading of the supplies began, much to the interest of the small crowd that gathered around the plane. After checking the supplies, they were loaded on trucks to be taken to Red Cross Headquarters in Santiago.

It was learned that Lieuts. Lynn and Lee, from France Field, Panama Canal Zone, were taking off in a B-18 at 10:00 a.m., on a trip to Chillan, about 220 miles to the south, to ferry some badly injured earthquake victims back to Santiago, where much better hospital facilities were available, so Captain Old climbed aboard to have a look at the destruction to the south.

Santiago is located about 80 miles inland, at the north end of a fertile valley that lies between the Andes and a lower range along the coast. To the south this valley widens out, and is almost completely cultivated. Many prosperous appearing haciendas, with their irrigated fields, were in evidence. The irrigation canals, fed from numerous streams that rise high in the snow-covered Andes, could be easily traced, as they were outlined with single rows of tall Eucalyptus, Pine and Cottonwood trees.

The first evidence, from the air, of the damage caused by the earthquake or "terremotto," as the Chileans call it, was seen at Parral, and from there southward each village was damaged to a progressively increasing extent. Destruction was not confined to the villages alone, as many isolated barns and farm houses were down. At Chillan we circled low over the pile of debris that a short time before had been a prosperous city of some 40,000 souls. Newspaper reports concerning the damage were in no way exaggerated. Noting how completely the demolished condition in which the entire city appeared, one wondered how so many escaped.

The type of building construction used in Chile was probably responsible for the numerous casualties. The houses were all very sturdily built of large adobe brick, with roofs of heavy tile, supported by heavy timbers. When the walls collapsed, down came the heavy roofs before the sleeping inhabitants realized what was happening. On the 6th of February, salvage work was still going on, and new victims were constantly being found.

We landed on the airport at Chillan to await the arrival of the ambulances with the patients. Quite a few of the natives spoke fairly good English, and during the conversation it was learned that they had acquired their knowledge of the language through American talking pictures, which are quite popular in South America.

With eight patients and two doctors aboard, we headed up the valley towards Santiago, and upon our arrival the patients were immediately removed and the plane completely disinfected.

In Santiago we had an interesting stay. Entertainments kept us busy. We were guests of Ambassador and Mrs. Norman Armour, Mr. and Mrs. Wesley Frost, Col. and Mrs. Ralph Wooten, The "Club Militaire," and the Officers' Club at El Bosque, the Santiago base of the Chilean Air Force. It was at the dinner at the Club Militaire that Major Haynes was presented with the Chilean "Commander of the Order of Merit," and Captains Wolfe and Tate, from France Field, were presented with "Officer of the Order."

Major Haynes planned to make the return flight in easy stages, with stops at Lima and Panama, but word was received that suitable gas was not available at Lima, thus necessitating a change in plans. It was then decided to load 4,000 gallons of gasoline aboard and head for Panama, with Talara, Peru, about 960 miles south of Panama, as an alternate airport, and where gasoline was available.

We cleared Los Cerrillos at 6:10 p.m., Thursday, February 9, 1939, and headed southeast to follow down a valley to the coast in order to avoid the high mountains that were on a direct course. We flew over Valparaiso a little before dark and, using that city as a point of departure, we again headed for Paita Point. The return flight was uneventful, except that about midnight the engines began to ice up. However, this was quickly remedied by application of carburetor heat. At about 7:00 a.m., our D.R. position showed that we should be nearing land, and shortly after passing through a light rain area we saw the coast to the east. We turned in for a pilotage fix and identified Paita Point, and from there set a course for Panama, as we had ample gasoline to make it.

We landed at France Field at 2:05 p.m., Friday, February 10th, with 550 gallons of gas aboard, after a flight of 19 hours and 55 minutes, covering about 3200 miles. The flight from Santiago to France Field is the longest one that has been made by the B-15. We had received orders to remain in Panama until Monday, February 13th, then proceed to Miami and spend the night there, and depart in time to arrive at Langley Field by 11:00 a.m. On Tuesday, February 14, 1939. During our stopover in the Canal Zone, Major Haynes demonstrated his ability as a

tarpen fisherman. The fish originally weighed 35 pounds, but since that time it has grown and is still growing.

We cleared Panama at 9:15 a.m. on Monday, and when about 100 miles out we passed directly over the U.S. Army Transport REPUBLIC, bound for the Canal Zone. The return trip across the Caribbean was made in almost perfect weather. At 4:20 p.m., we were on the Municipal Airport at Miami, where Major Andrews had made the necessary arrangements for servicing.

At 5:40 a.m., Tuesday, February 14th, we were off on the last leg of our trip, and at daylight we were well up the Florida coast. At 10:35 a.m., we were over Langley Field. Orders were received by radio to land at 11:00 a.m., and at that time we were on the ground, ending the longest flight of that nature on record.

General Andrews, General Krogstad, Colonel Olds, and other officers of the GHQ Air Force were on hand to greet the flight. After an address by General Andrews, a Wing review was flown.

At 12:45 p.m., the crew climbed aboard the B-15 for a trip to Washington to visit the Office of the Chief of the Air Corps, and from there to proceed to the Office of the Secretary of War, where Secretary Woodring presented Major Haynes with the Distinguished Flying Cross.

It is impossible to estimate the extent of the good will which was created by this flight. In Santiago, people stopped members of the flight on the streets and expressed their appreciation for the assistance sent by the United States. They were amazed at the distance traveled in such short time and realized how quickly assistance could be obtained from this country in time of need. It is efforts of this nature which greatly enhance the solidarity of the Americas.

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ARCTIC WEATHER OVER SHREVEPORT, LA.

While engaged in an ordered flight to service ceiling on February 6th, a flight of six P-36A airplanes, under the command of Captain M.R. Nelson, Air Corps, reached an altitude so high above the earth that the temperature of the outside air registered 40 degrees below zero, Centigrade. Strangely enough, this temperature, when converted to Fahrenheit, is 40 degrees below zero, and is the only temperature at which both Centigrade and Fahrenheit are the same.

"It is believed," says the Barksdale Field Correspondent, "that the altitude attained (33,800 feet) is the highest point from which human eyes have ever looked down upon Shreveport and its vicinity. Points over 100 miles away

(Continued on Page 7)

ARMY RE-CLASSIFIES AIR CORPS OFFICERS

As a result of intensive study of the flying qualifications required in handling modern airplanes in order to provide for increased safety and efficiency of the Air Corps, the Honorable Harry H. Woodring, the Secretary of War, announced today that all Air Corps flying officers will be reclassified into the following groups: Command Pilot, Senior Pilot, Combat Observer, and Technical Observer.

In the earlier days of military heavier-than-air aviation, the single-seater plane, or the biplace plane providing for a pilot and an observer, led to the ratings of military airplane pilot, airplane pilot and airplane observer.

In recent years the trend toward the larger crews required in bombing airplanes has indicated the desirability of having different ratings which would be more representative of modern development. Furthermore, these new ratings would take cognizance of changing physical and professional conditions so that officers would be able to fly only those types of planes for which they are professionally qualified and in capacities only as rated. The new regulations also provide for a changing of classification in which an officer may be placed as his development during his service may warrant.

The new ratings are as follows:

Command Pilot - All Air Corps officers with 20 years' service in the Air Corps and 2,000 hours' pilot experience or with 15 years' experience in the Air Corps and 3,000 hours' pilot experience.

Senior Pilot - All Air Corps officers with 10 years' service in the Air Corps and 1,800 hours' pilot experience.

Pilot - All graduates of the Air Corps Flying School.

Combat Observer - All graduates of the Combat Observers' Course at the Air Corps Flying School.

Technical Observer - Those Air Corps officers who have not received a higher rating, or who will fly under this category in temporary circumstances when their physical or professional condition may not warrant their flying under a higher rating at a particular time.

All pilots to be further subdivided into limited and unlimited groups. The former are those whose piloting must be limited in some way, differing with the individual, and depending upon professional and physical fitness.

Command Pilot would be senior member of a combat crew. In larger type

planes requiring a pilot, co-pilot, navigator, bomber, and machine-gunner, the distinct need for an experienced directing head, not necessarily at the controls, but on whose decision depends the successful completion of the combat mission and the safety of plane and crew, has been indicated.

Senior Pilot corresponds to pilot now rated as Military Airplane Pilot, and corresponds to civil airlines First Pilot.

Pilot - Corresponds to present airplane pilot rating.

Combat Observer - Takes over observation work, defends the airplane in rear hemisphere as a machine-gunner and does command observation or air observation of artillery fire.

Technical Observer - An officer in this class maintains technical proficiency but cannot fly in other classes unless physical and professional conditions warrant a higher rating.

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ARMY AIRMEN IN HAWAII COMPLETE COURSE IN CHEMICAL WARFARE

January 30, 1939, marked the completion of one of the most important phases of the January 3-June 30, 1939, schedule for the ground training of junior officers, when 60 officers and noncommissioned officers of the 18th Pursuit Group, Wheeler Field, T.H., received from Lieut. Col. Wm. E. Lynd, 18th Pursuit Group Commander, newly engraved certificates attesting to their proficiency in Chemical Warfare. Capt. S.E. Whitesides, Chemical Warfare Service, was the instructor who so ably conducted the School.

Those officers and noncommissioned officers graduating were:

1st Lt. Baxter; Tech.Sgt. Cayhue, and Sgt. Booth, Headquarters & Headquarters Squadron;

2d Lts. Holdiman, Holloway, Cain, Kluever, Quinn, Flack, Wintermute and Tuell; Tech.Sgt. Asherowsky; Staff Sgts. Bailey and Postvit; Sgt. Wells, and Corporals Hess, Walsh and Witko, 6th Pursuit Squadron;

1st Lt. Kaye; 2d Lts. Robbins, Hammond, Posey, Pinkston, Salzarulo, Starkey, Sparks and Roberts; Mr.Sgt. Duprey; Tech.Sgts. Downing and Van Matre; Staff Sgts. Johnson, E.R., Johnson, K.L., O'Neill and Villiquette, 19th Pursuit Squadron.

2d Lts. Eckman, Barden, Durham, Danson, Cole, Hubbard, Robinson and Stuart; Mr.Sgt. Weber; Staff Sgts. Brechtel, Doughty, Duggar and Smith, T.R., and

MODERN SCHOOL FOR CHILDREN AT LANGLEY FIELD

By the News Letter Correspondent

The construction of the children's school at Langley Field, Virginia, which will be one of the most modern and well-equipped educational institutions in the Tidewater area, is about 65 percent complete and the builder's completion date is June 24th, according to a recent statement of Lieut. Clarence Renshaw, Constructing Quartermaster at Fort Monroe, Va., and the Air Station of the Peninsular area.

Located on Dodd Boulevard and approximately midway between Thompson and Bowen Streets, the school is being erected by E. & E.J. Pfozter of Philadelphia, at a contract price of \$67,000. The sum of \$75,000 was allotted for the school, and the remaining funds will be expended by the Constructing Quartermaster for the installation of the necessary outside facilities, such as roads, walks, landscaping, etc., and the purchase of school equipment not required to be installed under the building contract.

Erected over a concrete foundation and floor with brick walls, slate roof and tile partitions, and being air-conditioned and heated, the school will be modern and fireproof in every detail. With its architecture resembling the style of early colonial days, the building, when completed, will present the same general exterior finish as the post chapel, which is located directly across Dodd Boulevard. The rear of the school building faces the station hospital.

The walls of the structure are rough-surfaced and constructed of variegated brick with limestone trim. It is designed as an "H" and has an overall measurement of 167 feet by 85 feet.

The main part of the building, or center wing, is 107 feet by 30 feet, and consists of an entrance hall and corridor, boys' and girls' rest-rooms, heater room, book room and one classroom with a seating capacity of 25. Also included in the main part is an assembly room, or auditorium, which will seat 128 persons. At the east end of the auditorium is an elevated stage equipped with a screen and drop curtain extending across the full width of the room.

Plans call for a projection room at the west end of the book room, which will be equipped with motion picture apparatus for the projection of 35 mm. film (full-sized or normal films). Most educational films shown in schools are either 8 or 16 mm., which are so narrow in width that difficulties are

encountered in the large magnifications necessary properly to display the pictures.

Housed in the west wing of the building, which is 35 feet by 30 feet, are two classrooms with seating arrangements for 30 and 35 children respectively; the principal's office and kindergarden.

The kindergarden will include several innovations and will be well equipped for the purpose intended. On the hardwood floor, marked off in permanent lines, will be a small play ring. The pupils will have the comfort of a large open fireplace during inclement weather. Along one wall will be built-in book benches with bookcases arranged on both sides.

Between the classrooms is the principals' office from which an electric assembly and dismissal gong is controlled.

The east wing has the same over-all dimensions as the west wing and will contain two classrooms, one for 30 and the other for 25 pupils. Between the rooms is to be placed a teachers' lounge and meeting room.

The building will contain 10 rooms and will have a seating capacity of 175, exclusive of the auditorium and the kindergarden.

When construction has been completed, equipment will be installed and the grounds will be landscaped, it being anticipated that the School will be ready for occupancy by the opening of the fall term.

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Chemical Warfare Instruction in Hawaii (Continued From Page 6)

Corporals Graham, Henson and Thomas, 26th Attack Squadron.

1st Lieut. Carter, Staff Sergeants Carnes, Garten and Gaudry, Sergeants Felkner, Geisinger and Vaughn, and Corporals Bayham and Wales, 18th Air Base Squadron.

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Arctic Weather over Shreveport, La. (Continued from Page 5)

were visible to the pilots of the six airplanes as they flew above Shreveport over six miles in the air.

Members of the flight, in addition to Captain Nelson, were Captain Sanders, Lieuts. Tacon, Grove, Keith and Miller, of the 55th Pursuit Squadron.

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STATION ASSIGNMENT OF ADVANCED FLYING SCHOOL GRADUATES

The Flying Cadets who graduated on February 1, 1939, from the Advanced Flying School, Kelly Field, Texas, and were commissioned second lieutenants in the Air Reserve, were placed on active duty at Kelly Field for a brief period pending their assignment to various Air Corps stations in the United States and in the Insular possessions.

Special Orders of the War Department, recently issued, relieved these newly commissioned Reserve officers from their assignment and duty at Kelly Field on February 14th, and assigned them to the stations as indicated below:

To March Field, Calif.

Glen Robbins Birchard	Lawrence William Coyle
John Huie de Russy	George Henry Gutru, Jr.
Ernest Gordon Ford	Harold Marklin Hatman
Jean Dowell Gilmore	James Allison Johnson
Harry Joseph Holt	William Archibald Lanford
Henry Preston King	George Wayne Thornbrough
Maurice Allen Morgan	Eugene Terry Yarbrough
Ralph Lorimer Oliver	Harold Willisie
William James Wrigglesworth	

To Mitchel Field, N.Y.

Chester Charles Busch	Charles Paul Sheffield
John Joseph Doerr	Campbell Henderson Gould
Dwight Francis Lewis	Malcolm McMillan Heber
Thomas Carl McNeal	Frederick Neil Philbrick
Brian O'Neill	*Franklin Emmett Schroeck
Parker Fall Schofield	*Bernard Willmore Veatch
*For duty with 97th Observation Squadron	

To Selfridge Field, Mich.

James Alex Barnett	George Herbert Armstrong
Robert Lee Baseler	John Landrum Brownwell
Willis Eugene Beightol	James Robert Bruce, Jr.
Eugene Louis Clark	Oliver George Cellini
Newton Robert Dick	John Scrimgeour Evans
Harry Albert Jenkins	Charles Nelson Fendrich
Neil Arnold Newman	Frederick Charles Grambo
Edgar Allen Romberg	Archibald Woodrum Moore
Delmer Norris Skow	Paul Lehmann Glenn Moore
Raymond Frank Rudell	Heman Ward Randall, Jr.
Burton Eugene Schwind	Robert Richard Rowland
Joseph Columbus Smith	William Howard Swanson
Eugene Lee Strickland	John Jacob Van der Zee
Thomas B. Summers	Harold Jennings Whiteman
William Waller, III	Woodrow Burton Wilmot
Robert Danforth Van Auken	

To Barksdale Field, La.

Frank Lowry Dunn	Martin Perdue Crabtree
Harry Leslie Galusha	Holden Fowler Ellison
Charles Afton Gayle	Jack Simmons Jenkins
William Lane, Jr.	Cecil James Looke, Jr.
Seth Jefferson McKee	Jack William Saunders
Charles Roy Sneed	William Emmett Stinson
Leonard J. Barrow, Jr.	David Dickson Terry, Jr.
Clarence Leonard Tinker, Jr.	

To Hamilton Field, Calif.

Harold Newt Chaffin	Robert Edward Crouch
Clarence Shipe Chiles	John Eugene Dougherty
George Edward Glover	Theodore Fred'k Holsteen
Donald McKay Keiser	Clarence Vernon McCauley
Clarence Arthur Neely	Harold Caldwell Smelser
Bruce Burns Price	Truman A. Spencer, Jr.

To Langley Field, Va.

Wilson Harper Banks	Theodore R. Aylesworth
Raymond Joseph Busse	Ralph Anderson Barksdale
John Edgar Carmack	William S. Barksdale, Jr.
Keith Karl Compton	Raymond Fred Blossies
Arthur Ray De Bolt	Charlie Rankin Bond, Jr.
James Giannatti	Raoul Joseph Bourgoin
Virgil Monroe Gillum	Paul M. Brewer, Jr.
James Alva Howard	Skidmore Neale Garrett
J. Garrett Jackson	Otha Bennett Hardy, Jr.
Joe Kenneth McNay	John Bailey Henry, Jr.
James Daniel Mayden	Hugh Boyd Manson, Jr.
Robert Burl Mueller	Philip Lambeth Mathewson
Philip Orville Potter	William Wallace Momyer
Kyle Loyd Riddle	Robert L. Morrissey
Leonard Boston Storm	Carrell Thurman Murrell
Sullins Preston Turner	Gerhard John Schriever
*Harold Thaddeus Babb	*Theodore Wightman Tucker
*For duty with 3rd Observation Squadron	

To the Hawaiian Department

Roy Milton Carter	William Simms Hindson
Cecil Lee Faulkner	Thomas Harber Holbrook
Byron Eugene Hall	Wm. Edward Hubbard, II
William Allen McClure	Jake McDonald Hartman, Jr.
Charles Martin Opeil	Weldon Halliwell Smith
Edward Charles Teats	Raymond Robert Surgeon
Curtis Edward Wood	Earl Wilson Worley
Harold Frederick Wilson	

To the Panama Canal Department

James Dean Berry	Charles William Rogan
Marshall Pyron Camp	John Preston Breckenridge
Leon Welton Gray	Kingsbury E. Parker, Jr.
David McNair Peffer	Herbert A. Von Tungeln
Thomas Cullen Smith	John William Wetman

To Fort Lewis, Washington

Roy William Gustafson	Albert Benton Edwards, Jr.
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To Marshall Field, Fort Riley, Kans.

Harold Emmett Humfeld

To Moffett Field, Calif.

John Albert Rouse

To Pope Field, Fort Bragg, N.C.

Thomas Fletcher, Jr.

To Scott Field, Belleville, Ill.

Frank William Jarek	Clarence Peter Wiltjer
James Frederick Setchell	

To Brooks Field, San Antonio, Texas

Andre Jacques Dechaene
Sidney Bruce Gimble, Jr.

To Fort Knox, Ky.

Charles Sylvester Marshall
Adolf Milton Wright

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Special Orders of the War Department announce the appointment of Colonel George E. Brett (Air Corps) General Staff Corps, as Assistant to the Chief of the Air Corps, with the rank of brigadier general, for the period of four years, beginning February 18, 1939, his relief as Chief of Staff, HQ Air Force, Langley Field, Va., and from the General Staff, and his assignment to duty at Wright Field, O., and as Commandant, A.C. Engineering School.

"FLYING FORTRESS" ON EXHIBITION AT GOLDEN GATE FAIR

The Army Air Corps and Hamilton Field can now boast the distinction of being officially represented at the Golden Gate International Exposition, since the delivery to Treasure Island Saturday, February 4th, of the B-17 "Flying Fortress".

The story of the placing of the plane on Treasure Island is one of difficulties and, well, situations. Major C.P. Talbot, the hard-working Base S-2, S-3, S-4 Officer at Hamilton Field, was detailed, in addition to his other duties, to handle the details of the project from its inception. Major Talbot was all set early in January to fly the plane to the Island, which is not more than five miles away from Hamilton Field by water, and land her in a sufficiently clear, smooth area, weather permitting, wind right, and all the other "ifs" contingent upon getting the big ship on the little man-made island.

But luckily, before the proposed flight was made, some slight obstructions were noted in the "clear, smooth area". These obstructions proved to be lamp posts, which the Exposition workers had inadvertently set in cement, checker-boarding the intended landing spot, and consequently making a landing on the island out of the question.

This situation might have stumped the ordinary individual, but not the Army. The B-17 was flown to old Crissy Field and placed near the sea wall, where she could be put on a barge and towed to the island. It was at this point that the Army found out about tides, winds, and the wetness of the Pacific Ocean. The ramp, built to hold up the 12-ton load from the sea wall to the barge, failed to withstand the high tide, and consequently was beached thirty feet away the night before the fateful journey was to take place.

Undaunted, however, another ramp was built on the following morning. The plane was put on the barge, towed, and lifted over the sea wall on Treasure Island by crane, and now she stands resplendent in the center of all the Federal exhibits.

After a bath, a coating of shellac to withstand the weather, and plenty of metal polishing on the part of her grooves, the B-17 is ready for all comers to the Fair not only to see, but inspect inside and satisfy that flying urge.

Permanently detailed from Hamilton Field to the Exposition for its duration, Feb. 18th to December, 1939, to guard and explain the parts and equip-

ment of the B-17, will be 1st Lt. Robin C. Cannon, 2d Lt. William R. Stark, Sgt. Nolan L. Thibodeaux, Pvts. 1/cl Ernest G. Werner and Clarence A. Le Mieux, and Pvts. Robert J. Dunn, Jr. and Allen N. Sly.

The link trainer, which will be on display and at the disposal of anyone having in his possession a pilot's license, is expected to provide some amusement and diversion for the men on this detail, who anticipate a constant barrage of questions and not as much fun as you might expect on such a mission.

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ARMY EXHIBIT AT SAN FRANCISCO EXPOSITION

Included in the U.S. Army Exhibit at the San Francisco Exposition on Treasure Island is a large mosaic of the San Francisco Bay area. Visitors to the Fair can see a clear lay-out of San Francisco, the Golden Gate Bridge, the Oakland Bay Bridge, Treasure Island, and many other interesting details.

The map, covering an area of 108 sq. miles, is 8 ft. wide by 12 ft. long. Seven hundred pictures were used in laying the mosaic. They were taken from an elevation of 6,000 ft. with a K-3B camera. Three months were spent in completing this tedious work and credit for the fine job is accorded Moffett Field, Calif., personnel in the persons of 2d Lt. Karl L. Polifka, A.C., pilot; Pvt. J.D. Goldstein, photographer; St. Sgt. Raymond M. Bishop, for the laying out; and Pvt. 1st Cl. James West, the painter.

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GAS DEFENSE TRAINING AT HAMILTON FIELD

The 88th Reconnaissance Squadron, Hamilton Field, Calif., has completed in January 1939, a course in "Defense Against Chemical Attack", and in training each of its officers and six enlisted men to act as Unit Gas Officer and Gas N.C.O. The instructor was 1st Lt. Leslie O. Peterson, A.C., a graduate of the Chemical Warfare School at Edgewood Arsenal, Md. The course was given over a period of two weeks and a total of sixteen hours was spent in lectures. At the close of the instruction, each student entered a gas chamber to emphasize the effectiveness of the army gas mask. In addition, concentrations of the common chemical agents were set up in the field so that the class could identify and familiarize themselves with the characteristics of each. After completion of the course, each student was presented with a diploma.

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SOLDIER'S MEDAL AWARDED CORPORAL WILSON

Corporal Frederick H. Wilson, Air Corps, 2nd Air Base Squadron, Mitchel Field, N.Y., was awarded the Soldier's Medal for heroism displayed in extinguishing a fire in a burning airplane.

The presentation was made on February 11, 1939, by Major General Hugh A. Drum, Commanding General, 2nd Corps Area. Captain J.M. Bevens, Air Corps, Base Adjutant, read the following War Department Citation:

"Frederick H. Wilson, R-1845622, private, air mechanic, second class, Air Corps, (now Corporal), United States Army. For heroism displayed in extinguishing a fire in a burning airplane at Mitchel Field, New York, on July 5, 1938. Noticing that a fire had started in the right wing of an airplane which was being taxied by him to a position near several other parked airplanes, Private Wilson turned off the fuel valves and the master ignition switch of the ship, leaped to the ground, and picked up a fire extinguisher, played its contents on the blaze. On the arrival of the fire truck, Private Wilson, with complete disregard of his personal safety, well knowing that all fuel tanks of the airplane were full and that there was imminent danger of an explosion, ran to the truck, seized a hose and played fire-extinguishing chemical therefrom on the blazing wing until the fire was extinguished, after which he again took a hand extinguisher, climbed into the still smoking ship and emptied its contents into the cote of the blaze. The heroism displayed by Private Wilson on this occasion averted possible loss of human life and prevented the destruction of valuable government property."

Following the presentation of the medal, the entire command of Mitchel Field passed in review for General Drum and Corporal Wilson to the strains of martial music supplied by the 62nd Coast Artillery Band from Fort Totten, Long Island, New York.

The News Letter Correspondent declares that the entire command of Mitchel Field is proud of Corporal Wilson's actions in averting what might have been a fatal accident and wish him continued success in the Air Corps.

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FAST FLIGHT BY NEW PURSUIT PLANES

Officials at Langley Field, Va., were "quite satisfied" with the performance of five new P-36A Pursuit planes which were flown on February 17th from Buffalo, New York, to the Peninsula airdrome.

These new planes, which became a part of the war birds of the Eighth Pursuit Group, made exceptionally fast time on the approximately 432-mile jaunt between Langley Field and Buffalo. The flight

was led by Captain John E. Bodley of the 33rd Pursuit Squadron, and the planes were flown from the Curtiss plant at Buffalo. The new type ships flew at an altitude of 13,000 feet, and no attempt was made to establish a record of any kind, since the planes are new and the flight was a military formation.

Several P-36A planes have been tried to Langley Field in recent weeks. Twenty-four of the silvery one-seaters participated in the aerial review held in honor of Major Caleb V. Hayes following his return from a mercy mission to South America.

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QUARTERS AT HICKAM FIELD

The long awaited quarters at Hickam Field, T.H., have reached partial completion, and the first of February found a number of officers of the 5th Bombardment Group and of the 18th Wing moving out to the new post. "The Construction Quartermaster has apparently done another fine job," declares the News Letter Correspondent, "and it is apparent that Hickam Field will soon take its place as one of the most attractive Air Corps posts."

The construction of the quarters has been so planned as to avoid the appearance of monotony. During the past several years an efficient nursery has been operating on the post, and thousands of flowering plants, shrubs and trees are available for use in beautifying the post. Landscaping and lawn planting in the vicinity of the quarters are nearing completion, thus adding considerably to the appearance of the post.

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SOMETHING BIG IN THE WAY OF A TRUCK

An item of equipment which has long been desired by the San Antonio Air Depot, Duncan Field, Texas, was received, namely, a magnificent new Type C-2 Wrecking Truck (airplane crash truck), manufactured by the Corbit Company, Henderson, N.C. This monstrous vehicle, which weighs 26 tons, is 70 feet long, has 22 wheels, and is powered with a 250 h.p. motor. It was driven from Henderson to Duncan Field by truck drivers Edward Lanotte and E.G. McMonigal, of the Motor Transport Department of the Depot, and the distance of 1900 miles was covered in due time without a single incident during the journey, which might constitute something of a record. They passed through the States of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Texas. Sincere appreciation is expressed (Continued on page 11)

V-7988, A.C.

ENLISTED MEN ASSIGNED TO WEATHER SCHOOL

Special Orders of the War Department, recently issued, direct the following-named enlisted men of the Air Corps to proceed without loss of grade or rating, by military aircraft if practicable, otherwise by rail, to the Air Corps Weather School, Patterson Field, Fairfield, Ohio, to report not later than February 27, 1939, for the forecasters course commencing on that date:

First Weather Region

Staff Sergeant Bernard C. Hoffman and Corporal Henry A. Smitt, from Fort Lewis, Washington.

Private First Class James A. Rosentiel, from Hamilton Field, Calif.

Privates First Class Claude N. Hall and William A. Pope from March Field, California.

Second Weather Region

Corporal Earl M. Gay, from Aberdeen Proving Ground, Md.

Private Ross A. Somers, from Fort Bragg, N.C.

Corporal Dale W. Akins, Private Willard G. Snyder, from Langley Field, Va.

Corporal Stephen Kubica, from Bolling Field, D. C.

Corporal Kenneth W. Smith, from Chanute Field, Ill.

Privates First Class Harold F. Guth and Lester R. Robinson from Patterson Field, Ohio.

Privates First Class Keith H. Asher and Charles H. Harrison from Scott Field, Ill.

Private First Class Leonard A. Trojanoski, from Mitchel Field, N.Y.

Third Weather Region

Private First Class Charles F. Needell, from Post Field, Okla.

Privates Kenneth H. Smith and Herbert J. Gustafson, from Barksdale Field, La.

Corporal Donald D. Fay, Privates First Class Maxwell W. Roman and John P. Crews, from Kelly Field, Texas.

Corporal Earle W. Clifton, from Randolph Field, Texas.

Private First Class LeRoy N. Cookingham, from Hensley Field, Texas.

Corporal Coyd C. Gibbs, from Biggs Field, Texas.

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MAJOR DAVIES DELIVERS TALK TO RESERVES

Major Isaiah Davies, Air Corps, Director of Flying at the Air Corps Advanced Flying School, Kelly Field, Texas, was the principal speaker at a meeting of the Reserve Officers Association of the United States (Dallas Chapter) at Hensley Field, Texas, on the night of February 8th. Major Davies' very interesting and instructive talk was delivered to 75 Reserve Officers (of all branches) of the Dallas Chapter at their regularly scheduled meeting. A great

deal of favorable comment was received from listeners as well as the local press. Major Davies' topic was "The U.S. Army Air Corps."

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KELLY FIELD FACULTY HEARD ON THE AIR

Several members of the faculty of the Air Corps Advanced Flying School, Kelly Field, Texas, were recently heard in a series of radio broadcasts over station KTSA, "The Voice of the Light," San Antonio, Texas, sponsored by the San Antonio Junior Chamber of Commerce. The talks were based on training activities at the Advanced Flying School, and were a continuation of the recent talks given by the faculty of the Primary Flying School, Randolph Field, Texas.

On the first of these radio broadcasts, Thursday, February 9th, Colonel Eugene A. Lohman, Air Corps, Assistant Commandant of the Air Corps Advanced Flying School, was interviewed by Mr. L. C. Lampe, Chairman of the Aviation Committee of the Junior Chamber of Commerce. Colonel Lohman described the purpose and objective of the Air Corps Advanced Flying School in general.

On the following Thursday, Captain Burton M. Hovey, Jr., Air Corps, Chief of the Pursuit Section, and 1st Lieut. John H. Ives, Air Corps, Operations Officer of the Attack Section, were similarly interviewed, and they described the history, organization, and role played by their respective branches of aviation, as well as the methods employed in training the students of their respective sections at the Advanced School.

On Thursday, February 23rd, Captain Russell E. Randall, Air Corps, Chief of the Observation Section, was slated to be heard over the same radio facilities on Observation Aviation, and the course and methods of instruction employed by his Section in training Airplane Pilots and Airplane Observers.

The following week it is expected that Major John V. Hart, Air Corps, Chief of the Bombardment Section, will bring this series of radio broadcasts to a close. From all reports, this series has been well received by the general public.

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Big Truck (Continued from Page 10).

the State Highway Police of these States, and all other traffic officials along this entire route, for the courteous and able assistance they rendered at all times in facilitating the passage of this giant truck.

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AIR CORPS PRIVATE HONORED FOR SKILL WITH PISTOL

In recognition of his skill in the use of the Army .45 caliber automatic, an Air Corps enlisted man was honored at the 113th Annual Old Guard Reception and Ball, held at the Hotel Commodore, New York City, on the evening of Friday, January 27th.

Private First Class, Specialist Third Class Stephen L. Kross, 97th Observation Squadron (Corps & Army), stationed at Air Base Mitchel Field, Long Island, New York, won the highest individual honors of the 1938 New York State Pistol Meet with a score of 291 out of a possible 300. He was awarded a handsomely engraved silver loving cup, presentation of which was made at the Old Guard Ball by Major General Hugh A. Drum, commanding the Second Corps Area.

The state-wide pistol meet was conducted under the auspices of the New York National Guard at Camp Smith, Peekskill Mountains, N.Y., during the month of October, 1938. The Regular Army "L" courses were used, involving both slow and rapid fire phases at distances of fifteen and twenty-five yards. The competition was open to all comers

and included representatives from military, police and civilian teams.

Private First Class Kross fired as a member of the Nassau County Police team, which garnered top team honors of the 1938 meet, and in the individual competition he represented his army organization.

This soldier's military record discloses long interest and marked success with the use of military weapons. During three years with the Field Artillery in the Hawaiian Islands, he was qualified repeatedly as Expert Gunner and Pistol Expert. In 1932, while stationed with the 25th Bombardment Squadron at France Field, Panama Canal Zone, Private Kross won the high individual honors in the Panama Department pistol elimination, using a standard Army .45 caliber automatic. His present Air Corps ratings include qualification as Expert Aerial Machine Gunner and Pistol Expert. He is performing duty as airplane and engine mechanic in his squadron engineering section.

Prior to enlistment, Kross resided in Cleveland, Ohio.

NEW UNOFFICIAL WORLD'S FASTEST FLIER By the Barksdale Field Correspondent

To Second Lieut. Troy Keith, Air Reserve, 55th Pursuit Squadron, GHQ Air Force, Barksdale Field, La., goes the dubious distinction of being the world's fastest flier. It will be recalled that about a fortnight ago Lloyd Child, Curtiss-Wright test pilot, attained a speed of 575 miles per hour while testing a plane for the French Government. On Monday, February 6, 1939, this record was bettered by approximately 50 miles per hour when Lieut. Keith, while flying at an altitude of 28,000 feet, lapsed into semi-unconsciousness, due to the lack of sufficient oxygen, and went into a power dive. Upon regaining consciousness, Lieut. Keith found himself at an altitude of 15,000 feet, with an indicated speed of 500 miles per hour (corrected to 625 miles per hour). Due to the terrific speed at which the plane was traveling, it required another 6,000 feet of altitude to make the pull out from the dive.

An examination of Lieut. Keith by the Flight Surgeon at Barksdale Field, after the flight, disclosed that the pilot was normal in every respect and had suffered no ill effects from the dive. This occurrence refutes the statement of a radio commentator, made recently, to the effect that such a speed and pull out means about three days in the hospital for the pilot. Either that, or it must

be acknowledged that Barksdale Field pilots and planes can take it in no small measure.

The P-36A airplane which Lieut. Keith was flying is very similar in type to the airplane which made the former record of 575 miles per hour.

DEATH OF LIEUT. WILBUR D. CAMP

On the afternoon of February 9, 1939, Lieut. Wilbur D. Camp, Air Corps, died as a result of shock and exposure after the sailboat in which he was riding capsized on Cross Lake, near Shreveport, La.

Lieut. Camp was born in Waco, Texas, on March 8, 1914. Following his graduation from North Texas Agricultural College in 1934, he entered the Air Corps Primary Flying School at Randolph Field. He received his wings upon completion of the Advanced course at Kelly Field on March 1, 1937. He specialized in Pursuit Aviation. Ordered to Barksdale Field, La., for active duty, he was assigned to the 79th Pursuit Squadron, 20th Pursuit Group, GHQ Air Force. He was commissioned a second lieutenant in the Air Reserve on March 1st, 1937, and in October, 1938, he was commissioned a second lieutenant in the Air Corps, Regular Army.

FATE IS UNKIND AT TIMES

Chanute Field is a level spot on the plains of Illinois and, although the buildings utilized for the Air Corps Technical School are of wood and what is vulgarly known as "war-time constructions", serious efforts were put forth by the Civilian Fire Chief, Herman A. Beers, Q.M.C., to keep the Old Red Demon-Fire away from our doors.

The Chief may have been seen on any and all occasions poking into a building, examining the fire fighting equipment, holding drills to determine the length of time necessary for his smoke-eating ladders to unlimber the hose and place a stream of water on his simulated conflagration.

It was an impressive sight to watch the Chief, bald pate shining in the bright sunlight, stop-watch in hand, pull an alarm box and have his boys hop to it in an effort to clip seconds from the last run to the same location.

The Chief, his fierce eyes glowing, would stand around with agony plainly etched on his countenance, loudly voicing his disapproval of the tactics and technique displayed by the "fighters" in attempting to hook up a hose or play an extinguisher on the theoretical flame. Everything must be done just so, and one little slip would draw a growl from the Chief.

There is no question but that the Chief believed in preparedness. His equipment were shining things of beauty and efficiency. He rarely wandered far from his appointed place of duty, and if not found in the Fire Station, he could be readily located in the Mess Hall or the War Department Theatre. Alas, The Fire Station is no more!

On January 14th, the Chief gave the post the once over and, with smug satisfaction, decided that all was under control. Little did he realize the fate that was in store for him as he mounted his trusty new Oldsmobile and headed north to see how the boys in the Windy City of Chicago were getting along with their problems. Tooling northwards, the Chief toyed with the idea of calling on the Fire Commissioner and offering gratuitous advice anent the lessons learned during the past, but discarded this in favor of a show and a night's rest in one of the local inns.

Having satisfied his aesthetic side, the Chief headed southward to Chanute Field, on the evening of the 15th. He gave thought to the fire fighting organization he had at Chanute Field and silently wished for an opportunity to demonstrate its worth. He was fast getting drowsy as he neared Rantoul, and

anticipated the comforts of his downy couch in the Fire Station. Yes, the Chief even thought of his worthy possessions in the Fire House and opined he would break out in the new brown checkered suit and diamond ring in the morning. The world was decidedly a fine place and the Chief was at peace with the world.

The story is ended except that as the Chief rounded the entrance to his home bailiwick, he learned to his dismay that the Fates had indeed been unkind and that they had unleashed The Old Red Demon on the Air Corps Supply, Guard House and Fire Station and quickly consumed them and the worldly goods of the Chief, downy couch, checkered suit and diamond ring, leaving the Fire Marshal and the Commanding Officer to battle the blaze he had so long trained to control. What a cruel trick to play on an ambitious Fire Chief!

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WING TACTICAL EXERCISES IN HAWAII

The high-light of the past several weeks in the training activities of the 5th Bombardment Group, Hickam Field, T.H., was the Wing Tactical Exercise conducted on January 25th. The Bombardment squadrons of the Group were dispersed to airdromes on the other islands while Reconnaissance squadrons operated as friendly reconnaissance from a dispersed airdrome on Oahu. A Reconnaissance unit was detached from the Group and, operating under direct orders from the Wing, kept the "hostile" Bombardment airdromes under surveillance and trailed the "enemy" after they left dispersed airdromes for attack on vital installations on Oahu.

The defending 18th Pursuit Group, using position reports furnished by this Reconnaissance unit, took the air in time to intercept the Bombardment as they approached the bombing target. A fierce air battle ensued, during which time yards of gun camera film were "fired" by both sides and the Bombardment deposited its load of bombs on the Ahua Point bombing target.

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The 72nd Bombardment Squadron in the Hawaiian Department, under the command of Major Oliver P. Gothlin, Air Corps, was awarded the Department Commander's streamer in recognition of attaining the highest rating in the 5th Bombardment Group in efficiency during the past year. The awards are made at a special review to the element of each regiment or similar unit which during the past training year has had the best record in all-around efficiency.

NEW REFUELING UNIT

By the News Letter Correspondent

A new type of Army Air Corps refueling unit has arrived at Wright Field, Dayton, Ohio, from the plant of the manufacturer. The unit consists of a truck with two tank semi-trailers attached. The purpose of this new enlarged unit is for the supply of fuel in larger quantities for servicing the airplanes of larger types. Two tank trailers are to be supplied with each truck. They will be used alternately, one being kept on the field for refueling purposes while the other is being towed for refilling to and from the source of fuel supply. This arrangement permits one tank containing fuel to be available at all times.

The truck and tanks were designed by engineers of the Materiel Division. The truck has six wheels, with six-wheel drive and dual tires. A separate hand control air brake for each unit permits operation over hilly and icy roads. The truck is equipped with the standard hand inertia starter which is used on airplanes. This is in addition to the regular conventional electric starter and is intended for emergency use in case of a rundown battery. There are ten forward speed shifts and two reverse shifts with overdrive. The maximum sustained speed is 35 m.p.h. A low speed of 23 m.p.h. provides a maximum pulling power.

The two semi-trailer type tanks have a gasoline capacity of 4,000 gallons each. Each is equipped with a dual pumping system powered by a 24-hp. air-cooled engine. A right-angle drive gear box operates the two pumps. Strainers, meters of 5,000-gallon range, standard Air Corps fuel segregators, power-driven hose reel with 2 1/2-inch capacity hose 75 feet in length are other items of equipment. Internal valves are installed which close when the rear compartment doors close. The control system provides fusing points which in case of fire will also close all valves. The rear compartments are provided with CO₂ automatic fire extinguishing systems. These will operate at a sudden rise in temperature, or in case of explosion, and flood the entire compartment with CO₂ gas.

Each tank has four compartments. The pumping system pumps from any one of these compartments or any combination of them. The pumping system is so arranged that airplanes may be serviced, or airplane tanks evacuated, or fuel transferred from one airplane to another, or gasoline pumped from railroad cars with the tank trailer in any position. It is possible to transfer from

40 to 200 gallons per minute with each of the two pumps, giving a maximum supply for each trailer of 400 gallons of gasoline per minute.

A dolly is provided which converts each semi-trailer to a full trailer, enabling the tanks to be towed by any military vehicle.

The total gross weight of tanks and trailer is 57,000 pounds. This weight is distributed over 18 tires.

The gasoline tank refueling unit delivered at Wright Field is the first of an order for five. It was sent to Wright Field for observation en route to New York where it will be shipped to Hawaii. Others on the order will be distributed to various Air Corps stations where the larger Bombardment types of aircraft are in service.

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MOFFETT FIELD PILOTS QUALIFY IN GUNNERY

The 82nd Observation Squadron at Moffett Field, Calif., recently had the following officers qualify as Expert Gunners in Course Three, Aerial Gunnery: First Lieut. Robert Alan, Second Lieuts. Potter B. Paige and Kermit A. Tyler, Air Corps. Second Lieut. Frederick L. Moore, Air Corps, qualified as Sharpshooter.

Lieut. Alan shot a high score of 729 for the complete course, while Lieut. Tyler took honors for the exceptional high score of 229 out of 250 in Phase One.

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LECTURE ON WEATHER FORECASTING

First Lieut. John B. Ackerman, Air Corps, commanding the Weather Section of Chanute Field, Rantoul, Ill., delivered an address on February 10th before the American Institute of Electrical Engineers at the Electrical Engineering Building, University of Illinois, on the subject of "Weather Forecasting and its application to Aviation."

Lieut. Ackerman outlined the weather service of the Army Air Corps, and in reply to direct questioning on whether aircraft crashes could be eliminated, neatly sidestepped by replying that crashes due to weather are decreasing with each improvement in the service.

Lieut. Ackerman outlined weather procedure and concluded by informing the audience 'that he would stick his neck out' and predicted 5 deg. below zero for the following morning. His neck must have been frozen, since the fickle fates only dropped the red line to a measley 8 deg. above.

"Maybe John shouldn't stick his neck out," concludes the Chanute Field Correspondent.

RANDOLPH FIELD JOINS TELETYPE NETWORK

The Post Weather Office at Randolph Field, Texas, formally joined the main lines of the Civil Aeronautics Authority teletype system at 10:49 a.m., on February 9th, when the first message was received on the new automatic printers.

Prior to the installation of additional equipment, the Primary Flying School's Meteorological Office received all its weather observations, and Post Operations Office dispatched and received its PX messages through its companion field in the San Antonio Area, Kelly Field.

This system entailed certain delays that were unavoidable, and plans were made to tie the Randolph Field office into the main line of Circuit 18 of the teletype system. Work on the installation of a perforator and also additional printers were started late in January and completed for the first message on February 9th. The mechanical equipment of the office now consists of one perforator for automatic transmission, two page printers, Model 15, and one tape printer, Model 14.

Circuit 18 of the teletype system covers the Atlanta - Fort Worth - Brownsville Airway, with a relay from Atlanta, Ga.

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HIGH PERCENTAGE OF STUDENTS COMPLETE PRIMARY COURSE AT RANDOLPH FIELD

Student flight training at Randolph Field for the present classes, 39-C and 39-B, ended on February 14th, somewhat ahead of schedule, due to unusually fine weather during the greater part of the period. Primary Stage, which started training with 335 student officers and Flying Cadets, eliminated only 98 for failure to meet the standard of flying proficiency required, or less than 30 percent. An additional ten men were eliminated for various reasons or resigned. Thus, 70 percent of the student pilots who started flight training successfully completed the first four months' work, and it constitutes one of the highest percentage marks ever attained at the Primary Flying School.

Meanwhile, Basic Stage, Class 39-B, started its training last October with 191 student pilots, including three foreign officers and two Flying Cadets from the Philippine Islands. During this course, 4 student officers and 22 Flying Cadets were eliminated, and 165 successfully completed the course.

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During the month of January, 1939, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled 10 airplanes and 94 engines and repaired 32 planes and 6 engines.

WEST POINT COMMANDANT OF CADETS VISITS RANDOLPH FIELD.

Lieut. Colonel C.W. Ryder, Commandant of Cadets at the U.S. Military Academy, spent several days on an informal inspection tour of the Air Corps Primary Flying School at Randolph Field, Texas. The trip from West Point to Texas was made in a BC-1 airplane, piloted by Captain Robert W. Harper, Air Corps.

Colonel Ryder spent considerable time at the Flying Cadet Detachment area, during the course of which he inspected methods of housing, feeding, and schooling the future pilots. Air Corps maintenance problems also proved of interest to the West Point Commandant of Cadets. He accompanied Colonel John B. Brooks, Commanding Officer of Randolph Field, on an inspection tour of hangars and airplanes during his visit.

Colonel Ryder was also present at a formal inspection of the Flying Cadet Detachment, first viewing the cadets in barracks and later witnessing the inspection under arms.

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FLYING CADET OFFICERS NAMED AT RANDOLPH FIELD.

At a ceremony held in the Flying Cadet Detachment Mess Hall on February 24th, Lieut. Colonel Edwin B. Lyon, Assistant Commandant of the Primary Flying School, Randolph Field, presented 86 Flying Cadets of the Class 39-C, the class being transferred to the Basic Stage, with warrants for their appointment as Cadet Officers and Non-commissioned Officers for the ensuing four months. The awards of trophies and medals were announced at the same time.

Flying Cadet Herbert W. Peters, of Appalachia, Va., a graduate of Virginia Military Institute, was named Battalion Captain. Company Captains, as announced, will be Flying Cadets Paul C. Schauer, of Fort Wayne, Ind.; Thaddeus L. Woltanski, of Chicago, Ill.; Nicholas N. Metropolsky, of Salem, Mass.; and William W. Walmsley, of New York City.

Thirteen Cadet Lieutenants, four First Sergeants, 30 Cadet Sergeants and 34 Cadet Corporals also were announced.

Flying Cadet Jack C. Jones, of Dobbs Ferry, New York, a member of the Class 39-B, which is transferring to Kelly Field, was awarded the Catlett Medal for Soldierly Efficiency. Flying Cadet William B. Reed, of Kintnersville, Pa., was awarded the Williams Medal for Athletic Development, and Flying Cadet Harvey E. Greiger, of Wanatah, Indiana, was given the Casino Club Medal for Academic Proficiency.

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A TRUE SUCCESS STORY

The story of a boy born and reared on a farm in Iowa, who yearned to become a pilot, and who served in the Army almost eight years before he achieved his ambition, is that of 2nd Lieut. Dwight Francis Lewis, 25, Air Reserve Officer, who recently graduated from the Advanced Flying School, Kelly Field, Texas.

Born near Corning, Iowa, Lieut. Lewis had his first trip in the air at the age of 12 in a barnstorming plane, but even before that he wanted to become a pilot because he had heard of the exploits of his cousin, A.L. McClain, who was an instructor at Kelly Field during the World War.

In order to learn something about airplanes and to be close to them, Lieut. Lewis enlisted in the Air Corps at Chanute Field, Ill., on March 28, 1931, and a year later graduated from the Air Corps Technical School as an Airplane and Engine Mechanic.

He was then transferred to the 52nd School Squadron at Randolph Field, and he served there as an enlisted man until he passed an examination and became a Flying Cadet on March 1, 1938. But while he was an enlisted man he attended the San Antonio Public School of Law at night for a period of three years, graduated with the Bachelor of Law degree, and was licensed to practice law in Texas. His examination to become a Flying Cadet would have been unnecessary had the school he attended been affiliated with the American College Association. But as it was necessary to take the examination, Lieut. Lewis studied harder than ever and was more determined to become a Flying Cadet, and his efforts were rewarded by passing the entrance examination. Then he successfully completed the year's flying course of the Air Corps Training Center, graduating as a member of the Attack Section.

Lieut. Lewis' brother, Lieut. David L. Lewis, is also an Air Reserve officer, having graduated from Kelly Field last June. Another brother, Corporal Arthur B. Lewis, is a member of the 11th Air Base Squadron at Randolph Field.

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The construction of the two new barracks in the Flying Cadet Detachment area at Randolph Field, Texas, is, to outward appearances, almost completed. The east barracks will be completed and turned over officially by the contractor about March 15th, the News Letter Correspondent believes. The west barracks, started about forty days later than the first, is maintaining its relative progress and should be available for occupancy about May 1st, next.

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KELLY FIELD GETS ANOTHER RECORD CLASS

Orders were received from the Air Corps Training Center, assigning another record class of students for advanced training at the Air Corps Advanced Flying School, Kelly Field, Texas. This class, officially known as No. 39-B, consists of 166 students. Two Regular Army Officers, one Philippine Army Flying Cadet, and 45 U.S. Army Flying Cadets will specialize in Attack Aviation; two Regular Army Officers and 38 U.S. Army Flying Cadets will train with the Bombardment Section; two Regular Army Officers, one Philippine Army Officer, one Philippine Army Flying Cadet, and 20 U.S. Army Flying Cadets will train with the Observation Section, while one Philippine Army Officer and 55 U.S. Army Flying Cadets will receive "high flying 'pea shooter' Pursuit" training.

This class was scheduled to report at Kelly Field on February 25th, and the period to include February 28th was to be utilized for processing students, etc., with flying training. Graduation Day for this class has been tentatively set for May 31, 1939, and the Kelly Field Correspondent expresses the hope that Old Sol will give this section of the country a break by hanging around, thereby affording this class an opportunity to complete its prescribed course and allotted flying hours in record time.

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MORE RESERVE STUDENTS COMPLETE REFRESHER COURSE.

The following-named second lieutenants, Air Corps Reserve, completed the special refresher course of instruction for Air Corps Reserve officers at the Air Corps Advanced Flying School, Kelly Field, Texas, on dates and in the specialized branches of aviation indicated, and were assigned to the stations shown after their respective names, viz:

Bombardment

Fred M. Adams, 31, Burbank, Calif.; Jon A. Laird, 30, Waco, Texas; Alvin J.H. Mueller, 28, Seguin, Texas, and Luther E. Thomas, 29, Austin, Texas, on February 4, 1939, and to Hamilton Field, Calif.

Attack

Don D. Cascio, 33, Staten Island, N.Y., January 28th, returned to civilian life; Joseph R. DeLaune, 27, Port Arthur, Texas; Robert H. Monroe, 34, Los Angeles, Calif.; and Charles A. Watt, 33, Detroit, Mich., on February 21, 1939, and awaiting orders.

Pursuit

John A.H. Miller, 35, Coffeyville, Kans., and Lewis M. Sanders, 31, of

(Continued on Page 17)

22-110 14-11
GUATEMALA AIRMEN VISIT PANAMA CANAL ZONE

Ten airplanes of the Guatemala Air Force landed at Paitilla Point Airport near Panama City at 1:45 o'clock on the afternoon of February 9th. The flight, under the command of Colonel Henri Massot, was on a good-will tour of Central America and bore a message from General Jorge Ubico, President of Guatemala, to President Arosemena, of Panama. The Guatemalan Squadron, flying five Waco biplanes and five Ryan monoplanes, was met in the vicinity of Rio Hato and escorted to the Panama airdrome by the 74th Attack Squadron, led by Lieut. Colonel Willis H. Hale. After circling Panama City, the planes landed on the airdrome, where an array of officials of the Republic and of the Canal Zone, Army officers and diplomats were gathered to meet them. Later, the fliers were escorted to the Union Club in Panama City, where they were the guests of Foreign Minister Garay at luncheon. On the following day, the Guatemalan officers called on the Governor of the Canal Zone, the Commanding General of the Panama Canal Department, and the Commanding General of the 19th Wing. In the evening they were guests at the home of Colonel Hale, Commanding Officer of Albrook Field, where they were presented to the officers of the post. A dance was held in honor of the visiting officers at the Officers' Club, Post of Corozal. The planes had been flown from the commercial airport to Albrook Field in the late morning.

The third day of the visit was taken up in sight-seeing. In the evening the visitors attended a dinner dance at the Union Club. Early the next morning, the planes took off for San Jose, Costa Rica, on the first leg of the flight home.

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LIENET PROXMIRE PLUNGES TO HIS DEATH

On February 19, 1939, Second Lieut. Magnus B. Marks, Air Reserve, of the 17th Pursuit Squadron, Selfridge Field, Mich., saw his companion and very close friend, Second Lieut. Theodore S. Proxmire, Jr., Air Corps, of the 27th Pursuit Squadron, plunge to his death in his plane into the Lake Santa Fe, Fla.

Lieut. Marks made a forced landing nearby in his endeavor to render aid, but to no avail, in spite of the crowd that had formed at the scene of the accident afterwards to try to recover the body.

Both pilots were enroute to Valparaiso, Fla., from Jacksonville, Fla., to join the First Pursuit Group, which was engaged in both aerial and ground gunnery practice.

Lieut. Proxmire was born on August 29, 1913, at Pottstown, Pa.; Yale University, and graduated from Randolph and Kelly Fields.

His only living parent, Dr. T.S. Proxmire, resides at Lake Forest, Ill. "Lieut. Proxmire's vacancy will be most difficult to fill," declares the Selfridge Field Correspondent, "and he will be missed by the whole field as well as the 27th Squadron."

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NAVIGATION TRAINING FOR INSTRUCTORS

In the interim between classes at the Air Corps Primary Flying School at Randolph Field, Texas, almost one hundred instructors and other permanent personnel departed on navigation flights as part of the annual War Department Training Directive.

Practically every Air Corps station in the United States will have been visited by at least one Randolph Field BT-9 between February 15th and March 10th, when training will be resumed on the Primary Stage. Destinations as far distant as Pearson Field, Vancouver Barracks, Washington; Boston Airport, Mass., and Chapman Field, Florida, were on the clearances issued by Post Operations Office.

The instructors on the Basic Stage found it necessary to curtail their flights, due to the commencement of student training in that department on February 25th.

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Students Complete Refresher Course
(Continued from Page 16).

San Antonio, Texas, on January 28th, and to Selfridge Field, Mich.

There were a total of 24 Reserve officers trained at Kelly Field during the period of instruction of the regular class of students (No. 39-A). It is anticipated that an additional 18 Reserve officers will arrive at Kelly Field shortly to pursue a similar course of instruction.

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PURSUITERS REGRET DEPARTURE OF PB-2A'S

"Very shortly," declares the Correspondent of the 36th Pursuit Squadron, Langley Field, Va., "we will lose our old friends, the PB-2A's, which have stood by us for more than two years. We are sorry to see our faithful steeds leave us, and hope that they are treated with respect in their new home at Maxwell Field. The new P-36A's, replacements for the PB-2A's, are just like new one-year old colts, always wanting to kick up their heels and get going. Everyone is well pleased and hopes that we have room for all of this expansion in the Air Corps, so our steeds can have a roof over their heads."

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CHANGES IN THE MARCH CLASS AT RANDOLPH FIELD

Since the publication in the February 1st issue of the Air Corps News Letter of the list of candidates selected by the Chief of the Air Corps for appointment as Flying Cadets, to begin training at the Primary Flying School, Randolph Field, Texas, on March 1, 1939, 59 of these young men, for various reasons, chief among which being their inability to wrest the monkey wrench from the grasp of "Dan Cupid," declined such appointment. Married men are not eligible under the regulations for appointment as Flying Cadets, but Cupid bides his time and manages to exact some measure of revenge when Flying Cadets graduate from the Training Center and are commissioned in the Air Reserve. As a result, the marriage license clerk in San Antonio is generally a busy individual around graduation time.

Because of Cupid's activities among the young men who had entertained the hope of undergoing flying training at the Air Corps Training Center, there was one instance where an entire State delegation was wiped off the original list of prospective students - West Virginia. Connecticut's original delegation of seven students was badly decimated, but one lone student remaining.

The candidates who declined appointment are listed below, as follows:

Foshee, Ben Crum	Red Level, Ala.
Walls, James M.	Magazine, Ark.
Clinch, Downey C.	Grass Valley, Calif.
Goff, Boyd Matthew	Sacramento, Calif.
Price, Jerald Clifton	Fort Collins, Colo.
Ciccalone, Thomas James	East Hartford, Conn.
Olshesky, John James	East Hartford, Conn.
Granberg, Edwin C., Jr.	Greenwich, Conn.
Cavadine, Octavius John	North Haven, Conn.
Boetcher, John Edward	Stratford, Conn.
Sutcliffe, Thomas Henry	Waterbury, Conn.
Hill, James Wilborn	Washington, D.C.
Adams, Benjamin C.	Macon, Ga.
Bevington, Frank Clark	Boise, Idaho
Poulson, Paul Herman, Jr.	Boise, Idaho
Large, Jackson Douglas	Pocatello, Idaho
Bankman, Jack A.	Chicago, Ill.
Priestly, Ralph B.	Chicago, Ill.
Floyd, Harold Marcus	Tamalco, Ill.
Swinehart, Marion Louis	South Bend, Ind.
Buis, Kenneth Leon	Terre Haute, Ind.
Underwood, Robert W.	Terre Haute, Ind.
Eyres, William Gordon	Ames, Iowa
Trigg, William J.	Hedrick, Iowa
Parsley, Harold Vincent	Hornick, Iowa
Ford, Eugene Matthew	West Bend, Iowa
Steele, Gordon K.	Columbus, Kans.
Lowe, Robert Clyde	Wichita, Kans.
Jenkins, Charles Frank	Bowling Green, Ky.
Frazier, Thomas W.	Jefferson Town, Ky.
Lensing, William E.	Louisville, Ky.
Bynum, Richard E.	Arabi, La.
Norwood, Albert M.	Opelousas, La.
Dow, Thompson Faxon	South Portland, Me.
Sullivan, John G.	Brighton, Mass.
Crust, Robert W.	Brainerd, Minn.
Cooke, Chester Guy, Jr.	Oxford, Miss.
Hosford, Jack Cunningham	Columbia, Mo.
McCorkle, Leon Marshall	Salisbury, Mo.
Larson, Robert Sherman	Thompson Falls, Mont.

Lang, Donald Washburn	Falls City, Neb.
Schwartz, William	Brooklyn, N.Y.
Trosper, Earl Joseph	Oklahoma City, Okla.
Wilson, Richard Rupe	Oklahoma City, Okla.
Schaller, Otto Henry	Oklmulgee, Okla.
Williams, William Frederick	Pittsburgh, Pa.
Hill, George Dourian	Reading, Pa.
Larson, Nils Rodney	Providence, R.I.
Tyler, Charles Matthew	Charleston, S.C.
Oliver, Harry	Hamer, S.C.
Boatwright, L.T., Jr.	Ridge Spring, S.C.
Milner, Robert Rutherford	Memphis, Tenn.
Black, Harry Gean	Galveston, Texas
McKemie, Jack F.	Hearne, Texas
Byrd, Hilton Homer	Kilgore, Texas
Fairbank, John Griffin	Seattle, Wash.
Franz, J. Howard	Grafton, W.Va.
Dawson, James Stenger	Morgantown, W.Va.
Griffith, Frank T.	St. Albans, W.Va.

Koonce, Pvt. Swegler Henkle Spindale, N.C.
 Battery D, 4th F.A., Fort Bragg, N.C.

Candidates selected for Flying Cadet appointment, to replace those who declined to accept same, are listed below, as follows:

Civilians

Preininger, Clair B.	Los Angeles, Calif.
Sherwood, Frederick Herren	Los Angeles, Calif.
Jackson, Daniel Miles	South Pasadena, Calif.
Lee, Walter Aloysius	New Haven, Conn.
Murray, Burton W.	DeFuniak Springs, Fla.
King, James Neil	Gainesville, Fla.
Kiser, Marion J.	Quitman, Ga.
Yow, Jones duBignon, Jr.	Toccoa, Ga.
Ensign, Lewis Plank	Boise, Idaho
Sizer, Richard Lucius	Champaign, Ill.
Lacey, John William	Chicago, Ill.
Omens, Norman Harry	Chicago, Ill.
Heggy, Edward LeRoy	Divernon, Ill.
Martin, Leonard Melcher	Newton, Mass.
Atwell, Lawrence Austin	Wakefield, Mass.
Bohn, John W., Jr.	Webster Groves, Mo.
Brannock, J. Frank	Lexington, N.C.
Davis, John Elmer, Jr.	Barnsdale, Okla.
Alexander, Eugene S.	Stillwater, Okla.
Peck, Gaillard Ray	Tonkawa, Okla.
Jowdy, William John	Goble, Ore.
Jack, Lewis N.	Lansdowne, Pa.
Dorn, George Eldred	Greenwood, S.C.
Chamberlain, Charles Henry	Flandreau, S.D.
Fletcher, Waldo Brown, Jr.	Abilene, Texas
Beers, George Albert	San Antonio, Texas
Noble, Gail Lewis	Burlington, Wis.

Hall, Conway Scott	Little Rock, Ark.
Martin, John Byrd	Atlanta, Ga.
Porter, Edward F., Jr.	Chicago, Ill.
Welsh, Albert M.	Dalton City, Ill.
Howorth, Arthur James	Dyers, Ind.
Miller, Richard Ewing	Fort Wayne, Ind.
Hawthorne, Earl Coe	Abilene, Kans.
Broidy, Vinton Edward	Baltimore, Md.
Kaliher, Russell E.	Benidji, Minn.
DeKin, Donald G.	Ilion, N.Y.
Sutton, James Harold	Charlotte, N.C.
Boyle, Paul C.	Fargo, N.D.
Ruhf, Richard C.	Allentown, Pa.
Parks, Russell Nixon	Philadelphia, Pa.
Griffin, Louis G.	Anderson, S.C.

(Continued on Page 19)

COLONEL ROBINS ASSIGNED AS COMMANDANT OF THE AIR CORPS TRAINING CENTER.

By the Materiel Division Correspondent

Orders effective February 20, 1939, relieving Colonel A. W. Robins from duty as Chief of the Materiel Division, removed one who during his term of service had become friend as well as executive to those with whom he came in daily contact.

As a token of the esteem in which he was held by the City of Dayton, as well as by his associates of Wright and Patterson Fields, a delegation of Dayton civic and business leaders called upon Colonel Robins to express regret at his leaving and wish him future success. That Mr. Orville Wright, the first person in history to lift an airplane in powered flight, formed one of the delegation, lent to the occasion an added honor and dignity. Colonel Robins' new assignment is that of Commandant of the Air Corps Training Center, with headquarters at Randolph Field, Texas.

Colonel Robins came to Wright Field as Brigadier General, Chief of the Materiel Division, on April 4, 1935. His arrival was delayed a short time after his appointment in order to enable him to complete his course of study at the Army War College. His four-year appointment as Brigadier General expired January 31, 1939. During his years of command, none knew him who was not impressed with his attitude of friendliness toward the personnel of the Division and his sense of absolute justice and fairness. Before leaving he sent a letter of appreciation to all employees for the cooperation he had received. It is hoped that his future duties will often bring him back as a visitor. Colonel Robins left Dayton for his new post on February 24th.

The coming of Brigadier General George H. Brett as the new Chief of the Materiel Division was heralded by the pleasantest forecasts concerning him as executive and associate. He has many friends among those with whom he has come in contact on his various visits at Wright Field. Also, many civilians at the Division served under him from 1924 to 1927, when he was on duty at Fairfield, Ohio. These have the highest praise both for his ability and his personality. Many who have not come in contact with him have received the impression of a vigorous and cooperative leader.

On the whole, the Materiel Division is made up of a group of officers and civilians who have chosen their work because they like it and are anxious to give the best service in it. To such a group capable leadership is a blessing. That the requirements of such leadership, especially at the present time, are most exacting and difficult to meet is deeply appreciated. The Division hopes that General Brett will find cheerful cooperation awaiting his every need, and that his stay at Wright Field will be a happy one.

General Brett's history, including an enviable war record, is too well known to need reviewing at this time.

Changes in New Class at Randolph Field
(Continued from Page 18)

Lee, James A.	Brookings, S. D.
Yeager, William Henry, Jr.	San Antonio, Texas
Whitman, John R.	Sweetwater, Texas
Gill, J. Weston	Richmond, Va.
Furman, Robert B.	Larsen, Wis.

Enlisted Men, Air Corps

Privates

Bedford, Boyce H.	Mobile, Ala.
Hqrs. and Hqrs. Squadron, Champe Field, Ill.	
Proffatt, Victor J.	Los Angeles, Calif.
Hqrs. and Hqrs. Squadron, 7th Bombardment Group, Hamilton Field, Calif.	
Poplawski, Henry Richard	Worcester, Mass.
3rd Air Base Squadron, Selfridge Field, Mich.	
Culver, Theodore Grant	Lincoln, Neb.
3d Staff Squadron, Ft. Leavenworth, Kans.	
Kaufhold, Frank George	Hackensack, N. J.
Base Hqrs. and 2nd Air Base Squadron, Mitchel Field, N. Y.	
Faulkner, George E.	Eugene, Ore.
1st Weather Squadron Det., Base Hqrs. and 5th Air Base Squadron, Hamilton Field, Calif.	
Croom, Wendell C.	Kershaw, S. C.
Hqrs. and Hqrs. Squadron, Randolph Field, Texas.	
Kris, Albert	Sisseton, S. D.
2nd Weather Squadron, Selfridge Field, Mich.	
Cook, Seth Rea	Salt Lake City, Utah
Hqrs. and Hqrs. Squadron, 7th Bomb. Group, Hamilton Field, Calif.	
Boyd, James Kenneth	Langley Field, Va.
11th Air Base Squadron, Langley Field, Va.	

Enlisted Men, Other Branches of Service

Schoknecht, Edward H., Jr.	
6th Signal Service Company, Selfridge Field, Mich.	

According to the latest information available in the Personnel Division, Office of the Chief of the Air Corps, the March 1, 1939, Class at the Air Corps Primary Flying School, Randolph Field, Texas, comprises a total of 342 students, of which number 291 are from civil life and the remaining 51 are enlisted men of the Regular Army.

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WRIGHT FIELD ENGINEERS HONORED

Word was received on February 21st at the Air Corps Materiel Division of the award of the Manly Memorial Medal to two members of the Division, Messrs. Ope Chenoweth and A.L. Berger, as co-authors of a paper entitled "Supercharger Installation Problems." This paper was selected by the Society of Automotive Engineers for the honor as the winning contribution for 1938. The paper was originally presented at a meeting of the Society on June 14, 1938, at White Sulphur Springs.

The Manly Medal is awarded each year by the Society of Automotive Engineers to the author of the best paper "relating to theory or practice in the design or construction of, or research on, aeronautic power plants or their

parts or accessories."

Messrs. Chenoweth and Berger are engineers of long standing and wide experience in the Power Plant Branch of the Materiel Division, and the distinction bestowed upon them was most gratifying to the Division as a whole. Mr. Berger has been with the organization since April 16, 1919, and Mr. Chenoweth since August 27, 1923.

With this award Wright Field is honored for the third time in a decade, S.D. Heron having been the recipient in 1929 for the outstanding paper presented during 1928 on aircraft fuel investigations, and F. L. Prescott, in 1932, for a description of his work on engine pressure indicators on test engines.

The Medal perpetuates the memory of Charles M. Manly, a pioneer in the adaptation of the internal combustion engine to aircraft use.

The telegram announcing the award was sent by Mr. J.A.C. Warner, President, Society of Automotive Engineers.

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ENLISTED MEN COMPLETE WEATHER SCHOOL COURSE

The third class of the Air Corps Weather School was graduated at Patterson Field, Fairfield, Ohio, on Friday, February 24, 1939, concluding a six months' course in modern meteorology and the allied subjects of mathematics and physics.

The three students attaining the highest standing were: first, Private, 1st Class, Jacob Follmer, Little Falls, N.Y.; second, Private, 1st Class, Thomas C. Cobb, Jr., Nixon, Texas; and third, Corporal August W. Throgmorton, Mayfield, Ky.

Private Follmer had four years' prior training in Aeronautical Engineering at the University of Michigan. He is being retained at the Weather School as an instructor.

Private Cobb had one year's prior training at St. Mary's University, and will be returned to Kelly Field, Texas, as a forecaster.

Corporal Throgmorton is a graduate of Western Teachers College, and completed two terms at the University of Indiana. He is also a graduate radio operator and radio mechanic of the Air Corps Technical School at Chanute Field, Ill. Corporal Throgmorton is under orders to report at the Air Corps Training Center, Randolph Field, Texas, for forecasting duty.

Twenty-five enlisted students completed the course. A new class started on February 27th.

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CAPTAIN McDARMENT JOINS UNIVERSITY FACULTY

Friends of Captain Corley P. McDarment, who retired as an Air Corps officer on September 30, 1936, for disability in line of duty, will be interested to learn that he was recently appointed as head of the public speaking department of Columbus University's Junior College, Washington, D.C.

Captain McDarment served as an enlisted man and as a commissioned officer during the World War, being appointed a second lieutenant in the Air Service on August 22, 1918. Following his retirement from active service, he became a writer and lecturer.

HAWAIIAN PURSUITERS FLY OVER MIDDLE ISLANDS

By the Wheeler Field Correspondent

Twelve red-cowled airplanes of the 6th Pursuit Squadron taxied out on Wheeler Field, T.H., recently, and took off by elements, headed for Makapuu Point to initiate new members in their first inter-island flight around and over the "Middle Islands."

A few minutes later, Ilio hove into view, and it wasn't long until we zoomed over the vast pastures and pineapple fields surrounding Homestead Field on Molokai. After landing and taxiing back, we took right off to drag the field at Kalaupapa, the home of the leper colony.

Flying besides the vertical cliffs, their tops hidden in the clouds, was conducive to illusions. Hundred of waterfalls laid their narrow silver bands on the face of the lush greenery, hiding the gray and brown-black lava cliffs. Soon the cliffs seemed so near that one felt one could reach out and touch them. They seemed like mounds. One had to look at the altimeter twice before believing that one was well over 1500 feet high and that the clouds above were hiding the top of those friendly "little" cliffs.

Then came Brant, and one wondered how anyone could land on the side of that mountain. Overshoot the field and - well, one had better be able to swim. Another few minutes of sea crossing, and we were buzzing Hanea Point on Maui. Then, with the sea on one side and densely overgrown mountains and ravines on the other, we continued on around to Hana, with more buzzing to look the field over. Kolekole Peak reared its head above the low strata of white cumulus clouds, so up we went. Rare are the occasions when one can fly over Haleakala and examine this kangaroo crater with all its baby craters tucked into its pouch.

Wind whistled about our ears as we passed over the Summit House and zoomed down on Maalaea. There was just a jump or two from there to Lanai, where we brushed our wheels through the pineapple bush tops to land in the first third of the field.

After a cigarette and a good old seventh inning stretch, we were off for Oahu and home. Oahu looked good, too. So the grass isn't always greener on the other side of the fence - or islands.

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Special Orders of the War Department announce the relief of Lieut. Colonel Clinton W. Russell, (Air Corps), General Staff Corps, from assignment to the War Department General Staff and from duty in the Office of the Chief of Staff, Washington, D.C., and his assignment to the General Staff with troops and as Chief of Staff, GHQ Air Force, Langley Field, Va.

Lieut. Colonel Joseph T. McNarney, Air Corps is relieved from assignment and duty with the 7th Bombardment Group, Hamilton Field, Calif., and is assigned to duty in the Office of the Chief of Staff, Washington, D.C.

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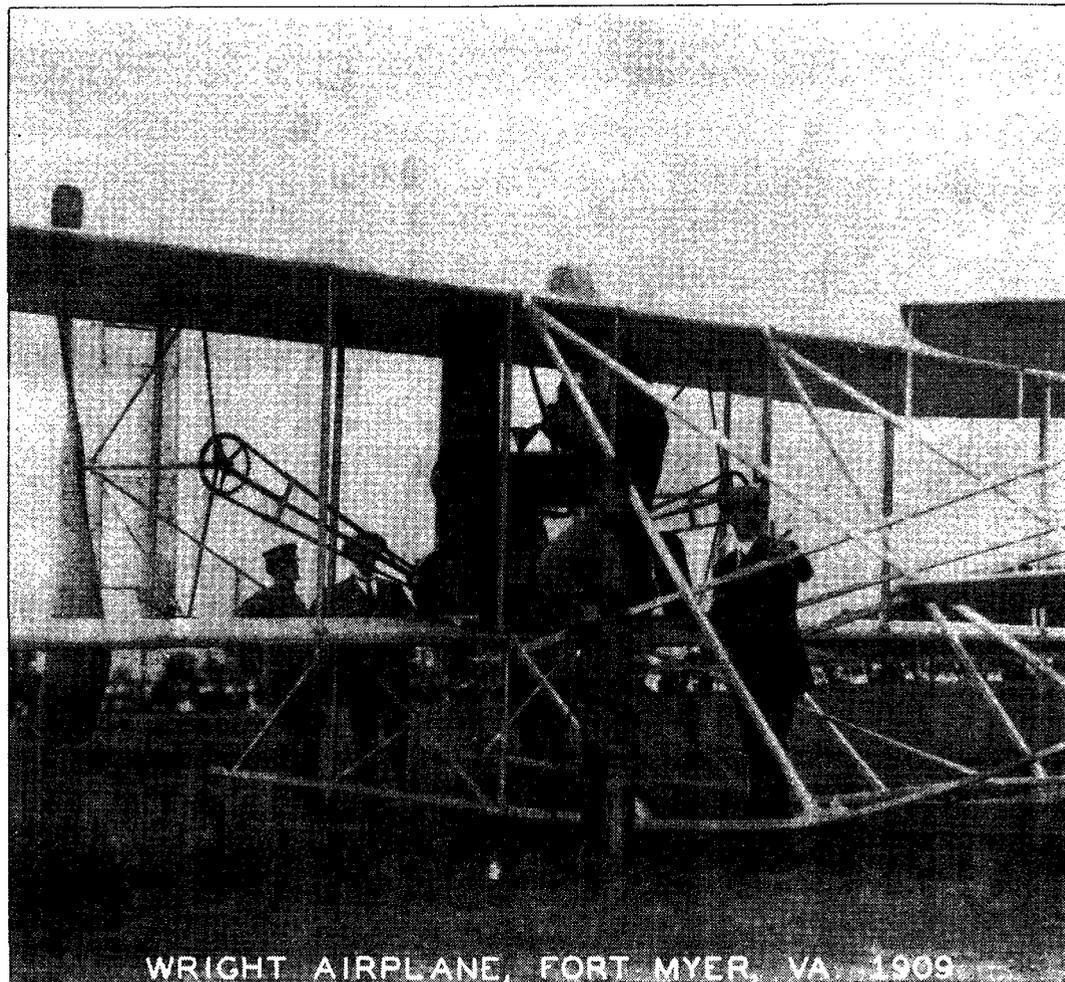
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 AIR CORPS 
NEWS LETTER



WRIGHT AIRPLANE, FORT MYER, VA., 1909

ISSUED BY
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WAR DEPARTMENT
WASHINGTON

MARCH 15, 1939

NO. 6

Information Division
Air Corps

March 15, 1939

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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THE WRIGHT BROTHERS AS I KNEW THEM

By Colonel Frank P. Lahm, Air Corps

Introduction

It was my pleasure to know the Wright Brothers in the earliest days of the Air Corps, though my first meeting was entirely unofficial and in no way connected with the service. In the summer of 1907, while recuperating from a long illness, I was lying in one of those beautiful gardens at St. Germain, outside of Paris, when my father walked in the gate with Wilbur and Orville Wright and there began a friendship that was to continue for many years.

Father's first contact.

It may be interesting to know how my father knew the Wright Brothers. It is a rather long story, but briefly put is as follows: In December, 1905, while living in Paris, he heard a report that the Wright Brothers of Dayton, Ohio, had actually flown in a heavier than air machine. He cabled to a relative in Ohio, as follows:

"Verify what Wright Brothers claim, necessary go to Dayton, prompt response cable."

The message was forwarded and delivered in Chicago in the night, but was a puzzle. However, my uncle vaguely recalled having heard of the Wright Brothers and their flying machine in Dayton, so he wired and eventually visited them in Dayton, interviewed witnesses of the flights, talked at length with the Wright Brothers and made a full report in writing to my father in Paris. This report was presented at a meeting of the Aero Club of France, but it fell on skeptical ears, although it did lead to a violent discussion lasting late into the night. My father then published the report in the Paris edition of the NEW YORK HERALD, where it was given the heading "Flyers or Liars." This led to more discussion, more doubts, but did lead to a direct contact with the Wright Brothers. So it was natural that when they came to Paris in the summer of 1907, he should see them and learn the facts first hand.

Washington, 1908.

My next meeting with the Wright Brothers was in Washington. Having been detailed to the Signal Corps for

aeronautical duty in September, 1907, and directed to make not to exceed two visits to London and Berlin for the purpose of investigating aeronautics, I complied with my orders, extending my investigations to Brussels and Frederickshafen as well, then reported to the Chief Signal Officer, General Allen in Washington, the last of 1907. He directed me to report to Captain C. deF Chandler, in charge of the Aeronautical Division of the Signal Office which he had organized on August 1st of that year.

Signal Corps Specifications

On December 23, 1907, invitations were sent out by the Chief Signal Officer for bids for a heavier than air machine of the following specifications: carry two persons having a combined weight of 350 pounds, sufficient fuel for a flight of 125 miles, remain continuously in the air for an hour with two persons during which time it must be steered in all directions without difficulty and at all times under perfect control and equilibrium, after which it shall return to the starting point and land without any damage that would prevent it immediately starting upon another flight; have a speed of 40 miles an hour in still air, with a bonus of 10% for every additional mile up to 44 and a reduction of 10% of the purchase price for every mile below 40, but below 36 it would be rejected. The machine was to be accepted only after successful trial flights, including prescribed tests of its speed, endurance and all other requirements of the specification. Three trials were to be allowed for speed and three for endurance, and both tests, the expense of which must be borne by the manufacturer, were to be completed within 30 days after delivery of the apparatus.

The machine should be quickly and easily assembled and taken apart and packed for transportation in army wagons and then reassembled on the field and put in operating condition in about one hour. It should be able to ascend or descend in any country encountered in field service, landing without requiring a specially prepared

spot and without damaging its structure. The starting device should be simple and transportable and another device should be provided to permit safe descent in case of an accident to the propelling machinery. The whole machine should be sufficiently simple to enable an intelligent man to become proficient in its use within a reasonable time, and the price of the machine must include the instruction of two men in its handling and operation.

The general dimensions were to be determined by the manufacturers, who must submit with their proposals:

(a) Drawings to scale showing the general dimensions and shape of the machine they propose to build; (b) the speed for which it is designed; (c) total surface area of the supporting planes; (d) total weight; (e) description of the engine used for motive power; (f) material of which the frame, planes and propellers were constructed.

On February 1, 1908, we opened the bids in the Office of the Chief Signal Officer and found the results not only interesting but in many cases highly amusing. One man sent in a rough sketch on a piece of wrapping paper and said his machine would comply with the specifications. Many were unable to meet the requirement of enclosing 10% of the purchase price. One of those who failed wrote: "Where there is money there are no brains, and where there are brains, there is no money." He presumably came in the latter class.

Of the many proposals received, three appeared reasonable and were accepted by the Board:

one from Mr. Scott, of Chicago, who offered to build an airplane complying with the specifications for \$1,000.00;

one for \$20,000.00 from Mr. A.H. Herring, of New York, who had done a considerable amount of experimenting and claimed he had already made numerous flights.

The third, for \$25,000.00, was from the Wright Brothers.

Mr. Scott replied that he appreciated the honor of having his bid accepted but that he could go no further as he was unable to finance the construction of his machine.

The failure to deliver the Herring machine is a long and amusing story that I will not go into here.

Fort Myer, 1908.

In due time the Wright Brothers appeared in Washington to arrange the details and select a place for the demonstration of their machine. The drill ground at Fort Myer was decided upon, a shed was erected, the pylon and starting track were set up at the upper end of the field and, late in August, Orville arrived with the machine and his mechanic, Charley Taylor. Here began an intimate association with Orville which was to continue through the daily tuning up

flights lasting to September 9th, when I had the thrill of my first ride, lasting about six and a half minutes. Major Squier, of the Signal Corps, was taken up as a passenger a few days later, followed on September 17th by my friend and associate, Lieutenant Tom Selfridge, U.S.A.

This flight terminated in an unfortunate accident in which Mr. Wright was very seriously injured and Lieut. Selfridge lost his life, the first of many victims who were to sacrifice themselves in the advancement and perfection of the airplane. We put Mr. Wright in the hospital at Fort Myer, where he lay for some weeks under the devoted care of his sister, Katherine, who came on from Dayton immediately. In my frequent visits to the hospital, I came to know and appreciate the sterling character of this third member of the team who was with them through the vicissitudes of those early days, sharing their hopes and disappointments.

Fort Myer, 1909.

The following summer, both Wilbur and Orville Wright came to Fort Myer with a new machine, followed shortly by Katherine, and the program of the preceding summer was resumed and carried to a successful conclusion.

By this time public interest was aroused to such an extent that every afternoon large crowds visited the field. Prominent visitors were numerous, including President Taft; members of the cabinet, foreign ambassadors and military attaches, and many other prominent people of the capital.

The Wright Brothers had come to Washington for a purpose, that was, to complete their contract with the Signal Corps and deliver their machine. With their characteristic determination, they stuck to this purpose. The 1909 airplane with its maximum speed of 42⁷ miles per hour was not so maniable in the high winds which mean so little to our present day machines with their normal speeds of 180 to 250 miles an hour. Flights were made only in light winds and, while large crowds and high officials were often disappointed, the Wrights were adamant in their decision not to fly unless conditions were just right.

Earlier that year, when Wilbur was flying at Pau, in southern France, the story is told of an American millionaire who went there and announced he had come to make a flight. When told that Wilbur was not taking passengers, he replied: "Oh, I dare say that can be arranged." He left Pau without having his ride.

My collection of photographs of those days, some 29 years ago, show styles that I am sure would provoke smiles from the feminine sex, and the hats, while entirely different, were no less wonderful than the ones now worn by

them.

For the speed tests we set up a series of small captive balloons over a five-mile course from Fort Myer to Alexandria, and on July 30th, Lieut. Foulois as passenger accompanied Orville Wright on the round trip over this course to determine the official speed. We of the Board and Wilbur stood on the ground during the take-off, watched the machine disappear over the treetops to the south and then waited in suspense for it to reappear. Wilbur, with a stop watch, had accurately calculated the exact moment at which he expected to see the machine reappear coming out of the south, and when it failed to do so he, as well as the rest of us, passed a very uneasy few moments until at last it came in sight and landed safely, to the cheering of the large crowd of spectators. Then began the endurance test, in which it was my pleasure to ride with Orville one hour and 12 minutes, a World's record at that time for two passengers.

College Park, 1909.

But the contract was not completed until two Army officers had been taught to fly. Lieutenant Frederick E. Humphreys, Corps of Engineers, and myself, were designated. As the drill ground at Fort Myer was too small, we searched the country for a larger and more suitable field. Many offers were made and many sites were visited, but all were rejected by the Wright Brothers as not meeting the requirements. One day while making a balloon ascension from Washington, I passed over College Park, Maryland, saw a likely looking level field, later visited it on the ground, and eventually it was rented from the owners and became our training ground.

On October 5th, we moved in, built a shed for the machine, set up the pylon and track, and Wilbur began our pilot training. At the end of about three hours' dual, we were turned loose and made our first solo flights. A few days later, I was even considered qualified to carry passengers and did so, taking Lieut. Sweet of the Navy as my victim for a flight around the field.

Wilbur was a patient and understanding instructor, always ready to explain anything we did not understand, always ready to help us, to make easy our venture into this new field which was not too well understood by anyone at that time. Between flights and in the evening, we had long talks on aviation in general, on the Wright machine in particular, and on the future of aviation and flying and, while we had great confidence in its future, I admit that in our wildest dream we did not foresee the speed, safety, carrying capacity and long range of the 1938 type of airplane.

Dayton Celebration, 1909.

My first visit to Dayton and the Wrights' home came in 1909, when I accompanied General Allen, the Chief Signal

Officer, to a two-day celebration in which the nation, the state and the city vied in showing their admiration and enthusiasm for the two pioneers of flight. Speeches, dinners, bands, parades, and finally the presentation of three medals capped the climax of the celebration. One medal from Congress was presented by General Allen; one from the State of Ohio was presented by the Governor, and one from the City of Dayton was presented by the Mayor. The attitude of the two brothers was typical throughout the two days. Their pleasure, their appreciation were plainly apparent but above all was their modesty, which might have deserted them under the shower of praise and acclaim, had it not been their outstanding, inherent quality.

Dayton, 1911.

My next contact with the Wrights was in 1911, when it was my privilege to spend a few days as a guest at their home in Dayton. During this visit I was to have a new experience, that of piloting an airplane under Orville's instruction, equipped with wheels instead of the skids I was accustomed to. This came in good stead the following two years, as three Wright machines were sent to me in the Philippines, where I used them in giving flying instruction to officers of the Army in 1912 and 1913. The 1911 visit was, perhaps, the highlight of my association with the Wrights and the one on which I look back with the happiest memories. It was a picture of the American home and family of which we are so proud and which fosters those qualities that produce the typical American citizen, the one who places culture, family, friends and the higher things of life above the trivial and passing interests which we are inclined to exaggerate in this age of materialism.

An appreciation.

The question was often put to me: "Which one of the two brothers really invented the airplane?" My answer is - neither one, but the two working together, checking each other, arguing out their problems step by step.

Orville once expressed it when he said they would start to thrash out a question, one arguing on one side and one on the other, and before they finished they had changed sides in the argument. They approached all their problems from a strictly scientific and mathematical angle, never leaving anything in doubt, and as one of them once said: "If we knew what was wrong, we could eventually find the solution." The greatest difficulty was in finding out just what was wrong. That brings back a rather amusing incident that occurred at Fort Myer during the 1909 flights. Several times the airplane was put on its cradle on the track, the motor speeded up, the weight released,

and the machine shot forward and left the track only to lose speed and come to the ground. Finally, Wilbur and Orville left the crowd, went out on the field by themselves, put their heads together and evidently were having a profound discussion. Somewhat awed, we remained at a distance to watch the proceedings, thinking it was something very serious and technical. Finally, one of the brothers walked over to the machine, looked at the spark lever and saw that it had slipped back due to lack of friction, slowing the engine down and causing the machine to lose its flying speed. It was all so simple when they found the difficulty, but I can imagine their experiments were full of just such occurrences.

The Wrights never made any extravagant claims for what their machine could do. In their first and unsuccessful negotiations with the War Department, and in the later ones which finally led to its purchase, they asked only for remuneration based on performance and were ready to demonstrate its capabilities before receiving a penny in payment.

Simplicity and order marked their procedure and their lives. The camp at Kitty Hawk was a wooden shed large enough to house the machine and their living quarters, and a photograph of the interior shows it was a model of which any housewife might feel proud. At times the nights on the coast of North Carolina were cold, but they were well supplied with bedding. They had their own expression for temperature; that is, a "one, two or three blanket night," depending on the thermometer reading.

No question put to them, however unimportant it might seem, failed to have careful consideration and a well thought out answer, and you may be sure we asked many questions.

As stated before, the Wright Brothers were primarily scientists, interested in the conquest of the air from a scientific point of view and not at all from a mercenary angle. When, in 1905, they had flown their machine sufficiently to satisfy themselves it had reached the practical stage, they stopped further work and set out to dispose of their invention, not to the highest bidder, but to reliable organizations or associations that would exploit it for the common good. Here was a new and revolutionary invention that was to mark the beginning of a new era in transportation, a new factor in our economic life, and while I doubt if anyone, including the Wrights, fully realized just how important it was to become and the relatively short time within which it was to prove itself, I do know that to the Wrights it meant a great deal more than merely a means to financial success. A pertinent remark of one of them has always remained in my mind: "We want to finish up with the business

end of the airplane so that we can go back to our experimental work."

Ed. Note: The cover featuring this issue of the News Letter embodies the reproduction of a photograph of the Wright airplane at Fort Myer, Va., in the year 1909. Lieut. Lahm, Cavalry, (now Colonel, Air Corps) is shown in front of the airplane with Mr. Orville Wright, while Lieut. Foullois (now Major General, U.S. Army, Retired) is shown at the rear of the plane with the late Wilbur Wright.

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UNUSUAL NIGHT PHOTOGRAPHS TAKEN AT RANDOLPH FIELD

What is believed to be the first night aerial photograph ever made of an airplane in full flight was released recently by the Public Relations Office at Randolph Field, Texas. Many pictures have been made at night, both by Army photographers as well as by commercial photographers, which show an airplane either landing or taking off in the illumination furnished by the field floodlights, but a picture taken at 3,000 feet above the airdrome on a moonless night had never been attempted before, according to the available information.

The equipment used to make this unusual view was a standard commercially manufactured camera, a flash bulb synchronizing attachment and one flash bulb, also in general use by newspaper photographers. Three negatives were made during the flight, all of which were satisfactory from a technical view point.

Private, 1st Class, Air Mechanic, Leslie W. Bland, of the Randolph Field Photographic Department, was the photographer, and Lieut. Hugh O'Daniel, an instructor, was the pilot of the BT-9 which was used as a photo plane. Lieut. L.R. Hughes, also an instructor at the Primary Flying School, piloted the plane which was photographed.

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Special Orders of the War Department, recently issued, announced the promotion of Captain Donald R. Goodrich, Air Corps, to the grade of Major (temporary from February 1, 1939, and of Lieut. Colonel Harold A. Strauss, Air Corps, to the grade of Colonel (temporary), from March 9, 1939.

War Department Special Orders also announce the retirement from active service, to take effect July 31, 1939, of Colonel Alfred H. Hobley, Air Corps, upon his own application, after more than thirty-five years' service, under the provisions of Section 1243, Revised Statutes.

GENERAL ANDREWS COMPLETES TOUR AS CHIEF OF GHQ AIR FORCE

Tuesday, February 28th, terminated the four-year tour of Major General Frank M. Andrews as Commander of the General Headquarters Air Force. On that date he turned over to his successor, Major General Delos C. Emmons, a well-organized, smoothly-operating unit which four years ago existed only on paper.

Conceived by the Drum Board in 1933, and authorized by Congress in response to the urgent recommendations of the Board headed by the late Honorable Newton D. Baker, the GHQ Air Force combined in one tactical fighting unit all of the Army's scattered combat aviation in the Continental United States. It placed under the command of one man air units which up to that time had been operating under the nine Corps Area commanders.

Hailed as the greatest step forward in military aviation in this country since the World War, the existence today of this coordinated and integrated combat air unit is a tribute to the wisdom of those who urged its creation.

It stands as a monument to the ability and leadership of General Andrews, the man selected by General Douglas MacArthur, then Chief of Staff of the Army, for the task of organizing and building up this new unit of the Air Corps. Chosen over many seniors because of his outstanding and demonstrated ability as an organizer and administrator, General Andrews assumed at the outset a personal leadership of the GHQ Air Force which he has steadfastly maintained throughout his tour of duty as its Chief a leadership which has served as an inspiration to the officers and men of his command. The heterogeneous assortment of uncoordinated units turned over to him on March 31, 1935, has been transformed into a compact and splendidly efficient combat team, a unit whose training during the past four years has been such as vastly to change the modern concept of military aviation.

General Andrews personally has taken a leading part in the development of modern standards of flying, and his early exploits in instrument flying, which at that time seemed to be unnecessarily hazardous undertakings, now appear in their true light as pioneering necessary to a type of flying which has now become commonplace. During his regime as Commanding General of the GHQ Air Force, General Andrews, in addition to his arduous administrative duties, has found time to pilot his own flagship a total of some 1500 hours, almost half of which have been at night.

It was not difficult for such a commander to set up high training objectives. The example of his personal experience popularized a strenuous routine of training which in a remarkably short

time converted the GHQ Air Force into the effective all-weather unit it is today. Its splendid organization and state of training, and its readiness to go into action on a moment's notice, are tributes to a wise administration and courageous leadership.

His clear concept of air defense led General Andrews, from the beginning of his regime, to champion the cause of the large military airplane of the four-engined type, the splendid performance of which during the past year has clearly indicated its future importance in national defense.

On every occasion General Andrews has fought for principles which he believed to be vital to the proper development of the nation's air power. Yet withal, he has exhibited a soldierly restraint and dignity which has won for him the admiration of his contemporaries and respect of his seniors. As a result, he has been instrumental in obtaining recognition of air force requirements and principles which have led to better airplanes, facilities, and personnel; and to a better general understanding of the problems of modern military aviation.

A graduate of the Military Academy in 1906, General Andrews' first service was with the Cavalry. Since his transfer to the Air Corps in 1917, he has served in many important executive capacities. In 1934, he was detailed to the War Department General Staff, and it was while serving in this capacity as a Lieutenant Colonel that he was selected to command the newly formed General Headquarters Air Force.

General Andrews has an able successor in Brigadier General Delos C. Emmons. General Emmons, as Commanding General of the First Wing for the past three years, has had an opportunity, second only to that of General Andrews, to observe and administer to the growing pains of the GHQ Air Force. He brings with him to his new office a wealth of personal experience in the inner workings of tactical air commands of all types and an intimate understanding of the problems which remain to be solved in national air defense.

Graduating from the Military Academy in 1909, General Emmons was first assigned to the Infantry. He is one of the veteran Army pilots, for his service with the Air Corps began in January, 1917, when he began his flying training at the Signal Corps Aviation School at San Diego, Calif. The brilliant leadership and sound judgment exhibited during all maneuvers involving the 1st Wing have gained for General Emmons the respect of the Air Corps and the Army.

ANNUAL RIFLE MATCHES IN 46TH SCHOOL SQDN.

The 4th annual small bore rifle and pistol matches for the Steve's Trophy were held recently in the indoor rifle range of the 46th School Squadron at Randolph Field. Corporal C.W. Jones, firing three courses - rifle, prone; rifle off-hand, and pistol - was the winner with an aggregate score of 257 out of a possible 300. The new champion dethroned Corporal Norman G. Hower, last year's winner. Corporal Hower finished second, three points behind, with an aggregate of 254 out of a possible 300. Sergeant Paul H. Bangham was third with a score of 246.

The Steve's Trophy is presented annually by Master Sergeant Calvin T. Stevenson for competition by members of the 46th School Squadron, Randolph Field, on their 50-foot indoor rifle and pistol range. It was first offered into competition in 1934, and since that time has become an annual fixture.

All firing is conducted strictly according to Army Regulations and also rules as promulgated by the National Rifle Association. For both the prone and off-hand rifle events, caliber .22 target rifles are used, while competitors may use either .22 caliber pistols or .22 caliber target pistols on standard U.S. Army caliber .45 automatic frames in the pistol events.

Individual competitors are charged for the ammunition used both in matches and also in practice, while the range itself, constructed in the basement of the squadron barracks, is maintained through funds supplied by the 46th School Squadron Rifle and Pistol Club.

Another trophy, known as "The Squadron Commander's Trophy," also offered annually, will be competed for during the month of March. General skill in the use of both rifle and pistol in various positions will be needed by the winner. Events in rifle, prone; rifle-kneeling; rifle standing; pistol slow fire, and pistol rapid fire are carded. Individual medals for the winners in the various classifications also will be offered.

In connection with the competition for the Steve's Trophy, Corporal Hower won the rifle prone medal with 97-100. Corporal Jones with an 83-100 in the off-hand won the medal for that event, while Private Albert L. Malok captured the pistol series with an 80 out of 100.

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Two noncommissioned officers of the Air Corps were placed on the retired list, effective February 28, 1939, viz: Technical Sergeant Joseph Caminske, 19th Pursuit Squadron, at Schofield Barracks, T.H., and 1st Sergeant Clarence A. Hammer, 77th Pursuit Squadron, GHQ Air Force, at Barksdale Field, La.

VICISSITUDES OF AIRPLANE TRAVEL IN THE PHILIPPINES.

During the recent maneuvers in the Philippine Department, Major General John H. Hughes, in order to save about two hours' time traveling by automobile, elected to make his trip to inspect the troops on maneuvers in an Amphibian airplane. One of the OA-4's was all serviced and ready for him when he arrived at Nichols Field, accompanied by his Assistant Chief of Staff, G-3, and by his aide.

The General was given the honor seat alongside the pilot, and twenty minutes later they were circling the shore where he desired to land. The bamboo stakes of the fish traps were seemingly all over the water, but finally the pilot found a place where there were no stakes, but just as he was about to set his plane down the General pointed out some more stakes under them, so he circled again and finally effected a safe landing.

The landing was made about a mile out in the water, due to the tide being out, and there was about half a mile of muddy tidal flats. A large banca, manned by four native oarsmen, commanded by a Major of the Quartermaster Corps, with outriggers and all complete, paddled to the side of the airplane, and General Hughes and his staff left the Amphibian for the banca. The banca was paddled over to a carabao cart, which had been backed up in the water to its axles, and the three officers left the banca for the carabao cart and were transported slowly to the automobile waiting on the far shore.

Despite the several means of transportation employed, the General still saved about two hours' travel time.

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REFUNDS TO TELEPHONE USERS IN DAYTON

The State Courts of Ohio recently made a ruling requiring the Ohio Bell Telephone Company to make certain over-payment reimbursements to resident telephone users of Dayton and Oakwood, Ohio, for the period January 1, 1925, to include December 31, 1931. This amounts to about 75 cents per month per telephone, or about \$30.00 for an officer who lived in either of the above cities during a tour of duty of four years at Wright or Patterson Fields.

To obtain a reimbursement, each officer should make a written or personal application to the Ohio Bell Telephone Company, Dayton, Ohio, stating street addresses and the approximate dates of residences thereat.

The officer at Wright Field who called attention to the above states he has over \$19.00 due, which should buy the baby (age 18) a couple pairs of shoes.

V-7993, A.C.

AIRPLANE PROVES SAFE CARRIER OF FRAGILE EQUIPMENT

By the Wright Field Correspondent

The practicability of aircraft as a means of safe and speedy transportation of fragile equipment was demonstrated recently in the flight from California to Boston, Mass., of the new experimental "Klystron" radio tube, developed at Stanford University.

Plans had been made to conduct demonstration flights from the East Boston Airport, Boston, Mass., during the week of February 27 - March 4 for representatives of the Civil Aeronautics Authority, the U. S. Army and the Massachusetts Institute of Technology.

The tube, still in the experimental stage of development, is a sensitive and valuable article and requires considerable associated equipment, such as power supply, voltage regulator, and high vacuum pump. It is capable of generating large powers on extremely high frequencies and will eventually be used, it is believed, in solving many present aircraft problems, such as those connected with instrument landing systems, absolute altimeters, and marker beacon transmitters. When packed for transportation, the total weight of this equipment was 500 pounds.

Because of the tube's fragility, the means of transportation in which it

would be least subjected to jars and rough handling was desired. The airplane was decided upon as the chosen carrier.

Arrangements were made with the U. S. Army Air Corps interdepot transport service to pick up the tube and equipment at Moffett Field, Sunnyvale, Calif. From there it was flown to Patterson Field, O., via Sacramento, March Field and Duncan Field, Tex. At Patterson Field the equipment was carefully unloaded and transported to Wright Field by Army truck, where it was reloaded aboard the Aircraft Radio Laboratory airplane. From Wright Field the equipment was flown directly to Boston and delivered safely to the Massachusetts Institute of Technology officials. At the conclusion of the demonstration flights in Boston, the "Klystron" was again placed aboard the Aircraft Radio Laboratory airplane and returned to Wright Field.

At each unloading of the "Klystron" tube from the airplane, the equipment was found to have suffered no damage from vibration, jars, or other hazards. It is believed that no other method of transportation at present available could have offered such quick and safe transportation service.

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AIR RESERVE AND NATIONAL GUARD OFFICERS ATTEND TACTICAL SCHOOL

The first Special Class for National Guard and Reserve officers ever to be conducted at the Air Corps Tactical School, Maxwell Field, Ala., was successfully concluded with the graduation exercises on March 3rd. The class consisted of 13 Air Corps National Guard officers and 7 Air Corps Reserve officers.

Instruction began on January 9th, and the program consisted of practically all the subjects covered in the regular course. The scope of instruction, however, was considerably abbreviated. Lieut. Colonel Leo A. Walton, Director of the Department of Command, Staff and Logistics, was Director of this Special Course.

In view of the limited time available to cover all the desired instruction, the students of this class had to attend classes each morning and on at least two afternoons per week. It was quite a grind, but the entire class showed an excellent spirit in the way it tackled the difficult program, and the students were always willing and anxious to attend any additional hours of instruction which were arranged for their benefit. Their main regret at the close of the course was that their tour of duty for

the course could not be extended for at least another month.

The following were members of the class, and all received certificates of graduation from the Commandant, Colonel Millard F. Harmon, Air Corps:

Reserve Officers

Captain Bayard B. Borden, N.C.; 1st Lieuts. Henry C. Diltz, Mo.; Winsor Harlow, Mass.; Andrew I. Ivanoff, N.J.; Earl H. Jacobson, Calif.; Captain Matt A. Nieminen, Minn.; 1st Lieut. Robert K. Urban, Texas.

National Guard Officers

Lieut. Colonel John V. Dallin, Penna. Lieut. Colonel John N. Jeffers, Calif.; Major Eldo A. Peterman, Calif.; Captains Harry W. Generous, Conn.; Russell C.A. Larsen, Calif.; Claude A. Owen, Wash.; Donald L. Provost, N.J.; Melville C. Robinson, Mich.; Charles C. Scott, Texas; Gilbert N. Swett, N.J.; 1st Lieuts. Leo Katzman, Mich.; Bradford A. Shaw, Mass.; Alan M. Thompson, Mass.

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Colonel Thomas G. Dobyne, Department Inspector General, conducted on February 23, 1939, the Annual Administrative Inspection of the Panama Air Depot.

V-7993, A.C.

NONCOMS. HONORED ON EVE OF RETIREMENT

A Stag Party to celebrate the retirement of three Bolling Field noncommissioned officers, Staff Sergeants Hugh Duffy, Thomas A. Standeven and Joseph Mathleson, was held at that field on the evening of February 27th.

The exercises were opened with the introduction of the Commanding Officer, Lieut. Colonel F. E. Galloway, Air Corps, by Warrant Officer Charles Maylon.

Colonel Galloway gave a short talk, in which he congratulated the retiring non-commissioned officers on their records in the service and their retirement. He then introduced the Chief of the Air Corps, Major General Henry H. Arnold.

During General Arnold's talk, he mentioned the Air Corps Expansion Program and stated that the intention was to double the number of airplanes, officers and enlisted men, which would mean practically a complete reorganization of the Air Corps. General Arnold congratulated the retiring noncommissioned officers, and on behalf of the Bolling Field personnel presented each with a beautiful Hamilton watch and chain.

Lieut. Colonel William Ord Ryan, Air Corps, who until recently was the Commanding Officer of Bolling Field, also spoke briefly and congratulated the non-commissioned officers.

Among others present were Major Charles P. Prime, Executive Officer; Captain H.M. Turner, Commanding Officer of the Base Headquarters and 14th Air Base Squadron; 1st Lieuts. Lewis R. Parker, Commanding Officer, 1st Staff Squadron; Ralph Rhudy, Commanding Officer of the 2nd Staff Squadron; and Eugene H. Beebe, Aide to the Chief of the Air Corps.

The retirement exercises were followed by a buffet dinner which was enjoyed by everyone.

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Bolling Field establishes commendable record handling transient aircraft.

During the calendar year 1938, the Transient Aircraft Hangar personnel at Bolling Field, D.C., established a very commendable record in the handling of visiting aircraft.

The crew is under the leadership of 2nd Lieut. Wilkie A. Rambo, Air Reserve, and Technical Sergeant Robert B. Norris, and consists of three noncommissioned officers (Sergeants E.T. Upczak, A.H. Robertson and Corporal W.S. Reese) and ten privates. All personnel assigned to the Transient Aircraft Hangar are members of the Base Headquarters and 14th Air Base Squadron.

During the past calendar year they have handled a total of 3,362 airplanes of practically every type operated by the Air Corps, and completed seventy-six

20-hour inspections, thirty-two 40-hour inspections and two 80-hour inspections.

On numerous occasions individuals have expressed their appreciation of the efficient manner in which their airplanes have been handled by the Transient Aircraft Hangar Crew.

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GENERAL FRANK INSPECTS 18TH PURSUIT GROUP.

Brigadier General Walter H. Frank, Air Corps, Commanding the 18th Wing, Air Corps, witnessed on February 2nd an aerial bombing and gunnery mission performed by the 18th Pursuit Group at Wheeler Field, T.H., against rubber raft targets anchored several miles out at sea. After dropping their bombs, the Pursuit pilots returned to strafe the targets with machine gun fire.

When the flight returned to Wheeler Field, the planes were lined up for inspection of the combat crews by General Frank, who was accompanied by Colonel William E. Lynd and staff.

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EFFICIENCY STREAMER FOR 19TH PURSUIT

At a ground review, given at Schofield Barracks, T.H., on February 3, 1939, the 19th Pursuit Squadron received the Efficiency Streamer for being the most efficient squadron in the 18th Pursuit Group during the year 1938.

At the end of each year, a careful check is made of the records of the four squadrons comprising the 18th Pursuit Group. The record of the 19th Pursuit Squadron was of such merit that it was also included as one of the ten most efficient military units in the Hawaiian Department.

Captain James A. Ellison, 19th Pursuit Squadron Commander, was presented with the streamer by Major General Charles D. Herron, U.S. Army, Department Commander, after which the Squadron passed in ground review.

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ACKNOWLEDGMENT

The pen and ink drawing of Colonel Frank M. Andrews, Air Corps, which faces the article on page 5 of this issue of the News Letter, giving a brief resume of his accomplishments as Commanding General of the GHQ Air Force, is the handiwork of Sergeant Frank J. Lorenz, of the Headquarters and Headquarters Squadron, GHQ Air Force, Langley Field, Va.

Readers of the News Letter will recall the drawings by Sergeant Lorenz which featured the cover page on several occasions in the past. We express our appreciation to the Sergeant for his very helpful cooperation.

A P-26A GETS ITS PANTS WET
By the Albrook Field Correspondent

The following is an account of the water landing of a P-26A type airplane in Panama by 2nd Lieut. William W. Jones, Air Corps, on February 13th:

While engaged in formation firing on a water target, the engine failed and the pilot was left with only his better judgment and four hundred feet of altitude. While the landing was undoubtedly a success, Lieut. Jones is convinced that the alternative of the parachute would have been better under different circumstances and at a higher altitude.

"Recovering from a dive on a water target," Lieut. Jones stated, "the motor in my P-26A failed. After checking my instruments and altitude I realized it was to be a water landing. Re buckling my safety belt and heading into the strong trade wind, directly towards shore, I rolled down full flaps at about fifty feet and landed into Panama Bay in a full stall.

"My first sensation was going deep down under some very salty water. I unbuckled my belt and scrambled out only to have a bad fright when my chute caught on some part of the cockpit - still under water. Reaching back, I pulled it free and groped for the surface, which was much nearer than I thought. All I could see was the last half of the ship pointing straight up and losing altitude fast. Inflating my vest, I swam over and climbed up on the trailing edge of the wing which stood like the edge of a sharp knife about a foot out of the water. There I freed my parachute and slid back into the water. I swam a few yards away and, with a lump in my throat, watched my little airplane sink quietly out of sight, leaving me very much alone in a very wide expanse of tossing white caps.

"Realizing I would be hard to see from the other airplanes of the formation, I pulled the rip cord of my floating parachute, but the silk, instead of flaring out in a big white circle, promptly sank and began to tangle around my feet. After a few minutes, I swam away from it and left it to its fate. At about this time I began to remember the tales I'd heard about sharks as long as the mine planter launch. A small cut over my eye causing drops of blood to fall into the water, I expected any minute to be approached for dinner. Too, I had seen no boats of any description for miles, and no flying boats were readily available. The prospects looked rather dim, so if worse came to worse I might be able to swim to shore.

"I removed my shoes and, with a bad bit of sentiment for my best uniform dress shoes, I cast them off and started in easy stages for shore, meanwhile keeping a sharp watch for Taboga Bill (longest of the launch-long sharks). It was

close to three miles in to shore and against the wind, so my progress against the waves was not only slow but quite tiring.

"To make matters worse, I had become lost from the searching planes and I had to watch them circle away out beyond me, and occasionally passing within a stone's throw without my being seen. If they couldn't see me among all those whitecaps and waves, I felt certain no rescue boats could - and the shore was still only a mirage in the distance.

"After about a half hour of this, I began to get a bad chill, as the water at this time of year is quite cool around Panama. I could feel my leg muscles and even my stomach muscles trying to tie themselves into very hard knots. And that, coupled with frequent sloshes of salt water in my lungs, caused me some unhappy speculations as to consequences in case my life-vest sprang a leak.

"At length, Lieut. Freddie Smith, in an A-17, picked me up and waggled his wings in response to my waving, and my feeling at that point was closely akin to that of a starving man sitting down to a lunch on the house. After that I had plenty of company with other airplanes, none of which could help materially, but could aid in directing a boat to me. In a few minutes a P-26 came straight for me and zoomed up, followed soon by another. Looking back in their direction, I saw one of the prettiest little white speed boats a man ever saw.

"It soon came alongside and I gaily tried to climb aboard, but it was only a useless gesture, as I had to submit to the ignominy of being pulled bodily over the side. I was immediately seized with a great nausea and headache, which passed after I had lain in the sun awhile and ceased shivering. I learned that it was a police boat and, being the closest to the crash, it had been hailed with makeshift signals by Lieut. Roy Shores, who had been in my formation. The time indicated that I had been in that cold water one hour and five minutes.

"Yes, you can land in water - if luck is with you. But don't try it unless you have a hard head that won't get knocked unconscious when you hit, and there is a decided lack of altitude. Above all - don't fail to wear a sound life vest. I'm framing mine."
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Recent orders from the War Department relieved the 120th Observation Squadron, Colorado National Guard, from attachment to the 45th Division and attached the Squadron to the 24th Cavalry Division. "It is believed," declares the News Letter Correspondent, "that the summer field training for the Squadron will be at Boise, Idaho, June 10 to 24."

KEEPING THE ARMY AIRMEN PHYSICALLY FIT By the Langley Field Correspondent

The important task of keeping Langley Field's flying personnel physically fit at all times has always been one of the leading purposes of the Station Hospital, it was declared by Colonel Irwin B. March, Senior Flight Surgeon of the Virginia Peninsula Airdrome.

Colonel March, who has 15 years of experience as a Flight Surgeon with the Army Air Corps, was first placed on flying status in January, 1924. He arrived at Langley Field in February, 1937, from duty as Flight Surgeon and Post Surgeon at Selfridge Field, Mich. During the World War, he served two years overseas with the Fourth Division of the American Expeditionary Forces. His services in the Army of Occupation in Germany were in the capacity of Director of Field Hospitals of the Fourth Division.

Colonel March is assisted in the important duties of keeping flying members of the various organizations physically fit by a staff of medical officers and enlisted men.

It is estimated that approximately 375 examinations of flying officers are conducted twice each year, together with over 400 enlisted men of combat crews, who are examined once each year for the purpose of securing a clear estimate of an individual's ability to perform the task demanded of him, and to find and correct physical defects that might interfere with their flying duties.

Realizing that physical defects which may be possessed by any personnel engaged on flying duty may directly or indirectly be the cause of serious accidents, it is easily understood just why the Flight Surgeons closely check at all times the physical fitness of the qualified pilot, co-pilot, radio operator, machine gunner, bombardier and the mechanic.

It has often been said that the measures established at the airdrome are of the preventive medicine type and, since the government has invested in every member on flying status a considerable sum of money, it is evident that the longer these men are able to carry on their respective military flying duties the greater the return will be on the government's investment.

All Langley Field flying personnel are required to undergo a thorough examination at the Station Hospital twice each year to determine their physical fitness to fly, special attention being paid to the eyes, ears, lungs, heart, blood vessels and nervous system.

The difference in air pressure at high altitudes causes the blood to absorb less oxygen, and this requires increased activity of both lungs and heart. It is apparent, therefore, that a sound car-

diac and respiratory system is of extreme importance.

Without doubt, the organ of sight is the most important factor to all personnel engaged in flying. Visual acuity must therefore be normal, which is technically termed 20/20 with Snellen test type.

Among the older personnel, where experience compensates for minor defects of distant and near vision, waivers for these minor defects are granted, thus permitting them to continue on flying duty, provided these minor defects can be corrected to normal or near normal by glasses worn under their goggles.

The extrinsic, or voluntary muscles of the eyes are tested by an instrument called a Phorometer, because if any of these muscles are weak the pilot will, when fatigued from long hours of flying lose his ability to judge distance and may even see double, and so run the danger of wrecking his airplane when he comes in to land.

Hearing must also be normal in both ears, due to the fact that radio communications are of vital importance in aircraft operation and it is necessary to disregard the noises emanating from the motors, propellers and the howling static picked up by the radio receiver during inclement weather.

With changes in barometric pressure producing considerable effect on the ear drums, the eustachian tube, which runs from the middle of the ear to the upper part of the throat, must be free from colds or the presence of adenoid tissues. Therefore, the nose and throat are also carefully examined, and any obstruction to breathing must be corrected by operation or treatment before the individual is returned to or placed upon duty involving flying.

All in all, the matter of keeping the flying personnel physically fit to fly is very important both from a medical as well as an economic standpoint, tending as it does to minimize accidents with their resultant loss of both personnel and materiel, both of which are very costly to Uncle Sam.

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COLORADO AIRMEN FLY NEW AIRPLANES

The 120th Observation Squadron, Air Corps, Colorado National Guard, now boasts of four O-47A Observation airplanes. The last one was ferried from the North American Aircraft factory, Inglewood, Calif., during the latter part of January, 1939, by Captain John K. Nissley, Air Corps, who is the instructor on duty with this National Guard unit.

ACTIVITIES OF THE 2ND BOMBARDMENT GROUP

The Second Bombardment Group, Langley Field, Va., under the command of Lieut. Colonel Robert Olds, engaged in a varied assortment of activities during the past six weeks which proved very interesting.

On January 21, 1939, one of the Group's B-17's, flown by Major Vincent J. Melby, participated in the search for the British flying boat CAVALIER. Orders from the War Department were received at 4:30 p. m. and half an hour later the B-17 was ready for a take-off with a load of extra life rafts, life vests and flares. A low overcast and severe icing conditions forced the airplane to return to Langley Field. After landing, the reported position was found to have been in error by 100 miles. Plans were immediately made to have six B-17's take off at dawn on January 22nd, but the finding of the survivors by the SS ESSO BAYTON cancelled the undertaking.

On February 1st, word was received that all B-17's and the XB-15 were to be prepared to leave with a cargo of medical supplies for the earthquake-stricken areas of Chile upon twenty-four hours' notice. Several airplanes were at the Middletown Air Depot but, thanks to energetic work at the Depot, they were ferried back to Langley Field within 24 hours, by which time the Group was ready to take off. Fortunately, the need for extra supplies was not sufficiently great to require this mass flight. However, the chance to render an act of mercy was not lost, as the XB-15 was called upon to take about 3,200 pounds of medical supplies to Chile.

A detailed account of the flight of the XB-15 to Chile appeared in the previous issue of the News Letter.

Three airplanes of the 20th Bombardment Squadron performed a navigation flight to March Field, Calif., and return.

On February 25th, personnel of the 2nd Bombardment Group, flying in six B-17's, demonstrated bombing tactics to members of the Military Affairs Committees of the Senate and House of Representatives. Demolition bombs of all sizes from 100 lbs. to 1100 lbs. were dropped.

Captain McDaniel, of the 96th Bombardment Squadron, conducted extensive tests on B-17 type airplane on varying oil pressures at high altitudes and at varying temperatures. Experimental firing was carried on by airplanes firing at own shadow and that of an accompanying airplane. The results were very satisfactory.

Lieuts. Carlmark, Bockman, and Pvt. 1st Cl. Cardwell, of the 20th Bombardment Squadron, were ordered to report at

Wright Field, Dayton, Ohio, on February 13th, for two weeks' duty in connection with bombsight equipment.

The 49th Bombardment Squadron recently welcomed to its fold six new officers, five of them coming from the Air Corps Training Center and one from the 8th Pursuit Group, namely, 2nd Lieuts. Barksdale, Bond, Carmack, Giannatti, Mathewson and Clark.

Captain Palmer and Lieut. Feagin, of the 96th Bombardment Squadron, were assigned to the Cold Weather Test group for this year's test in Minneapolis, Minn. Their conclusion was that "it is quite possible to have a warm town in a cold climate."

Lieut. Moffett, a recent graduate of the Advanced Flying School, Kelly Field, Texas, was assigned to the 96th Bombardment Squadron, and reported for duty on February 14th.

Four other Air Corps officers, also recent graduates of Kelly Field, namely, 2nd Lieuts. Compton, Manson, Bank and Potter, were assigned to this organization. They are at present on leaves of absence.

COMMENDATION FOR MERCY FLIGHT TO CHILE

The Chairman of the American Red Cross, Mr. Norman H. Davis, addressed a letter on February 15, 1939, to General Malin Craig, Chief of Staff, as follows:

"My dear General Craig:

Once again the American Red Cross is indebted to the Army for its splendid cooperation in bringing relief to the victims of the recent earthquake in Chile. This prompt and generous response to the needs of the situation contributed in a large measure to the prevention of suffering among the victims of the disaster.

The splendid flights of airplanes on missions of mercy have won the admiration of the entire country and I should be grateful if you would express to the crews our very sincere appreciation."

COL. DUNCAN RETURNS TO CHIEF'S OFFICE

Special Orders of the War Department relieve Lieut. Colonel Asa N. Duncan, Air Corps, from further assignment and duty at March Field, Calif., and assigns him to duty in the Office of the Chief of the Air Corps, Washington, D. C.

Colonel Duncan's previous tour of duty in the Office of the Chief of Air Corps began in July, 1931, when he was assigned to the Training and Operations Division. Later he commanded Luke Field, T. H., and the 5th Composite Group.

SHORT-LIVED JOY FOR PURSUITERS

"For the first time in 10 these many moons," declares the Correspondent of the 36th Pursuit Squadron, Langley Field, Va., "each pilot in the 36th has a nice, bright, new shiny airplane to call his own - well, practically each pilot has one. But that won't last very long, because the balance of power is being upset by the quota of new officers from the Air Corps Training Center - Lieuts. R.J. Bourgojn, P.M. Brewer, Jr., A.R. DeBolt, S.N. Garrett, V.M. Gillum, O.B. Hardy, Jr. and J.B. Henry. As men, they are well met, and as officers they bid fair to maintain the spirit of a highly zealous organization. These officers reported for duty during the week of February 20 - 25. They bring the commissioned strength of the Squadron to the all time high of twenty-six."

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SQUADRON AIDS IN SOLUTION OF MURDER CASE.

The News Letter Correspondent of the First Observation Squadron, Air Corps, at Marshall Field, Fort Riley, Kansas, reports that this organization had an opportunity to assist local authorities in the solution of a murder case recently. A local automobile salesman was missing under circumstances which caused authorities to believe he had been kidnapped or murdered.

About noon on Sunday, March 5, 1939, the Geary County sheriff and prosecuting attorney requested that an airplane search of an area immediately south of Marshall Field be made in an effort to locate a dark green Plymouth sedan, which the missing man had been driving. Due to bad weather, which had grounded air traffic through this area, the search could not be immediately conducted, but was delayed until Monday morning, March 6th. Shortly after taking off from Marshall Field, Lieut. Gerry L. Mason located the missing car in a saucer-shaped depression where it had been missed by ground searchers. The sheriff was notified and immediately came to Marshall Field with deputies and an agent of the Federal Bureau of Investigation, who had entered the case because of the kidnapping angle.

Officers from Marshall Field conducted the officials to the car, which contained mute evidence of a brutal murder. There was no body near, but an immediate effort was made to reconstruct the crime and estimate where the murderer had hidden or disposed of the body. A bridge on the road into Junction City was considered, and at the request of the sheriff, who wished to leave his own car with deputies to guard the murder car, he and the F.B.I. agent were taken to the bridge. Blood spots were discovered, and the sheriff was taken to town to organize

a crew for dragging the river. It was soon discovered that this was a wrong lead, however, when a local citizen identified the blood spots as those of a dog he had killed on the bridge. A local youth started a short cut home, and in a field next to the bridge, near a steel power pole, he found the body of the missing salesman. An arrest has been made and the suspect charged with first degree murder.

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31,000-MILE FLIGHT IN LIGHT AIRPLANE

A clipping from the Manila DAILY BULLETIN of January 28, 1939, forwarded to the Information Division by Colonel Ralph Royce, Air Officer of the Philippine Department, gives an account of the landing on the day previous at the Nielsen Airport, Manila, of two aviators, Lieuts. Rudolph Jenett (24) and Horst Pulkowski (30), of the German Air Force, following their 15,000-mile flight from Germany in their light Arado Ar 79 cabin plane. This plane, which is of the inexpensive type built out in Germany, weighs about 3500 lbs. and flies on 65 horsepower, with 40 horsepower in reserve. Its gasoline capacity is 3,984 liters, approximately 1100 gallons.

The arrival of the fliers in Manila marked the completion of the first half of their 31,000-mile flight from Germany to the Far East. They stated they began their flight from Brandenburg, Germany, on December 17th, and made stops at Naples, Tripoli, Alexandria, Calcutta, Bangkok, Penang, Medan, Sumatra, Java, Timore, Port Darwin, Normantown, Sydney, Cape York, New Guinea, Makassar, Tarakan and Cebu. Sydney, Australia, marked the turning point of their journey back to Germany, via the Philippine Islands, the route they intended following being from Manila to Bangkok, to Calcutta, Mysore, Delhi, Djask, Bagdad, Alexandria, Cyprus, Rhodes, Athens, Belgrade and Bucharest.

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MAJOR SMITH ORDERED TO SACRAMENTO

Major Lowell H. Smith, leader of the Air Corps Around-the-World Flight in 1924, and the only member of that expedition still actively connected with the Air Corps, is under orders for duty at the new Air Corps Depot at Sacramento, Calif. He is scheduled to leave for his new station on or about June 1, 1939. For the past four years Major Smith has been on duty in the Office of the Chief of the Air Corps, Washington, D.C., as Chief of the Inspection Division.

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THE NEW, ADVANCED FLYING CLASS AT KELLY FIELD

The class of student officers and Flying Cadets, which for the past eight months had undergone instruction at the Air Corps Primary Flying School, Randolph Field, Texas, completed the course towards the end of February, and on the 25th of that month was ordered to proceed to Kelly Field, Texas, to pursue the advanced course of flying instruction thereat. This class, numbering 166 students, comprises four officers of the Regular Army, two officers of the Philippine Army, 158 Flying Cadets of the U.S. Army, and two Flying Cadets of the Philippine Army.

These students were assigned to the various sections of the Advanced Flying School, as follows:

Observation Section

Officers

2d Lt. John T. Shields, Cav. Louisiana
 2d Lt. William S. Steele, Inf. South Carolina
 3d Lt. Experto B. Luzon Philippine Army

Flying Cadets

Luker, James Webster Porterville, Calif.
 Parker, Frank Russell, Jr. Old Greenwich, Conn.
 Metyl, James D. Wilson, Conn.
 Allen, Charles Oran, Jr. Panama City, Fla.
 Jones, James Dalton Sarasota, Fla.
 Beaz, William Nelson, Jr. Lexington, Ky.
 Kinnaird, Eugene F., Jr. Lexington, Ky.
 Williams, Adriel Newton Shelbyville, Ky.
 Habberstad, Edward C. Blooming Prairie, Minn.
 Dech, Keith Wesley Minneapolis, Minn.
 Foltz, John Lloyd Herkimer, N.Y.
 Fawcett, Ralph M. Ottawa, Ohio
 Wilkins, John Campbell Corvallis, Ore.
 DeVine, John I. Philadelphia, Pa.
 Cole, Nester Evan Florence, S.D.
 Barham, James Carlton Houston, Texas
 Chandler, Charles G., Jr. San Antonio, Texas
 Bareham, Joseph Anderson Stephenville, Texas
 Pancake, Frank Robins Staunton, Va.
 Page, Jerry Dentler Los Angeles, Calif.
 Dixon, Victor H. Philippine Army

Pursuit Section

Officers

2nd Lt. Bienvenido E. Ferrer Philippine Army

Flying Cadets

Gilchrist, William David, Jr. Auburn, Ala.
 Libbey, Harry G. Mobile, Ala.
 Tipton, James Baird University, Ala.
 Grossetta, Anthony V. Tucson, Ariz.
 Green, Franklyn T. Fort Logan, Colo.
 Wood, Samiel Gordon Washington, D.C.
 Beyeler, Arnold Walter Fort Lauderdale, Fla.
 McMillan, George Bray Winter Garden, Fla.
 Meng, Lewis Bruno Avondale Estates, Ga.
 Gordon, Michael Jacob Chicago, Ill.
 Loomis, Donald Eugene Chicago, Ill.
 Riley, Harris Dean Chicago, Ill.
 Koepke, Fred Vinton LaMoille, Ill.
 Bowen, William Joseph A. Oak Park, Ill.
 Cory, Albert Arnold Oak Park, Ill.
 Hester, John Kenton Peoria, Ill.
 Kelly, Joseph Anthony Westville, Ill.
 Terhume, Charles F., Jr. Indianapolis, Ind.
 Reed, William Benjamin South Bend, Ind.
 Grieger, Harvey Emil Wanatah, Ind.

Sprankle, Kenneth Wayne West Lafayette, Ind.
 Jackson, T. Walter Ames, Iowa
 Stewart, Everett W. Manhattan, Kans.
 Lawrence, Samuel Eugene, Jr. Baton Rouge, La.
 MacDonald, Charles Henry Baton Rouge, La.
 Salmela, Oliver R. East Weymouth, Mass.
 Richmond, Luther H. North Wilbraham, Mass.
 Gorman, Paul Joseph Detroit, Mich.
 Harker, Ward W. Detroit, Mich.
 Lichter, Carl Jerome St. Paul, Minn.
 Dusard, Lee Francis, Jr. Kirkwood, Mo.
 Conway, Ralph Francis Socorro, N.M.
 Wheeler, Ansel James Genesco, N.Y.
 Seymour, Rudolph Romulus Cary, N.C.
 Exum, Wyatt Patrick Goldsboro, N.C.
 Slocumb, Charles Dewey, Jr. Goldsboro, N.C.
 Barnick, Roland J. Max, N.D.
 Nunzenmayer, Wilmer Walter Kent, Ohio
 Fisch, Ted B. Milwaukie, Ore.
 Milne, Jack Gillespie Meyersdale, Pa.
 Hornsby, Thomas William Columbia, S.C.
 Gilbert, William Frank, Jr. Lyman, S.C.
 Cherry, William T., Jr. Abilene, Texas
 Ort, Rudolph King Wichita Falls, Texas
 Cate, Albert Murray Plainfield, Vt.
 Darling, Henry B., Jr. Lexington, Va.
 Tokarz, Clemence Paul Port Richmond, Va.
 Wood, Paul Davis Fairmont, W. Va.
 Bowen, William S. Huntington, W. Va.

Norris, Robert Parks Banks, Ala.
 Hubbard, Thomas Harvey San Diego, Calif.
 Rosasco, Henry P. Washington, D.C.
 McCafferty, Guy Franklin Fort Bliss, Texas
 Davis, Allyn Taylor Los Angeles, Calif.
 Matthews, Robert Lee South Bend, Ind.

Attack Section

Flying Cadets

Riddle, Samuel S., Jr. Birmingham, Ala.
 Frazier, Robert M. Nogales, Ariz.
 Curry, Jack Harold Rogers, Ark.
 Northamer, Kenneth Walter Fresno, Calif.
 Hubbard, Harry Vaughn Hayward, Calif.
 MacPhee, Angus C.B. Los Angeles, Calif.
 Thornquest, William L., Jr. Redlands, Calif.
 Kittel, Robt. Stewart Colorado Springs, Colo.
 Bratton, Leslie Raymond Denver, Colo.
 Laborde, Fred N. Southbury, Conn.
 Cook, Bailey Cavanaugh New Castle, Dela.
 Savoie, William Frank Chicago, Ill.
 Barthelmes, Karl T. Dixon, Ill.
 Kuhl, Phil John Riverside, Ill.
 Clark, Donald Leonard Alta, Iowa
 Evanoff, Alexander G. Belle Plains, Iowa
 Sams, Burton Kresge Culver, Kans.
 Goetz, Albert John Dodge City, Kans.
 Carlton, William Clayton Minden, La.
 Watkins, Tarleton H. Aberdeen Proving Gds, Md.
 Higgins, Edward William, Jr. Arlington, Mass.
 Evans, Robert Chester Detroit, Mich.
 Ballard, Norman Luellen Bay City, Mich.
 McNelly, Fred Wright Anoka, Minn.
 Rehmann, Orville H. Bertha, Minn.
 Ryan, Clair E. Springfield, Minn.
 Franks, Perry Leroy Lincoln, Neb.
 Carlson, Francis Bernard Ossining, N.Y.
 Vosper, Stanley Richard Akron, Ohio
 Schurter, Orie Olin Burlington, Okla.
 Anthis, Rollien Henry El Reno, Okla.
 Newton, Dorr Ellsworth, Jr. Malvern, Pa.

Ragland, Richard M.	Handley, Texas
Beck, George G.	Houston, Texas
Brooke, Lawrence M.	Randolph Field, Texas
Gregory, Charles E.	Houston, Texas
Rector, Walter Stokes	Houston, Texas
Wheelless, Hewitt Terrell	Menard, Texas
Dahlberg, Charles William	San Antonio, Texas

Tarrant, Yancey Smith	Waco, Texas
Martin, Maurice Leslie	Vancouver, Wash.
Cunningham, Joseph Austin	Clarksburg, W. Va.
Pike, Harry MacCulloch	Portage, Wis.

Danley, James Ramey	West Los Angeles, Calif.
O'Connor, Robert G.	Northampton, Mass.
Juliano, Godofredo M.	Philippine Army

Bombardment Section

Officers

1st Lt. James B. Buck, Inf.	Texas
2nd Lt. Jack A. Gibbs, C.E.	Oregon

Flying Cadets

Rogers, George Wendell	Tucson, Ariz.
Myer, Glen Anthony	Cupertino, Calif.
Alder, Glen Miller	North Los Angeles, Calif.
Carter, John Henry	Pasadena, Calif.
Brown, Don Cornelius Paul	Venice, Calif.
Boyd, William Ellsworth	Boulder, Colo.
Carpenter, Randall Hamilton	Wilmington, Del.
Miller, Samuel Hudson	Decker, Ind.
Emrick, Paul Stanley	West Lafayette, Ind.
Maney, John Randolph	Cedar Rapids, Iowa
Itz, Milford Felix	Osage City, Kans.
Cranston, George Echelbary	Winfield, Kans.
Holt, James William, Jr.	Hazard, Ky.
Whitaker, Narce	Roxana, Ky.
Tartar, Jerome E.	Mintonville, Ky.
Simpson, John G.	Chevy Chase, Md.
Rozwenc, George Stephen	Northampton, Mass.
Preston, Joseph J.	St. Paul, Minn.
Henry, John Elwood	Ridgefield Park, N.J.
Jones, Jack Carey	Dobbs Ferry, N.Y.
Brown, Paul Douglas	West Orange, N.J.
Wilson, Frederick Gerald	Delaware, Ohio
Morse, Raymond Steel	Fort Sill, Okla.
Chadwell, George Theodore	Purcell, Okla.
Beard, Robert Wallace	Eugene, Ore.
Spieth, Harry Edwin, Jr.	Portland, Ore.
Smith, Pinkham	Providence, R.I.
Bussey, Carver Thaxton	Florence, S.C.
DuRant, Francis Fill	Georgetown, S.C.
Reeve, Ralph Amos	Milbank, S.D.
Pratt, Carlos Conrad	Bearden, Tenn.
Cox, Ray Lawrence	Vernon, Texas
Hendrix, William Murray, Jr.	Fort Belvoir, Va.
Jeffrey, Thomas Stanley, Jr.	Lexington, Va.
Fitzwater, John Timothy	Buckhannon, W.Va.
Hahn, Delbert E.	Milwaukee, Wis.
Van de Lester, John Rineir	Hammond, Ind.
Ezzard, Richard Francis	Winter Garden, Fla.

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Under Special Orders of the War Department, recently issued, Lieut. Colonel George L. Usher is relieved from duty in the Office of the Chief of the Air Corps and assigned to duty at Randolph Field, Texas. Colonel Usher has been on duty in the Personnel Division for the past four years, serving as Chief thereof three yrs.

GOVERNMENT OFFICIALS VIEW BOMBING DEMONSTRATION
By the Langley Field Correspondent

Powerful demolition bombs roared a welcome on the morning of February 25th to a party of high ranking officials of Washington, who arrived by steamer and plane to inspect armaments, view a bombing and gunnery demonstration at Plum Tree Island, and witness firing from huge Coast Artillery guns at Fort Story and Fort Monroe before returning the same night to the Capital.

Chairman May, of the House Military Affairs Committee, headed the delegation of eleven members of that Committee and four members of the House Appropriations Committee, who were greeted at Old Point Comfort by military authorities upon their arrival by steamer. Another delegation came by plane from Washington to Langley Field.

Six B-17 "Flying Fortress" Bombers and 36 Pursuit planes engaged in a bombing and gunnery demonstration at Plum Tree Island while the Washington officials and their hosts watched from Messick's Point, a few hundred yards distant. Following the aerial exercises, the entourage traveled to Fort Story for lunch and a demonstration of 37 MM, .50 and .30 caliber machine guns and 3-inch anti-aircraft guns. The group returned to Fort Monroe to see the 12-inch disappearing carriage seacoast guns of Battery DeRussy in action that afternoon.

The bombing demonstration was inaugurated by one of the four-motored Bombers, which dropped eight 300-pound bombs at the rate of three per second from a height of 12,000 feet. A moment later, another B-17, flying at the same altitude, dropped four 600-pound bombs at the rate of three per second. A third Bomber loosed two 1100-pound bombs in one second as it flew unseen through a hazy sky. All the while, the pilots of the planes were in radio communication with the group at Messick's Point, and through a loud-speaking arrangement advised the spectators at what moment the missiles were dropped.

Three B-17's, flying in formation at 12,000 feet, ended the bombing exercises by dropping in train ten 100-pound bombs of gray smoke and flame on the island range and rocked the bleachers where the visitors were seated.

Thirty-six Pursuit planes, flying in flights of six planes each, fired at water targets simultaneously. The last 18 airplanes fired tracer bullets which could be seen as they belched from the machine guns of the speedy craft.

An official program describing the bombing and gunnery demonstration said the display was arranged "in an effort to illustrate the extent of training and preparedness of the HQ Air Force, exemplified by the units taking part in this demonstration."

"No artificiality is imposed in the demonstration of aerial bombing. Actual demolition bombs are dropped," the program pointed out, "using exactly the same tactics that would be used in time of war." It further explained that by multiplying the effect of each three-

(Continued on Page 15)

NIGHT FLIGHT

The airport, like a jeweler's tray
Of blackest velvet that night lay,
With brilliant stones about its fringe,
And on beyond, a yellow tinge
Of city lights from buildings high
That seemed to pierce the lowering sky.

Runways marked with emeralds green;
Danger rubies in places seen;
While in between the green and red
The boundary diamonds took their stead,
And twinkling was this bright array,
This airport like a jeweler's tray.

Picnicking above the field
Three colored lights swiftly wheeled;
Then sliding down through the clouded sky
Straight for the emeralds did they fly;
A red light left, a green light right,
And a Cyclops eye that searched the night.

The transport settled on the tray,
And took its place in the rich array,
A bit of platinum it might seem
That fitted into the jewelry scheme.
It tucked up to the waiting line,
But remained the jewel in the dream of mine.

Nathan H. Ranck,
2nd Lieut., Air Reserve,
Pope Field, Ft. Bragg, N.C.

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RADIO ENTHUSIASTS STAGE NOVEL "STAG PARTY."

The Kelly Field monthly stag and "get-together" party, held on Friday night, February 24th, was under the supervision of a committee composed of the radio enthusiasts at that field, namely: Major Albert B. Pitts, Captains Holmes, Guest, Lieuts. Bundy, Nelson, Sergeants Hagin, O'Connor, Privates Gudehaus, Talley and O'Hara.

This was the first party to be given under the supervision of different committees of the field. The committee spent a great deal of time on their entertainment, which consisted of demonstrating the ability of the different Section Chiefs and their assistants in their indoor blind flying equipment over a "hot" runway and beam course. Due to the runway not being "hot" enough, participants were required to remove their shoes.

Supplementing this demonstration were other radio features, including a photo-electric target range, remote radio-controlled slot machine, and a demonstration of the Crosley "Reado" (fac simile printer). This "Reado" receives radio broadcasts of printed news items and pictures and reproduces them on white paper. This demonstration was conducted by Mr. H.L. Roper, representing the Alamo Distributing Company of San Antonio, and was of great interest to everyone who attended.

Another very interesting feature of this party was a demonstration of expert pistol shooting by Lieut. Densford, of Kelly Field; Mr. L.L. Kline, Director of the National Rifle Association, and President of the Liberty Pistol and Rifle Club; Detective R.F. Tate, special investigator for

the Chief of Police of San Antonio; Mr. H.M. Kline; and Mr. Ben Mouton, target holder and renowned high diver of the circus. The audience received numerous thrills during this shooting, watching these experts shoot pieces of chalk out of the target holder's mouth and buttons off his vest while holding the pistol in odd positions.

The balance of the evening was spent in various forms of diversion.

Says the News Letter Correspondent: "If the subsequent parties are as entertaining as the one held Friday night, it is believed that the Officers' Club at Kelly Field will have to be enlarged."

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Bombing Demonstration at Langley Field (Continued from Page 14).

plane formation by four an accurate idea of the results to be obtained by a full strength squadron may be shown.

Among those listed as visitors from Washington were: Chairman May (Ky.); Representatives Thomason, Kinday (Texas); Faddis, Rutherford, Snyder (Pa.); Turner (Tenn.); Schaefer, Arends (Ill.); Pace (Ga.); Sparkman, Starnes (Ala.); Clason (Mass.); Martin (Colo.); Elstrom, Harter (Ohio); Edmiston (West Va.); Smith (Conn.); Merritt (N.Y.); Costello (Calif.); Anderson (Mo.); Narness (Ind.); Terry (Ark.); and Engel (Mich.).

Senators Bridges (N.H.) and Gurney (S.D.), could not come to the Lower Peninsula, although they were included in the group scheduled to accompany the Representatives who made the trip for first hand information on the Administration's military program.

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TO A (HAMILTON) FIELD MOUSE OR 'MUCH ADO ABOUT NOTHING' (in the Group Adjutant's Office)

Hickory, Dickory, Dock,
You've heard of the mouse in the clock;
But here's about one
Who thought it great fun
To hide in the Group Adjutant's frock.

Persistently, cunningly, avoiding pursuit,
Smug in the pocket of a warm flying suit,
"Help!" cried the Captain,
"Sergeant, come quick -
Bring me a gun or fetch me a stick!"

"The British are coming," the Sergeant cried,
"They've got us surrounded on every side,
Sound the Charge! Forward! Typewriters -
present."
The whole office force to the rescue went.

Then ensued a battle that made Bull Run
Look like a picnic before it was done,
But the home guard fought fiercely, and at
last turned the tide.
"Bravo!" cried the Captain; you've conquered
the pest,
"Sergeant! Help me get down from this desk!"

MAN OF DESTINY
Anonymous

Young oscar klotz
was just a squirt
a wee broth of a lad
as it were
tending his poppas pea patch
out in oklahoma
one morning in the early twenties
when suddenly
with a scattering miss
and a coughing sneeze
something with two tattered wings
and a greasy pilot
skidded betwixt two rows
parted two strands of barbed wire
and slithered to a stop
poppa klotz and the pilot
who called this wheezing
monster
a goddam d h
fixed something in the engine
with something offa poppas
tractor
and put some cardboard and
adhesive tape
on the tattered wings
with more sneezes
and more coughing
and a pat on oscar's head
not to mention one more
strand
of barbed wire
the greasy one was gone
but not
forgotten
because young oscar klotz
had found his calling
years passed
and though between times
oscar had been exposed
to higher learning
and shoulda known better
he would still get
up on Sunday morning and
drive twenty miles to see
the plane from
amarillo land
and driving home
with Emmy Lou
who still admired
a football player at o u
he would renew his plans
to write his name across
the sky in crimson letters
so oscar went to texas
with poppas blessing
and a spark of interest
from Emmy Lou
i met him there
he was a good joe
and together we walked
the area
and busted shock cords
and generally tried
everybodys patience
but we made it
and even on graduation day
oscar said this armys

not for me
i've got big things to
do and i said you goota
eat too and i'll betcha
in six months you'll
wanta stay
but he said no and so
the air corps took us in
hand and told us we didn't
know it all
not yet
so lissen
so we lissened and
learned some more
and one day oscar and i
dropped into oklahoma
city and there was
poppa klotz and
momma klotz and
emmy lou and
the football player from
o u
and a hundred others
they took oscar's picture
and put a big story in the
local papers
about oscar and his
super ultra fighting
ship
and how he was uncle sams
left hand buddie and
a lot more slop
but oscar was impressed
and emmy lou forgot her
hero
and married oscar
not right there but
sometime that night
time passed apace
and the man of destiny
became a fair to middling
mess and supply officer
but he still dreamed dreams
of far places and
taking off some morning
for tierra del fuego or
something
but emmy lou enjoyed the
post bridge circle
and liked to root around
the p x
and was all for the army
as her career
and even oscar weakened
when they let him lead an
element
and gave him armament
and communications
and told him he was now
the squadrons right hand man
next time i saw him
emmy lou
had proudly presented
oscar with oscar jr
and he was talking air corps
politics and comparative air
strengths instead of

financial backing for
that tierra del fuego
proposition
i might have guessed it
but when the next list of
new second looies
air corps
came out
lo young oscar's name
led all the rest
this is a long
dissertation
not to have a moral
so i'd better
put one in
it's about a
conversation i heard once
between two prairie dogs
just north of north platte
nebraska
a big one said to a
little one
if the hole you're in
isn't big enough
make it bigger
don't go running around
north platte looking for
a bigger one
all the big ones are full
and somebody might steal
your little one
and a missus prairie dog
won't want you running
around digging a
big hole
she'll just make you feel
at home
where you are.

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NEW CRASH TRUCK IS INTRODUCED TO NEW TRANSPORT PLANE

When the San Antonio Air Depot Correspondent reported in the previous issue of the News Letter the acquisition of a big new airplane crash truck on February 17th, and a new C-39 transport plane on the 15th, it was not dreamed that, unfortunately, these two craft would be formally introduced to each other so soon. On February 21st, the new C-39, piloted by Lieuts. L.P. Kleinoeder and T.K. Dorsett, en route with cargo to Barksdale Field, La., was forced down by engine failure near Mount Enterprise, Texas, some 80 miles west of Barksdale Field, fortunately without injury to personnel. The new crash truck and the necessary mechanics were sent to the scene of the crash.

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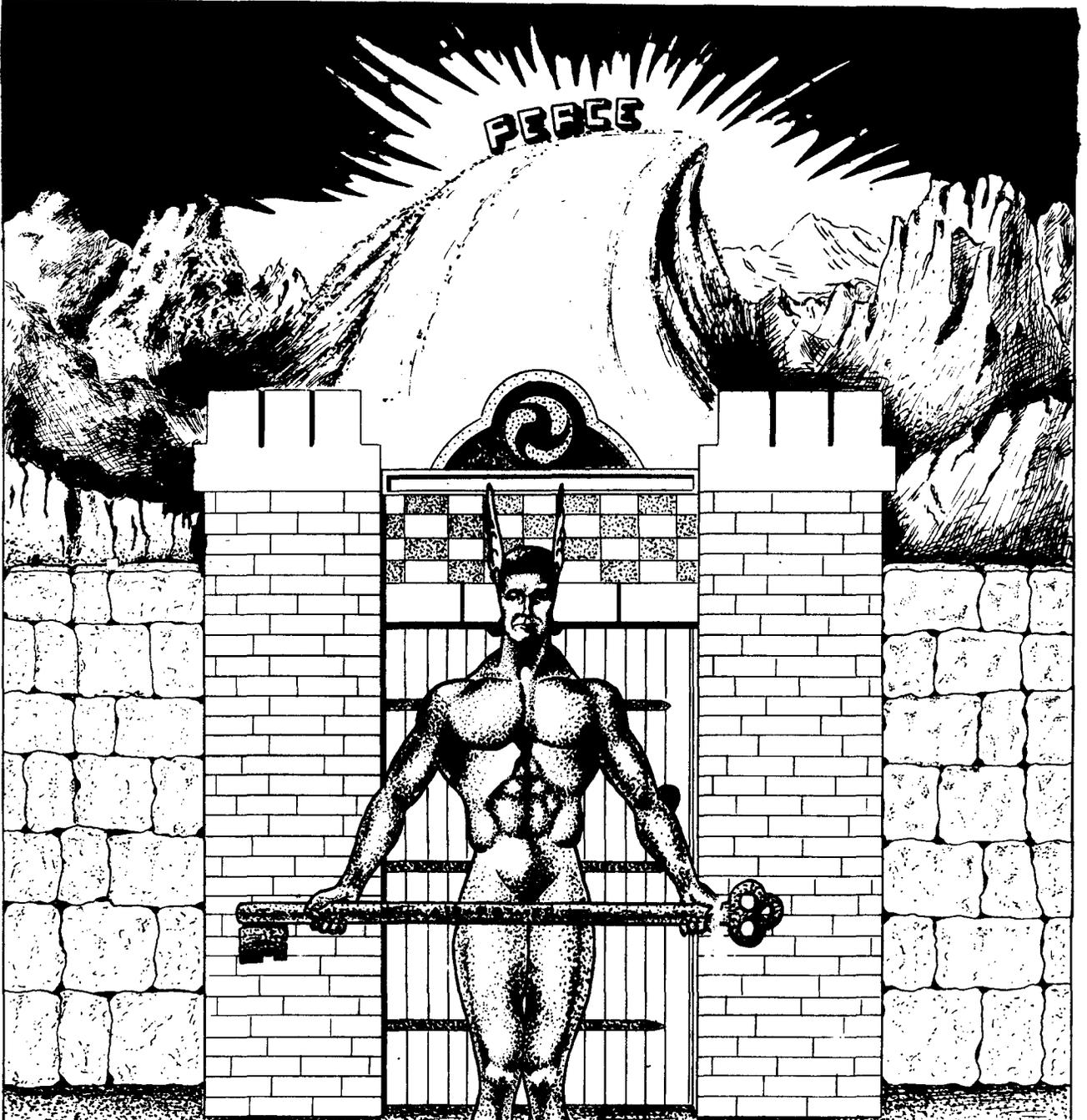
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PEACE



**AIR
CORPS**

**NEWS
LETTER**

F. J. LORENZ

ISSUED BY THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT WASHINGTON

Information Division
Air Corps

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Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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THE ARMY AIR CORPS FOR 1938 -- A REVIEW

Ed. Note: The review of Air Corps activities and of various aeronautical events during the calendar year 1938, as hereinafter given, is not intended as a full and complete chronology thereof. The necessary time required to conduct the research work incident to the compilation of a complete chronology has not been available. Furthermore, space is lacking for the publication of a more complete report. It is believed, however, that the chronology of events as here given should afford the reader a fair idea of the various activities in which the Air Corps was engaged during the past year.

CHRONOLOGY

Personnel - Appointments, Changes, etc.

The tour of duty of Brigadier General Gerald C. Brant as Wing Commander of the 2nd Wing, GHQ Air Force, Langley Field, Va., terminated on February 28th, and on the following day he was assigned as Commandant of the Air Corps Technical School, Chamute Field, Rantoul, Ill., and the branch thereof at Lowry Field, Denver, Colo. General Brant reverted to his permanent rank of Colonel.

Colonel Frank D. Lackland was relieved from assignment and duty as Chief of the Field Service Section at Wright Field, Dayton, Ohio, and assigned to duty as Commandant of the Air Corps Advanced Flying School, Kelly Field, Texas. He assumed command of this School on March 25th.

Effective March 1, 1938, Colonel Arnold N. Krogstad, Air Corps, was appointed a Wing Commander with the temporary rank of Brigadier General; relieved from assignment and duty as Commandant of the Air Corps Advanced Flying School, Kelly Field, Texas, and assigned to the command of the 2nd Wing, GHQ Air Force, Langley Field, Va. General Krogstad assumed the duties of his new position on March 31, 1938.

Brigadier General James E. Chaney, upon the expiration of his appointment as Assistant to the Chief of the Air Corps, with the rank of Brigadier General, on July 16, 1938, was relieved from assignment and duty as Commanding General of the Air Corps Training Center and assigned to the command of Mitchel Field, N.Y.

The appointment of Brigadier General George H. Brett as Wing Commander of the 19th Wing, Albrook Field, Panama Canal Zone, terminated on October 29, 1938, and he was assigned to duty as Chief of Staff of the GHQ Air Force, Langley Field, Va.

Brigadier General Barton K. Yount as relieved from the command of the 18th Wing in the Hawaiian Department and assigned to duty as Commandant of the Air Corps Training Center, Randolph Field, Texas, succeeding Brigadier General James E. Chaney. General Yount assumed

command of the Training Center on August 5, 1938.

Effective September 30, 1938, Colonel Walter H. Frank, Air Corps, was appointed temporary Wing Commander, with the rank of Brigadier General in the Air Corps. He was relieved from duty as Chief of Staff, Hqrs. GHQ Air Force, Langley Field, Va., and assigned as Wing Commander of the 18th Wing in the Hawaiian Department.

Effective October 13, 1938, Colonel Herbert A. Dargue, Air Corps, was appointed temporarily a Wing Commander, with the rank of Brigadier General in the Air Corps. He was relieved from duty as Assistant Commandant of the Air Corps Tactical School, Maxwell Field, Ala., and assigned to duty in the Panama Canal Department, where he arrived on October 14th and assumed command of the 19th Wing.

Brigadier General Henry C. Pratt, U.S. Army, was relieved from duty as Commandant of the Air Corps Tactical School, Maxwell Field, Ala., and assigned to the command of the 23rd Brigade in the Philippine Department. He departed from Maxwell Field for his new assignment on August 7, 1938.

Colonel Jacob H. Rudolph, Air Corps, assumed command of the branch of the Air Corps Technical School, Lowry Field, Denver, Colo., on July 1, 1938, relieving Lieut. Colonel Junius W. Jones, assigned to duty in the Inspector General's Department, Washington, D.C.

Brigadier General Henry H. Arnold, Assistant Chief of the Air Corps, was appointed Chief of the Air Corps with the rank of Brigadier General, for a period of four years, beginning September 29, 1938. General Arnold assumed the duties of that office on September 30th.

Colonel Walter G. Kilner, Chief of Staff of Hqrs. GHQ Air Force, Langley Field, Va., was appointed Assistant to the Chief of the Air Corps, with the rank of Brigadier General, for a period of four years beginning September 30, 1938, and assigned to duty in the Office of the Chief of the Air Corps, Washington, D.C.

Colonel John H. Pirie, transferred from

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March Field, Calif., to Maxwell Field, Ala., assumed command of the latter field on October 4, 1938.

Brigadier General Barton K. Yount, Air Corps, was relieved from command of the Air Corps Training Center and assigned to duty in the Office of the Chief of the Air Corps, Washington, D. C.

Colonel Millard F. Harmon, Air Corps, assumed command of the Air Corps Tactical School, Maxwell Field, Ala., on December 6, 1938. Lieut. Colonel Donald Wilson was assigned as Assistant Commandant of this School.

A total of 17 first lieutenants of the Air Corps were promoted to captain, with rank from June 7, 1938, and 61 additional first lieutenants were promoted to captain, with rank from June 9, 1938.

Thirty second lieutenants of the Air Corps were promoted to the grade of first lieutenant, effective June 12, 1938. Effective June 30, 1938, 38 additional second lieutenants were advanced to first lieutenants.

Nineteen Air Corps Reserve officers serving on extended active duty were commissioned second lieutenants in the Air Corps, Regular Army, with rank from July 1, 1938, under the provisions of the Acts of Congress of August 30, 1935, and April 13, 1938.

As a result of competitive examinations among Air Corps Reserve officers on extended active duty, 188 received commissions as second lieutenants in the Air Corps, Regular Army.

SCHOOL ACTIVITIES

Air Corps Training Center

The maintenance flight of Class 38-A of the Air Corps Advanced Flying School, Kelly Field, Texas, was completed on January 28th, with no mishap, despite delays encountered due to adverse weather conditions, including dust storms, low ceilings, etc.

On February 16th, Class 38-A, comprising 5 officers of the Regular Army, one officer of the Brazilian Army, and 55 Flying Cadets graduated from the Air Corps Advanced Flying School.

Bombardment training was reestablished at the Air Corps Advanced Flying School, beginning February 23rd, with the incoming class which graduated from the Primary Flying School, Randolph Field. Four officers were assigned to duty as instructors in the Bombardment Section.

A total of 101 students of Class 38-B, comprising 2 Regular Army officers, 6 foreign officers and 93 Flying Cadets, who graduated from the Primary Flying School, Randolph Field, Texas, reported on February 23rd at Kelly Field for advanced flying training.

A class of 321 students reported at the Primary Flying School, Randolph Field, for flying training with the March 1, 1938, class.

A special Traveling Board of Air Corps and Medical officers from the Air Corps Training Center departed on February 14th for the purpose of visiting colleges and universities in the 7th and 8th Corps Areas; first, to examine applicants for appointment as Flying Cadets; and, second, to disseminate information concerning the Training Center over as large an

area as practicable. The Board examined a total of 746 applicants, of which number 165 were found qualified and recommended for appointment as Flying Cadets. The Board returned to the Training Center on April 13th, after traveling a distance of 5150 miles, utilizing two BT-9 airplanes.

Seven Inspectors of the Bureau of Air Commerce, Department of Commerce, holding commissions in the Air Reserve or in the National Guard, arrived at the Air Corps Advanced Flying School, Kelly Field, on May 9th, for temporary duty, to receive a special course of pilot instruction on two-engined equipment. Each Inspector received from 12 to 15 hours of pilot time on local and cross-country flights, and they completed the course on May 21st.

Graduation exercises for Class 38-B, of the Air Corps Advanced Flying School, were held on June 16th. The graduating class consisted of two officers of the Regular Army, 6 foreign officers, and 88 Flying Cadets.

A total of 341 students were selected for appointment as Flying Cadets to enter the July 1, 1938, Class at the Air Corps Primary Flying School, Randolph Field. This constituted the largest number of students ever to begin training in any class in the history of the Air Corps Training Center.

A total of 114 second lieutenants of the Regular Army, who graduated from the United States Military Academy, West Point, N. Y., on June 14, 1938, were assigned to the Air Corps for flying training. They reported at the Training Center during the latter part of September.

During the Fiscal Year ending June 30, 1938, Randolph Field officers and students flew the unusual total of 102,932 hours and 25 minutes, exceeding the Fiscal Years 1936 and 1937 by approximately 30,000 flying hours.

On October 6, 1938, the strength of the Air Corps was increased by 61 commissioned officers, graduates of the United States Military Academy of the class of 1937, who successfully completed the course of instruction at the Air Corps Training Center.

Graduation exercises for Class 38-C were held at the Air Corps Advanced Flying School on October 5, 1938. The class consisted of 64 Regular Army officers and 80 Flying Cadets and was the largest graduating class in the history of the Air Corps Training Center.

Class No. 39-A reported at Kelly Field on October 8th to complete its instruction at the Air Corps Training Center. This class, the largest yet to be sent to the Advanced Flying School, consisted of 176 students, 4 being Regular Army officers, 6 National Guard officers and 166 Flying Cadets.

Eighteen second lieutenants of the Air Reserve (non-graduates of the Air Corps Training Center) began on October 10th a refresher flying course at the Primary Flying School.

A total of 236 Flying Cadets reported at Randolph Field early in October to begin primary flying training. Including the West Point graduates assigned to the Air Corps for flying training, the number of students in

this class totalled 350.

During the period from July 5 to October 5, 1938, a total of 20,781 hours was flown by airplanes at the Advanced Flying School.

Other Schools

New classes in dead reckoning and celestial navigation, the courses lasting six weeks, were begun the first of the year at Hamilton Field, Calif., 33 pilots being enrolled in the first class.

After two weeks of intensive instruction, 20 selected officers of the Air Corps completed on January 21st a special course in Naval Operations at the Air Corps Tactical School, Maxwell Field, Ala.

Final orders for moving the Departments of Photography and Ammunition from the Air Corps Technical School, Chanute Field, Ill., to Lowry Field, Denver, Colo., arrived on February 7th, and three days later the freight and passenger trains, carrying personnel and equipment, were on their way to Denver, Colo.

The second class of the Air Corps Weather School at Patterson Field, Fairfield, Ohio, reported for duty on February 1st, 26 students, stationed in various parts of the United States, reporting for this training.

Eight Air Corps officers were assigned to duty as students for the 1938-1939 course at the Army Industrial College, Washington, D.C., and directed to report on September 10, 1938.

On February 19th, 18 members of the class attending the radio school conducted at Hamilton Field, Calif., graduated. The course started on December 2, 1937, and the instruction in radio included both the theoretical and practical phases.

Nine medical officers graduated from the School of Aviation Medicine at Randolph Field, Texas, on March 31, 1938. Diplomas were presented the graduates by Brigadier General James E. Chaney, Commanding the Air Corps Training Center.

In order to train Air Corps officers and enlisted men in the operation of the Autogiro, four officers and five enlisted mechanics began on April 20th a six weeks' course of instruction at Patterson Field, Fairfield, Ohio. Three Autogiros were in use. This was the first school to be operated in this country for military flying training and maintenance of the Autogiro.

Fourteen enlisted men graduated on April 25th from the two months' course of instruction at the School of Aviation Ordnance at Langley Field, Va. Brigadier General Arnold N. Krogstad, Second Wing Commander, presented the diplomas. In the two previous classes of this School a total of 23 students graduated.

During the middle of May, the students and

faculty of the Air Corps Tactical School, Maxwell Field, Ala., conducted a 'Paper War' at the aerial gunnery base at Valparaiso, Fla. Approximately 76 students, 14 members of the faculty, and 120 enlisted men participated

Students attending the Air Corps Tactical School, Maxwell Field, Ala., received their certificates of graduation on June 3rd from Major General Oscar Westover, Chief of the Air Corps.

On May 21st, the first class attending the Autogiro training school at Patterson Field, Ohio, graduated, after five weeks of intensive air and ground training.

Ten Air Corps officers were detailed for duty as students at the Air Corps Engineering School at Wright Field, Dayton, Ohio, for the 1938-1939 course, beginning August 1, 1938.

Nine Air Corps officers graduated on June 22nd from the Army War College, Washington, D.C.

A total of 38 Air Corps officers graduated on June 20th from the Command and General Staff School, Fort Leavenworth, Kansas.

Eight Air Corps officers graduated on June 23rd from the Army Industrial College, Washington, D.C.

The second course of instruction in Autogiro maintenance and operation started on June 8th at Patterson Field, Ohio, five officers and four enlisted men being in attendance.

Six Air Corps enlisted men graduated on July 2nd from the Radio School conducted at Maxwell Field, Ala., for the purpose of training enlisted men as radio operators for the airways control, airdrome control and post communications section.

Instruction in dead reckoning navigation began on August 15th at Hamilton Field, Calif., for eight Air Corps officers assigned to the 88th Reconnaissance Squadron.

October 3rd marked the opening of the fourth annual two-months' course of instruction at the School of Aviation Ordnance at Langley Field, Va. The class consisted of nine enlisted men stationed at Langley Field.

On October 7th, a total of 12 students graduated from the Airplane Maintenance course at the Air Corps Technical School, Chanute Field, Ill. This was followed with the graduation on October 21st of 48 students from various other courses given at this School.

On November 12th, seven Medical officers of the Regular Army and seven Medical officers of the U.S. Navy, also one Medical officer of the Cuban Army, graduated from the School of Aviation Medicine at Randolph Field, Texas.

A course of instruction in Dead Reckoning and Celestial Navigation for Air Corps officers in the 18th Pursuit Group, Wheeler Field, T.H., was completed during November.

On December 26, 1938, 26 Air Corps enlisted men were graduated from the Radio Repairers and Operators course given at the Air Corps Technical School, Chanute Field, Ill.

Eleven Air Reserve officers (non-graduates of the Air Corps Training Center), completed the refresher course of instruction at the Air Corps Advanced Flying School, Kelly Field, on December 23rd, and were assigned to extended active duty.

DECORATIONS AND AWARDS

Decorations and awards made during the calendar year 1938 to Air Corps personnel for heroic conduct or distinguished service in connection with flying are enumerated below, as follows:

Distinguished Flying Cross

During a formal review at Randolph Field, Texas, on February 12th, the Distinguished Flying Cross was presented to 2nd Lieut. Dross Ellis, Air Reserve, for heroism displayed while participating in a flight from Hensley Field, Dallas, Texas, to Oklahoma City, Okla., on April 24, 1937. During this flight the pilot of the airplane, Lieut. Robert S. Fisher, was pulled from the airplane by his parachute which had accidentally opened. Lieut. Fisher's body struck the tail surfaces, badly damaging the rudder, taking off completely the elevator on the left side and leaving a stub of some 18 inches in length of the stabilizer. Believing Lieut. Fisher to be badly injured, disregarding his own personal safety and mindful only of securing aid as quickly as possible, Lieut. Ellis displayed great courage when he piloted the badly damaged airplane back to Hensley Field and landed it safely, thereby enabling him to report the accident within 25 minutes of the time it had occurred. Shortly afterwards the body of Lieut. Fisher was found by ground searchers at approximately the location reported by Lieut. Ellis.

The War Department announced the award of the Distinguished Flying Cross to 2nd Lieut. Homer A. Boushey, Air Corps, for heroism and extraordinary achievement in a flight near Fort Lewis, Wash., on October 5, 1936. Structural failure in the aircraft resulted in the loss of both ailerons and caused the plane to go out of control. Ordering his mechanic to jump with his parachute, Lieut. Boushey, by the skillful use of the remaining controls on the disabled airplane, brought it to a safe landing, this resulting in a great monetary saving to the government and making possible an engineering study as to the cause of the structural failure of this type of airplane.

At the Auditorium at Wright Field, Dayton, Ohio, on the morning of March 9, 1938, 1st Lieut. B.S. Kelsey, Air Corps, was presented with the Distinguished Flying Cross by Brigadier General A.W. Robins, Chief of the Materiel

Division, for extraordinary achievement while participating in aerial flight. On December 24, 1936, Lieut. Kelsey, piloting an airplane from Mitchel Field, N.Y., to Wright Field, flew at an altitude of 1800 feet when, without warning, the left motor failed and the left wing burst into flames. Maintaining control of the airplane with great difficulty, due to the darkness of the night and the blinding glare from the burning airplane, Lieut. Kelsey managed to effect a safe landing at Wright Field, thereby preventing the destruction of valuable government property.

Lieut. Colonel Robert Olds, Air Corps, Commanding Officer of the 2nd Bombardment Group, Langley Field, Va., was presented the Distinguished Flying Cross on the morning of April 30th before the personnel of his Group and a large number of friends and spectators. The decoration was bestowed upon Colonel Olds for extraordinary achievement while participating in an aerial flight from Langley Field, Va., to Buenos Aires, Argentina, South America. Major General Frank M. Andrews, Commanding the GCHQ Air Force, made the presentation.

The Mackay Trophy

Captains Carl J. Crane and George V. Holloman, Air Corps, were awarded the Mackay Trophy for the year 1937 for their outstanding achievement in successfully developing and actually demonstrating the airplane automatic landing system. On the morning of October 14th, in the office of Hon. Harry H. Woodring, Secretary of War, gold medals emblematic of the Mackay Trophy were presented by the Secretary to these two officers.

Cooperating with Captains Crane and Holloman in the development of this system of automatic landing control were Messrs. Raymond Stout, Project Engineer, and C.D. Barbulesco, of the Signal Corps Aircraft Radio Laboratory, both connected with the Materiel Division at Wright Field, Ohio. The provisions of the deed of gift in connection with the Mackay Trophy, limiting its award to military personnel, rendered it impracticable for these two civilians to share in the Mackay Trophy award.

The Collier Trophy

Announcement was made by the National Aeronautic Association on September 15th that the Army Air Corps had been awarded the Collier Trophy for 1937 for the successful accomplishment in high altitude flying by the pressure cabin method. The citation accompanying the award reads: "To the United States Army Air Corps for having designed, constructed and completely equipped the XC-35 sub-stratosphere plane, the first pressure cabin airplane to be flown successfully anywhere in the world." Major Carl F. Greene, Captain Alfred H. Johnson and Lieut. Colonel Oliver P. Echols, Air Corps, and Dr. John E. Younger were cited as the principals in the research and development work which resulted in the award.

The presentation of the Trophy was made by President Roosevelt at the White House on

September 16th, Brigadier General Henry H. Arnold, Assistant to the Chief of the Air Corps, accepting the Trophy on behalf of the principals. Also present at this presentation ceremony were Brigadier General A.W. Robins, Chief of the Air Corps Materiel Division; Mr. Charles F. Horner, President of the National Aeronautic Association, and Mr. William L. Chertney, Editor of Collier's Weekly.

The Cheney Award

Announcement was made on January 20th that the Cheney Award for the year 1937 would not be made, the Board of Officers, appointed by the Chief of the Air Corps to select the person or persons most meriting the award, making the recommendation that while there were several instances of heroic feats in connection with aircraft operation, involving risk of life, these were not of a character distinctly to merit the Award, according to standards set in previous years.

The Soldier's Medal

At a colorful and impressive ceremony held on February 26th at Langley Field, Va., 1st Lieut. Joseph A. Bulger, Air Corps, of the 8th Pursuit Group, was presented the Soldier's Medal and citation for distinguished valor in rescuing a little girl from drowning in the waters of Chesapeake Bay in May, 1937.

Announcement was made by the War Department on April 28th of the award of the Soldier's Medal to Corporal Richard F. Miller and Private 1st Class Earl W. Jordan, Jr., 1st Corps Area Air Corps Detachment, for heroism displayed in attempting to rescue a soldier from drowning in Boston Harbor, Mass., on the evening of December 22, 1937.

On November 4, 1938, the 18th Pursuit Group at Wheeler Field, T.H., held a presentation formation, during the course of which Corporal Paul W. Stone, Air Corps, was presented the Soldier's Medal for heroism in rescuing a civilian from drowning on December 26, 1937.

The Harmon Trophy

The 79th Pursuit Squadron, 20th Pursuit Group, Barksdale Field, La., having attained the highest efficiency standard of any combat squadron in the 3rd Wing, GHQ Air Force, during the Fiscal Year 1937-1938, was selected for the award of the Harmon Trophy, donated by the businessmen of Shreveport, La., to Colonel Willard F. Harmon, Air Corps, as a token of their esteem and friendship for him. The presentation of this Trophy was made to the Commanding Officer of this Squadron, Captain Thayer S. Olds, Air Corps, by Brigadier General Frederick L. Martin, Air Corps, Commanding the 3rd Wing, GHQ Air Force, on November 12, 1938, at Barksdale Field, La.

The Frank Luke Memorial Trophy

The 77th Pursuit Squadron, stationed at

Barksdale Field, La., having for the second consecutive time attained the highest score of the year in aerial gunnery, was again awarded the Frank Luke Memorial Trophy, the presentation being made to the Squadron on November 5th by Brigadier General Frederick L. Martin, Air Corps.

The Daedalian Trophy

The Colombian Trophy

In an impressive ceremony on the morning of September 21st, the 19th Bombardment Group, under the command of Lieut. Harvey S. Burwell, Air Corps, drawn up on the parade ground at March Field, Calif., was presented with the new Daedalian Trophy by Major General Oscar Westover, Chief of the Air Corps, just a few hours before his tragic death in the airplane accident at Burbank, Calif. Major General Frank M. Andrews, Chief of the GHQ Air Force, then presented the Group with the Colombian Trophy, a gift to the Army Air Corps by the Colombian Government. These two trophies were awarded to the 19th Bombardment Group for its splendid record of 10,942 hours of flying, during which only one minor accident occurred. This Group flew during the preceding year more hours per airplane than any other organization in the GHQ Air Force or in the entire Air Corps.

Hawaiian Department Commander's Streamer

The 26th Attack Squadron, attached to the 18th Pursuit Group, Wheeler Field, T.H., and commanded by Major G.A. McHenry, Air Corps, was the recipient of the Department Commander's Streamer for demonstrating the highest military efficiency during the year 1936-1937. The award was made by Major General C.D. Herron, U.S. Army, Commanding General of the Hawaiian Division, during an impressive ceremony at Wheeler Field, T.H., on January 18th.

T R A I N I N G

1st Wing, GHQ Air Force

Utilizing two B-18 Bombardment airplanes, the 88th Reconnaissance Squadron, Hamilton Field, Calif., made two flights, beginning March 14th, across the Gulf of Mexico, to qualify flight personnel in celestial navigation, this being a final test for the course of instruction in that phase of training.

The 9th Bombardment Squadron of Hamilton Field, Calif., began bombing practice on February 10, 1938.

The 1st Wing moved to the Pacific Northwest, August 9-15, to engage in long range reconnaissance missions and to familiarize personnel with the terrain and available military facilities throughout the Northwest area. Units from March and Hamilton Fields were based at various localities in the Pacific Northwest and, in addition to reconnaissance missions, staged bombing demonstrations. The 7th Bombardment Group, of Hamilton Field, Calif., consisting of 37 officers and 100 en-

listed men, utilizing 15 B-18 airplanes, was based at Felts Field, Spokane, Wash.

The 9th Bombardment Squadron, Hamilton Field, Calif., conducted a unit navigation and assembly problem over the week-end of September 2-5. The problem consisted of individual dead reckoning and celestial navigation missions to Randolph Field, Texas, via Bakersfield, Calif., and El Paso, Texas.

2nd Wing, GHQ Air Force

A B-17 Bombardment airplane of the 96th Bombardment Squadron, Langley Field, Va., with full combat crew, and piloted by Captain Darr H. Alkire, Air Corps, accomplished on January 5th a night navigation, bombing and gunnery mission to Maxwell Field, Ala., and return, without landing at Maxwell Field.

Two Boeing B-17 Bombers, manned by a crew of 35 officers and 56 enlisted men, and commanded by Major Vincent J. Meloy, Air Corps, landed at Kelly Field, Texas, on January 24th on the return portion of a routine training flight from Langley Field, Va., to March Field, Calif. The distance of approximately 1200 miles from March to Kelly Field was accomplished at an average speed of 200 miles per hour, six hours being required for the flight.

Air Corps pilots of the 27th Pursuit Squadron, 1st Pursuit Group, Selfridge Field, Mich., and led by Major Willis R. Taylor, Air Corps, began on February 9th a long aerial journey scheduled to take them through 16 States, during the course of which they were to cover 4600 miles within one week. This flight constituted part of the regular annual training program required of all the army's fighting air units. A great deal of valuable experience was gained by members of the Squadron during this flight.

On June 12th, three B-17 airplanes of the 2nd Bombardment Group, Langley Field, Va., while on a routine training flight, intercepted the steamship "Queen of Bermuda" about 300 miles at sea and then returned to the home airdrome. The three planes were piloted by Majors Caleb V. Haynes, Edwin R. McReynolds and Captain A.Y. Smith.

A flight of seven PB-2 Pursuit planes from the 33rd Pursuit Squadron, Langley Field, Va., took off on June 6th on a high altitude navigation mission. The flight was joined by six planes from the 35th and 36th Pursuit Squadrons. As a result of this flight, much was learned of the capabilities of biplane Pursuit at high altitudes.

During the Fiscal Year 1937-1938, airplanes assigned to the 27th Pursuit Squadron, Selfridge Field, Mich., were flown for a total of 4,723 hours.

The 36th Pursuit Squadron returned to Langley Field, Va., on November 20th, after two weeks of aerial gunnery training at Valparaiso, Fla.

On November 7th and 8th, the 20th Bombardment Squadron, 2nd Bombardment Group, Langley Field, Va., conducted a joint training exercise with the Navy.

The 33rd Pursuit Squadron took off from Langley Field, Va., on December 5th for Valparaiso, Fla., to engage in aerial gunnery qualifications. A flight of 10 PB-2A's made the trip to the Florida gunnery base.

3rd Wing, GHQ Air Force

As their part in the tactical demonstration held at Barksdale Field, La., in February, 1938, for the students of the Air Corps Tactical School, the 20th Pursuit Group of that station furnished nine P-26A airplanes for a mass gunnery demonstration.

In October, 1918, the 90th Attack Squadron, Barksdale Field, La., participated in cooperative missions with ground forces. The base of these operations was at Fort Riley, Kansas, and they were conducted for the officers of the Command and General Staff School of Fort Leavenworth, Kansas.

Hawaiian Department

The 18th Pursuit Group of Wheeler Field, T.H., spent the week end of January 14th in the field at Haleiwa.

On March 25th, Air Corps personnel flying six airplanes of the 18th Pursuit Group, Wheeler Field, T.H., dropped aerial delivery containers with food to a detachment of the 2nd Battalion of the 21st Infantry which was marching through rugged country, northwest of Puniki. This exercise afforded valuable training for air and ground units and demonstrated that food and water can be delivered by air to lost and marooned parties.

Seven B-12 airplanes of the 50th Reconnaissance Squadron winged their way in a north western direction on May 16th to Burns Field, Kauai, to participate in a week of maneuvers. The personnel on this flight consisted of 9 officers and 34 enlisted men. Operations for the period consisted of reconnaissance flight and aerial machine gunnery practice.

After giving the Transport REPUBLIC, sailing from Honolulu on July 18th, a head start of 2 hours, Bombardment Squadrons of the 5th Bombardment Group, Luke Field, performed an interception mission on the vessel and made contact with it some 285 nautical miles at sea, after a flight of 2 hours and 8 minutes.

Brigadier General Barton K. Yount, Air Corp relieved from duty in the Hawaiian Department was aboard the Transport.

The 4th Reconnaissance Squadron, Luke Field completed an interesting and instructive cooperative mission during the month of August with Battery A of the 15th Coast Artillery. The object of the mission was to service test a means of accurate location of targets for the 16-inch battery located at Fort Weaver.

On August 11th, approximately 35 officers and men of the 23rd Bombardment Squadron, stationed at Hickam Field, T.E., participated in a most interesting navigation mission. The Squadron, flying five B-18 airplanes, flew 550 miles out to sea at an average speed of 204 miles per hour. It was approximately 7 hours in the air before landing at the home airdrome.

During the month of August, the 72nd Bombardment Squadron completed an intensive two weeks' training course at Bellows Field. The training included ground and aerial gunnery and bombing.

During the period August 15 to 27, the 23rd Bombardment Squadron conducted field training at Bellows Field, Waimanalo, T.H.

On September 29th, the 5th Bombardment Group, Luke Field, performed an interception mission on the Army Transport REPUBLIC when it was some 24 hours out of Honolulu. The vessel was intercepted at a distance of 329 miles from Oahu.

Ten officers and 46 enlisted men of the 23rd Bombardment Squadron spent five days of training on the auxiliary airport at Hilo, Hawaii.

During the latter part of October, the 23rd Bombardment Squadron was engaged in flying highly cooperative missions for the 64th Coast Artillery (Anti-aircraft).

Panama Canal Department

The 74th Attack Squadron, Albrook Field, moved to the gunnery camp at Rio Hato, Panama, on September 10th for two weeks of gunnery and tactical operations.

The 29th Pursuit Squadron, Albrook Field, was encamped at the aerial gunnery base at Rio Hato for two weeks of gunnery and field maneuvers, October 3rd to 17th.

The 24th Pursuit Squadron, Albrook Field, arrived at the aerial gunnery base at Rio Hato on October 17th to engage in a two-week period of aerial gunnery practice.

The 44th Reconnaissance Squadron, Albrook Field, was encamped at the aerial gunnery base at Rio Hato for a period of three weeks, beginning December 1st, to engage in aerial gunnery and field maneuvers.

During the latter part of November and early part of December, the 74th Attack Squadron of Albrook Field was engaged in live bombing and gunnery practice, utilizing as targets aluminum slick on the surface of Panama Bay.

Air Corps Tactical School

About 23 airplanes and a convoy of trucks, carrying 38 officers and 78 enlisted men, departed from Maxwell Field, Ala., on October 26th for Eglin Field, Valparaiso, Fla., to participate in aerial gunnery practice over the week end.

Philippine Department

Early in the fall, Air Corps officers of the 4th Composite Group at Nichols Field, P.I., completed aerial gunnery and bombing practice. Of the 14 officers participating, ten made qualifying scores.

The 2nd Observation Squadron, Nichols Field, conducted cooperative training missions with the 60th Coast Artillery regiment, stationed at Fort Mills, P.I., two missions being carried out daily, involving anti-aircraft and machine gun training.

The 2nd Observation Squadron, Nichols Field, conducted its annual 15-days' field training period from November 28th to December 12th, utilizing the Del Carmen Sugar plantation in Pampanga, about 75 kilometers north of Manila, as the base of operations. The strength of the command in the field was 9 officers and 96 enlisted men, utilizing 9 airplanes.

Miscellaneous Air Corps Organizations

Personnel of the 1st Observation Squadron, Marshall Field, Fort Riley, Kansas, during the period from May 2nd to 10th, participated in day and night missions in connection with the Cavalry School's "Field Exercise Maneuver No. 1." Included in these activities were reconnaissance missions; liaison missions, utilizing radio and dropped messages; and photographic missions, including shots of troops in action and photographs of each day's bivouac.

The 22nd Observation Squadron (Corp's and Army), stationed at Brooks Field, Texas, furnished the air observation for the Proposed Infantry Division Maneuvers and for the Proposed Cavalry Division Maneuvers. The personnel of this Squadron demonstrated ability in locating positions, movement of troops, and other activities.

The 1st Observation Squadron, stationed at Marshall Field, Fort Riley, Kansas, spent two weeks (August 28th to September 11th) at Camp McCoy, Wisconsin, participating in maneuvers of the 14th Brigade (Reinforced).

Flight B of the 16th Observation Squadron, stationed at Lawson Field, Fort Benning, Ga., completed on September 24th a two-week period of aerial gunnery training at Eglin Field, Valparaiso, Fla. Eight officers and 20 enlisted men, with two Field Artillery officers and one Medical officer attached, participated in this encampment.

Air Corps National Guard Organizations

The 120th Observation Squadron, Colorado National Guard, conducted its annual encampment at its home base, the Municipal Airport, Denver, Colo., from August 1st to 15th.

The 154th Observation Squadron, Arkansas National Guard, returned September 3rd from

Eglin Field, Valparaiso, Fla., after completing one of the most successful field training periods in its history. During this 10-day period, practically all pilots and observers of this outfit qualified in aerial machine gunnery. The total flying time during this encampment was 363 hours and 35 minutes. All pilots were afforded the opportunity of flying the North American O-47A Observation plane, and they handled it perfectly.

DEMONSTRATIONS AND REVIEWS

The entire student class of the Air Corps Tactical School, Maxwell Field, Ala., and most of the instructors, attended the GHQ Air Force demonstration at Barksdale Field, La., on February 5th. The demonstration was staged principally to give the students an idea of the use of the Attack, Bombardment and Pursuit arms of the GHQ Air Force. The students and faculty of the Tactical School made the trip to Barksdale Field by air.

Participating in this demonstration were four B-18 Bombardment airplanes from Hamilton Field, Calif., these planes returning to the home station on February 7th; also three B-17 Bombardment planes from the 96th Bombardment Squadron of Langley Field, Va., and one attached from the 20th Bombardment Squadron from that station, which demonstrated the method of attack on an outlined target, using various types of bombs and fuzes. Organizations stationed at Barksdale Field also participated in this demonstration.

On the morning of April 27th, Army planes from France and Albrook Fields, led by Brigadier General George H. Brett, Commander of the 19th Wing, Air Corps, flew in an aerial review honoring Major General David L. Stone, Panama Canal Department Commander, upon his arrival at Cristobal, Canal Zone, from the United States.

On August 4th, Pursuit, Attack and Bombardment airplanes of the 19th Wing welcomed President Roosevelt when he arrived in the Panama Canal Zone to make a tour of inspection. The entire Wing passed in review on the port beam of the Cruiser U.S.S. HOUSTON as she steamed into the Pacific entrance of the Panama Canal. At 4:35 p.m., the following day, when the President and his party arrived at France Field and the nation's Chief Executive proceeded with his inspection, all the Air Corps troops were formed in front of the line of airplanes in Group Review formation. Brigadier General George H. Brett, Commander of the 19th Wing, was among the officials selected to accompany the President on automobile tours of inspection of both Army and Navy defense establishments in the Canal Zone.

Brigadier General George C. Marshall, Assistant Chief of Staff, and Major General Frank M. Andrews, Chief of the GHQ Air Force, while making a tour of Air Corps stations, made an inspection of Kelly Field, Texas, on the morning of August 17th.

Cadets from the United States Military Academy, West Point, New York, witnessed on August 17th a bombing demonstration staged by the 2nd Bombardment Group over Plum Tree Island, near Langley Field.

During the National Air Races at Cleveland, Ohio, September 3rd to 5th, the 27th Pursuit Squadron of the 1st Pursuit Group, Selfridge Field, Mich., flying Seversky single-seater Fighters, staged demonstrations of tactical maneuvers and formation flying. The Air Corps also furnished a ground exhibit of nine airplanes, representing one each of the standard modern types now utilized by the Army Air Corps.

Before students of the Command and General Staff School of Fort Leavenworth, Kansas, Fort Riley, Kansas, on October 20th, was the scene of a demonstration by all branches of the Army Air Corps of bombing and machine gunning of silhouette targets. Attack, Bombardment and Pursuit units of the 1st and 3rd Wings of the GHQ Air Force participated in this demonstration.

The 19th Wing in the Panama Canal Department staged a Review on September 7th, honoring its departing Commander, Brigadier General George H. Brett, Air Corps, who sailed for the United States on September 9th.

Twelve B-17 airplanes of the Second Bombardment Group took off from Langley Field, Va., for March Field, Calif., to participate in the exercises incident to the American Legion Convention, held early in September at Los Angeles, Calif.

A demonstration of the use of divisional artillery was staged at Fort Benning, Ga., by the Infantry School on the afternoon of November 14th for the benefit of the entire class of 76 students attending the Air Corps Tactical School, Maxwell Field, Ala.

EXERCISES AND MANEUVERS

Tactical squadrons and groups of the Second Wing, GHQ Air Force, concentrated in Florida during the period from March 14th to 31st for their annual field exercises. The area embracing central and north Florida was selected for the exercises. The 17th Pursuit Squadron of the 1st Pursuit Group, Selfridge Field, Mich., was based at Tampa, Fla. The Second Bombardment Group, with a personnel of 55 officers, 225 enlisted men and equipment comprising 9 B-17 Bombardment planes, 3 Douglas B-18 Bombardment planes and 2 A-17 Attack planes, was based at Orlando, Fla. The 8th Pursuit Group of Langley Field, Va., was based at Sarasota, Fla., and comprised 25 officers and 143 enlisted men, utilizing 22 B-21 airplanes. The 9th Bombardment Group of Mitchell Field, N.Y., comprising 37 officers and 210 enlisted men, with 21 B-10B Bombardment planes, was based at Lakeland, Fla.

One of the prime objects of the Field Exercises was to test the new aircraft with which

the Wing was equipped. In addition to the problems of supply, maintenance and repair, an intensive study was made of the comparative performance of new and old aircraft. The Bombardment and Pursuit planes were tested at all altitudes and under all possible conditions, and much useful information was acquired for future reference. At the conclusion of the Exercises, it was the consensus of opinion that much had been accomplished to benefit the Second Wing with respect to the development of the air defense of this country.

During the month of March, the 5th Bombardment Group, Hawaiian Department, participated in joint maneuvers with the U.S. Navy. A considerable amount of valuable information was gained in connection with the problems inherent in the defense mission in the Hawaiian Islands.

May 18th saw the completion of the GHQ Air Force Maneuvers on the East Coast, during the course of which 19 temporary air bases were utilized. The tactical situation assumed was that of defending the northeastern section of the United States from attack by a "coalition of Asiatic and European Powers." Statistics disclosed that 2,285 plane hours were flown in actual operations, involving 340,254 miles.

Three Provisional Transport Squadrons were utilized in transporting officers and men to the various airdromes where the Air Corps units were based during the Maneuvers. The three Wing Commanders with their respective staffs reached the maneuver area on May 3rd.

The Headquarters of the 1st Wing, commanded by Brigadier General Delos C. Emmons, was set up at New Haven, Conn.; the Headquarters of the 2nd Wing, commanded by Brigadier General Arnold N. Krogstad, was based at Middletown, Pa., and Mitchel Field, N.Y., was the base of operations of the 3rd Wing, commanded by Brigadier General Frederick L. Martin.

During the course of the two weeks of Maneuvers, Major General Frank M. Andrews, Commanding General of the GHQ Air Force, and his staff, arranged for the extensive tests of new portable field equipment.

One of the interesting incidents in connection with the Maneuvers was the reconnaissance flight of three B-17 "Flying Fortresses" 750 miles out to sea to find the entirely friendly Italian liner REX. The pilots on this mission were Major Caleb V. Haynes, Captains Cornelius Cousland and Archibald Y. Smith. Handicapped by line squalls and wind shifts, the pilots nevertheless navigated accurately, and after four hours of flying sighted the steamer. Circling the vessel, much to the surprise of the passengers and crew aboard it, the airmen then returned to Mitchel Field on schedule, despite adverse weather conditions.

Second in interest to the long range reconnaissance flight was the "blackout" of Farmingdale, L.I., New York. The officials and residents of this community responded to this air raid drill with enthusiastic cooperation.

Joint Anti-aircraft-Air Corps Field Exercises were held during the period October 3-17, 1938, at Fort Bragg, N.C., and its vicinity, the Air

Corps organizations participating being the 33rd and 36th Pursuit Squadrons, Hqrs. and Hqrs. Squadron of the 8th Pursuit Group, the 2nd Wing Headquarters, and the 2nd Bombardment Group, all of Langley Field, Va.; the 27th Pursuit Squadron, 1st Pursuit Group, of Selfridge Field, Mich.; the 9th Bombardment Group, Mitchel Field, N.Y., and the 18th Reconnaissance Squadron of that station; one Attack Squadron of the 3rd Wing, Barksdale Field, La. and one Bombardment Squadron of the 1st Wing, March Field, Calif.

The exercise involved the concentration of a large percentage of the Regular Army anti-aircraft artillery in the United States.

In addition to the heavy concentrations of anti-aircraft and Air Corps defense equipment, civilian aid was enlisted on a large scale in the installation of an extensive aircraft warning net encircling Fort Bragg with a radius reaching to the North Carolina coast. The general function of the warning net was to warn the defended area of the approach of any hostile aircraft in order to provide for interception by defending Pursuit aviation and immediate defensive action by the anti-aircraft artillery.

The work during this period was very intense for both flying and ground personnel. Many missions were executed day and night at high altitudes.

Squadrons of the 5th Bombardment Group in the Hawaiian Department participated in the joint anti-aircraft-Air Corps exercises held in that Department from November 5 to 16, 1938.

CHANGES IN ORGANIZATIONS AND STATIONS

War Department orders were issued on January 20th, transferring the 31st Bombardment Squadron from Hamilton Field, Calif., to the Hawaiian Department.

The 31st Bombardment Squadron, from Hamilton Field, Calif., arrived in Honolulu on February 23rd, and was assigned to station at the new Hickam Field.

The designation of several squadrons stationed in the Hawaiian Department was changed, effective February 28th. The 4th Observation Squadron was renamed the 4th Reconnaissance Squadron, and the 65th Service Squadron was redesignated as Base Headquarters and 17th Air Base Squadron.

On March 1, 1938, the 75th Service Squadron at Wheeler Field, T.H., was redesignated as the Base Headquarters and 18th Air Base Squadron.

During the month of April, the 72nd Bombardment Squadron was moved from Luke Field, T.H., to the new Hickam Field.

On June 15th, work was started incident to the exchange of stations between the 28th Bombardment and the 3rd Pursuit Squadrons in the Philippines. The 28th Bombardment Squadron was transferred from Nichols Field to

Clark Field, and the 3rd Pursuit Squadron from the latter field was transferred to Nichols Field.

FLOOD RELIEF OPERATIONS

During the disastrous flood in Southern California the first week in March, Air Corps personnel from March Field, Riverside, Calif., aided in rescue work and performed various other missions to help relieve the situation. Under the direction of Brigadier General Delos C. Emmons, 1st Wing Commander, the 38th Reconnaissance Squadron photographed inundated areas; the 17th Attack Group constantly flew over the flooded sections, directing and facilitating the rescue work by means of radio communication, dropped food to people in marooned communities and towns and acted as a news agency in the dissemination of actual and unexaggerated reports of conditions, in addition to assisting the direction of outside help. During the period from March 3rd to 15th, the 17th Attack Group, under the command of Major Carlyle H. Wash, Air Corps, conducted 37 missions, involving a total flying time of 51 hours and 40 minutes. Of these, 14 missions were flown to locate marooned people; 4 to locate washed out roads; 8 to locate destroyed bridges; 6 to check the condition of dams; 2 to check broken power lines; 2 to drop food to marooned people, and one liaison mission to Los Angeles, Calif.

From April 8th to 11th, heavy rains in the vicinity of Maxwell Field, Ala., caused the Alabama, Coosa and Tallapoosa Rivers to go on a rampage and to cause considerable damage to the section between Maxwell Field and the coast. Several portions of Maxwell Field were flooded, necessitating the removal of ammunition and other supplies to higher ground.

TORNADO RESCUE WORK

On March 15th, a tornado having laid waste to an area of eight blocks of the City of Belleville, Ill., Air Corps personnel from Scott Field, Ill., were promptly dispatched to the scene of the disaster, where they aided in rescue work, and performed guard duty to prevent looting until the arrival of National Guard troops.

AERIAL PHOTOGRAPHIC ACTIVITIES

Photographic personnel of the Air Corps Advanced Flying School, Kelly Field, Texas, began on January 18th a project involving the mosaic mapping of an area of approximately 950 square miles around Fort Clark, Texas. This mapping work was for the use of the 1st Brigade at Fort Clark.

During the period April 9th to 13th, photographic personnel at Maxwell Field, Ala., performed almost continuous photographic missions for the Corps of Engineers, relief agencies and the press, during which approximately 1200 square miles of river basins were photographed with two multi-lens cameras.

Army airmen in the Philippines took a number of interesting photographs of Mt. Mayon, the world's most perfect volcano, which started its eruption on June 4th, after ten years of inactivity. Thousands of natives were forced to flee from their homes as a result of the enormous lava flow from this volcano.

Photographic work was completed in August for a mosaic, embracing 3500 square miles, by the 1st Observation Squadron, stationed at Marshall Field, Fort Riley, Kansas. This work was done for the Command and General Staff School, Fort Leavenworth, Kansas.

ERRANDS OF MERCY, SEARCH MISSIONS, ETC.

Six airplanes of the 28th Bombardment Squadron, Clark Field, P. I., participated in a search for the "Hawaii Clipper" reported missing on July 28th. The search was carried out for four days, in cooperation with Navy aircraft. Planes from the 4th Composite Group covered approximately 127,000 square miles without mishap. No trace was found of the "Clipper."

On the afternoon of December 28th, an aerie search was initiated for a Naval officer reported overdue at Coco Solo, enroute from David, Republic of Panama. Advice being late received that the officer had effected a forced landing at an auxiliary landing field near the town of La Mesa, two A-17 planes, flown by Lieuts. Clark and Gent, were dispatched to that field, accompanied by Lieut. Colonel W. S. Woolford, Medical Corps, Flight Surgeon. The injured officer was taken care of and returned to his home station.

RADIO BROADCASTS FROM AIRPLANES

A successful radio broadcast from the Lockheed XC-35 stratosphere airplane was accomplished on January 22nd by Major Carl F. Greene and Lieut. E.H. Beebe, Air Corps, the plane being piloted by Lieut. L.F. Harman, Air Corps, and the broadcast being made while flying at an altitude of 21,000 feet over Chicago, Ill.

On April 3rd, in cooperation with the National Broadcasting Company, a radio broadcast was conducted in honor of Army Day. One broadcast was from the XB-15 airplane flying over New York City, with Major General Oscar Westover, Chief of the Air Corps, at the microphone, and the other was from the Air Corps stratosphere airplane, flying at an altitude of 33,000 feet over New York City, with Major Carl F. Greene, Air Corps, at the microphone. The latter flight happened to be a record one for the stratosphere airplane which, of course, is not built to accomplish altitude records but to serve as an experimental laboratory for the study of the practicability of comfortable flights between 20,000 and 40,000 feet altitude.

NEW CONSTRUCTION AT AIR CORPS POSTS

The theater at Hamilton Field, Calif., a beautifully constructed and decorated building, was officially dedicated on April 7th by Colonel Horace F. Sykes, Adjutant General of the 9th Corps Area, and Lieut. Colonel C.W. Russell, Commanding Officer of Hamilton Field.

Work started on July 27th at Kelly Field, Texas, on a construction project, costing \$520,000, involving 8 sets of officers' quarters and 9 double sets of noncommissioned officers quarters.

CELEBRATION OF ARMY DAY

On Army Day, April 6th, at Langley Field, Va., various types of airplanes of the Second Wing were parked at various localities to enable visitors to inspect them. At one o'clock one squadron each of Pursuit planes, "Flying Fortresses", B-18's and Observation planes were flown in the vicinity of the Peninsula on tactical missions to enable residents of nearby cities and towns to see them in action.

At Chanute Field, Rantoul, Ill., thousands of citizens of surrounding communities visited the field to inspect the activities of the Air Corps Technical School.

At Wright Field, Dayton, Ohio, by virtue of an invitation issued through the Dayton newspapers, thousands of visitors took advantage of the "Open House" at that Air Corps activity in connection with the celebration of Army Day. The Army Aeronautical Museum was thrown open to the public, and a hangar was devoted to an exhibition of new types of Army aircraft. Despite the rainy weather, a crowd, estimated at between 5,000 and 6,000 persons, was present at the field. A flying exhibition was attempted, but it was necessary to curtail it due to the unfavorable weather.

Students of the Air Corps Advanced Flying School, Kelly Field, Texas, attended on Army Day a demonstration by the Second Division at Fort Sam Houston, Texas. In the afternoon a program was staged at Kelly Field to which the public was invited. This program included an inspection of the airplanes on the line, blind landing demonstrations, student flying by the Pursuit and Attack Sections, inspection of the miniature range, a Link Trainer demonstration, and a description over a public address system of the airplanes displayed, as well as a description of the blind landing method while this demonstration was in progress.

AIR CORPS EXHIBITS

At the International Air Show at Chicago, Ill., January 28th to February 6th, the Army Air Corps, allotted a space of approximately 5,000 square feet in the exposition building, exhibited the latest type of Curtiss Attack and Seversky Pursuit airplanes, also the Kellett Autogiro, various sizes of bombs, a sectionalized Pratt & Whitney aircraft engine alongside the original Wright Brothers' 4-cylinder engine, a 3-bladed propeller, the 9-lens aerial camera, and two transparency cabinets presenting the newest types of military airplanes.

At the 28th Annual Orange Show at San Bernardino, Calif., held for a 10-day period ending March 27th, the Army Air Corps for the first time arranged an aeronautical exhibit. This consisted of airplane engines, parachute and photographic equipment, airplane instruments, bombs and Ordnance equipment. The Show drew an attendance of more than 200,000 people and more than 20,000 people inscribed their names in the register at the aeronautical exhibit.

CONFERENCES, REUNIONS, DEMONSTRATIONS, ETC.

The first National Aviation Planning Conference was held at Cleveland, Ohio, on January 11th. Major General Oscar Westover, Chief of the Air Corps, was one of the principal speakers at this conference.

Some 2500 members of the Southern California Army Ordnance Reserve Association and their families visited March Field, Calif., on March 20th, where they were welcomed by Brigadier General Delos C. Emmons, 1st Wing Commander. Speeches were made by various officials, and the demonstrations during the day included anti-aircraft gun drills by a detachment of the 63rd Coast Artillery; an attack by Attack type airplanes; the loading of various types of bombs; dropping of bombs and curtains of water representing chemicals; firing of field guns of various types and the loading of Bombardment airplanes. All types of weapons and military equipment were on display.

Luncheon was provided for all visitors at the various squadron messes and the Officers' Club, following which Army Ordnance pictures were shown at the Post Theater.

Army and Navy flying personnel in the Panama Canal Department fittingly commemorated the Silver Anniversary on April 27th of the first airplane flight over the Panama Canal, which was made by one of the pioneer aviators, Robert Fowler, when, flying a hydroplane, he covered the distance of 35 miles between the two oceans in 57 minutes. Six Army Bombers conveyed an airplane of the Pan American Airways from Albrook Field to France Field.

National Air Mail Week, May 15th to 21st, was fittingly observed at various Air Corps fields and stations.

On June 27th, more than 12,000 residents of Denver, Colo., and vicinity, took advantage of Lowry Field's first "Open House" to see how the Air Corps lives and to view the equipment used in teaching the students the subjects of armament and photography.

The remaining members of the 50th Aero Squadron, A.E.F., which organization found the Lost Battalion during the World War, staged their annual reunion for the first time in Washington, D.C., from September 3rd to 6th. This is the only World War outfit with a continuous record of reunions.

GOOD WILL FLIGHTS

Flying the flags of Chile, Argentina, Peru and the United States from their cockpits, six B-17 Bombers of the 1938 Good Will Flight to Buenos Aires, Argentina, under the command of Lieut. Colonel Robert Olds, Commanding the 2nd Bombardment Group, GHQ Air Force, taxied onto the landing mat at Langley Field, Va., at 5:00 p.m. on February 27th.

The flight took off on the trip to the capital of Argentina on the morning of February 15th, and reached the airport at Miami, Fla., 5 hours and 45 minutes later. Shortly before 1:00 a.m., February 16th, the flight again took the air and, after covering a distance of 1100 miles, assembled over Colon, Panama. Faced with unfavorable weather conditions which were reported at the equator, it was nevertheless decided to continue the journey southward for the remainder of the flight to Lima, Peru, part of which, about 300 miles, was made above an equatorial storm at an altitude of approximately 23,000 ft. Lima was reached at 4:25 p.m. The six planes made the record non-stop flight of 2695 miles in 15 hours and 32 minutes.

At 11:05 p.m., February 16th, five of the B-17's took off for Buenos Aires, Major Meloy, piloting the sixth plane, being delayed at Lima due to a defective propeller. The flight landed at the Buenos Aires airport in slightly more than 12 hours after leaving Lima. At one stage of this flight, the Army airmen flew at an altitude of 21,000 feet.

Major Meloy, leaving Lima 7 hours and 15 minutes following the departure of his companions, and after an all-night job on the defective propeller, landed at the field at Buenos Aires after a flight of 11 hours and 5 minutes, he having taken off from Lima at 6:20 a.m., February 17th.

While at Buenos Aires, the Army airmen participated in the inaugural ceremonies for the new President of the Argentine Republic. Five of the airplanes departed on the homeward-bound journey on the morning of February 22nd, at 7:10 o'clock, Captain A.Y. Smith, piloting one of the planes, being delayed at the airport five hours due to a mishap to one of the landing wheels. The five planes landed at Santiago, Chile, at 12:05 p.m. The next morning, at 8:00 o'clock, they took off, and landed at Lima at 5:05 p.m. Here Captain Smith joined the flight, he being further delayed by engine trouble.

On February 25th, the flight took off for Panama and landed at Albrook Field after a 9-hour flight. At 6:00 a.m., February 27th, the flight took off from Panama for the final leg of the homeward-bound journey and reached Langley Field in 10 hours and 45 minutes.

The 19th Wing, Air Corps, Panama Canal Department, under the command of Brigadier General George H. Brett, departed from Albrook and France Fields on February 7, 1938, on an extended navigation and Wing concentration flight to Guatemala City, Guatemala. A total of 80 officers and 70 enlisted men made this flight in various types of airplanes. Departure from Guatemala City was effected on February 11th and, after an overnight stop at San Jose, Costa Rica, by 3:30 p.m., February 11th, all of the

airplanes participating in the flight had landed at the home stations.

The second Good Will flight during 1938 of Army airplanes to a South American Republic to represent the United States at the inauguration ceremonies of a President-Elect, terminated successfully at Langley Field, Va. the point from which it started - on the afternoon of August 12th. Three B-17 airplanes participating in this flight, led by Major Vincent V. Meloy, Air Corps, negotiated the long overland and water journey to Bogota, Colombia, and return without incident. The two other B-17 planes in this flight were piloted by Majors Harold L. George and Caleb V. Haynes.

The flight took off from Langley Field at 9:00 a.m., August 3rd, and landed at the Miami Municipal Airport at 2:35 p.m., covering 850 miles in about 5 1/2 hours. Taking off from Miami at 3:00 a.m., August 5th, the Army airmen landed at the airport at Bogota about 6 1/2 hours later.

The visitors were the guests of the Colombian government during their stay at Bogota and, in addition to attending the inaugural ceremonies for the President-Elect, they were special guests at a number of receptions tendered in their honor by military personnel and civilians of the Colombian capital and by the American Ambassador.

The return flight to Langley Field was started at 9:15 a.m., August 9th, and France Field, Panama Canal Zone, a distance of 680 miles, was reached in 3 hours and 17 minutes. Taking off from the Canal Zone at 8:30 a.m., August 11th, the airport at Miami, Fla., was reached at 2:45 p.m. The flight departed from Miami at 9:30 a.m., August 12th, and landed at Langley Field at 1:45 p.m.

LONG-DISTANCE FLIGHTS

Among some of the long-distance flights made during the year 1938 were the following:

Randolph Field, Texas, was visited on February 2nd by a flight of 13 B-18 airplanes, under the command of Colonel Harvey S. Burwell, Air Corps, which was enroute from March Field, Calif., to Barksdale Field, La.

On April 22nd, Lieut. Colonel Robert Olds, with a crew of 3 officers and 5 enlisted men, in a B-17 airplane, established a record flight from the West Coast to Langley Field, Va., the flying time being 10 hours and 45 minutes, thus bettering by 16 minutes his previous record for this same flight which was established in February. The flying time on the westward journey to March Field was 12 hours and 27 minutes, and eclipsed the previous record by one hour.

Piloting an A-17 Attack airplane, Major General Oscar Westover, Chief of the Air Corps, accompanied by Staff Sergeant Samuel Hymes, crew chief, took off on May 13th from Brownsville, Texas, for Panama, via Vera Cruz, Mexico, and Guatemala City, Guatemala. The purpose of General Westover's flight to Panama was to inspect Air Corps activities in the

Canal Zone. General Westover landed at Albrook Field on the morning of May 15th, and, after remaining in the Canal Zone for the period of a week, he took off on May 22nd for the return flight, following the same route as on the southbound journey. He reached Washington, D.C., on May 25th.

Ten B-10 airplanes of the 6th Bombardment Group, stationed at France Field, Panama Canal Zone, were flown to San Salvador, Salvador, and return, by way of San Jose, Costa Rica. The flight, which took off on April 19th, was led by Lieut. Colonel George E. Lovell, Jr., Air Corps, and consisted of 20 officers and 20 enlisted men. The American airmen were cordially received and entertained by high officials at the capital cities of both of these Central American Republics.

Flying a new Seversky P-35 Pursuit plane, 1st Lieut. Harold L. Neely, Air Corps, on July 28th, flew across the American continent at a speed of approximately 278 miles per hour, his total elapsed time being 11 hours and 29 minutes. Stops for refueling were made at Salt Lake City, Omaha and Cleveland, for a total time of one hour and 35 minutes, thus making Lieut. Neely's flying time across the continent 9 hours and 54 minutes.

Prevailing winds aided the speed record of a B-18 Bomber on the first transcontinental non-stop flight ever made in a craft of this type. Taking off from Hamilton Field, Calif., on August 19th, the plane, piloted by 1st Lieut. John G. Armstrong, of the 11th Bombardment Squadron, Hamilton Field, Calif., landed at Mitchel Field, N.Y., 15 hours and 38 minutes later. The distance traveled was 2570 miles.

Lieut. Colonel Ralph H. Wooten, Air Corps, detailed as Air Attache to Bolivia and Chile, left Bolling Field, D.C., on August 16th in an A-17 Attack plane for his new post of duty. Flying via Brownsville, Texas; Guatemala City, Guatemala; Albrook Field, Panama Canal Zone; Cali, Colombia; Guayaquil, Ecuador; Talara and Lima, Peru, and Antofagasta, Chile, he arrived at Santiago, Chile, on August 28th.

Major General Henry H. Arnold, Chief of the Air Corps, arrived at Hamilton Field, Calif., by plane, from Washington, D.C., on December 7th, for the purpose of making an inspection of that air base and the Air Depot at Sacramento, Calif. On his return trip to Washington he visited the Air Corps Primary Flying School at Randolph Field, Texas, December 10th, and made a formal inspection of that School.

ROUND THE WORLD FLIGHT BY HOWARD HUGHES

Through his remarkable achievement of encircling the globe and covering a distance of 14,824 miles in 91½ flying hours, Howard Hughes, America's No. 1 Sportsman Pilot, demonstrated once more the supremacy of the United States in aviation. Hughes took off from the Floyd Bennett Airport at 6:20 p.m., July 10th, and on the afternoon of July 14th, at 1:34 o'clock, the

wheels of his special Lockheed monoplane rolled to a stop at this same airport.

Hughes reached Paris, France, on Monday, July 11th, at 10:55 a.m., crossing the Atlantic and covering a distance of 3641 miles in 16 hours and 35 minutes. The next leg of the flight to Moscow, U.S.S.R., a distance of 1675 miles, was covered in 7 hours and 49 minutes, Omsk, U.S.S.R., 1380 miles distant, was reached in 7 hours and 35 minutes, and Yakutsk, Siberia, 2177 miles distant, in 10 hours and 31 minutes. The next and longest leg of the entire flight, involving a distance of 2456 miles to Fairbanks, Alaska, was covered in 12 hours and 17 minutes. The flight to Minneapolis, Minn., 2441 miles distant, required 12 hours and one minute, and the 1054-mile lap to Floyd Bennett Field was negotiated in 4 hours and 23 minutes.

Major General Oscar Westover, Chief of the Air Corps, made a special flight to New York to extend in person his hearty congratulations to the globe-encircling airman for this epochal feat. Messages of congratulation were wired to Hughes by Brigadier General Henry H. Arnold, Assistant to Chief of the Air Corps, and by Major Lowell H. Smith, Air Corps, who was the leader of the Army Air Corps Around-the-World Flight in 1924.

Associated with Mr. Hughes on this flight was 1st Lieut. Thomas L. Thurlow, Air Corps, stationed at the Air Corps Materiel Division, Wright Field, Dayton, Ohio, who served as one of the two navigators on this record flight.

THE XB-15 BOMBARDMENT AIRPLANE

The flight-testing of the new XB-15 Bombardment airplane commenced the latter part of February at Wright Field, Dayton, Ohio, with Major S.M. Umstead and Lieut. L.F. Harman at the controls. Preceding this flight test, the huge airplane underwent a thorough inspection by Materiel Division engineers. This four-engined formidable weapon of the air was delivered to the 2nd Bombardment Group at Langley Field, Va., on August 6th, being piloted by Lieut. Colonel Robert Olds, commanding the Group.

DROPPING FOOD FROM PLANE TO CAVALRY DETACHMENT

During a period of four days, beginning on April 14th, tests were conducted in the Big Bend District of Texas, in the vicinity of Balmorhea, with respect to the practicability of utilizing an airplane to drop food for personnel and grain for animals. A detachment of troops in the field, the first platoon of Troop A, 30th Cavalry, consisting of 30 men and 30 horses, was assumed to be completely isolated in a mountainous region where it was impossible for an airplane to land. It was necessary for more than 1,000 pounds of supplies to be dropped daily from a B-10 Bomber. All of the supplies, except hay and wood, were dropped in special containers supported by individual parachutes. The plane was flown at an altitude of 400 feet, and all but three out of 20 bundles dropped from the plane landed within 300 yards of a panel which was laid

out, according to a report covering the test on the first day. The report stated that the test was highly satisfactory, adding that only two eggs were cracked out of four dozen delivered.

A NEW CRASH RESCUE BOAT

The P-11, intended for use in the Hawaiian Islands as a sea-going crash rescue boat, was launched at Greenport, L.I., New York, on March 18th, the ceremony being witnessed by over 300 persons. This vessel, reported to have a speed of 32 knots per hour, is 72 feet long, thoroughly streamlined, and powered with two Capitol P-12 engines converted for marine use.

STANDARDIZATION OF AERONAUTICAL SPECIFICATIONS

For the purpose of obtaining the standardization of aeronautical specifications between the Army and the Navy, a new Army-Navy Aeronautical Specification Unit was established at the Air Corps Materiel Division at Wright Field, Dayton, Ohio, the administrative control thereof being vested in the Chief of the Materiel Division and the executive control in the permanent working committee of the Aeronautical Board in Washington, D.C.

NEW METHOD OF TESTING LIQUIDS

The Materiel Division, Wright Field, Ohio, installed in its material laboratory a new supercentrifuge, in which from 30,000 to 40,000 revolutions per minute can be obtained - ten times the speed of the usual centrifuge. Used for the clarification of viscous liquids, tests can be completed in about twenty minutes with this laboratory model which would ordinarily would take a day.

AVIATION TRAINING FOR WEST POINT CADETS

During the period from June 18th to July 9th, 456 West Point cadets of the Class of 1939, received a practical test of the way the Army Air Forces are employed at Mitchel Field, N.Y. The cadets displayed a keen interest in military aviation.

PERFECT RECORD FOR BOMBARDMENT SQUADRON

The 31st Bombardment Squadron at Hickam Field, T.H., accomplished what is believed to be a record when it finished the Fiscal Year 1938 without an aircraft accident of any nature.

EXCHANGE OF AIRPLANES

A total of 25 Boeing P-12 airplanes, assigned to the Air Corps Tactical School at Maxwell Field, Ala., was transferred in June to the Air Corps Advanced Flying School at Kelly Field, Texas. These planes were replaced at Maxwell Field with 14 P-6's.

AN ERRAND OF MERCY

On April 20th, Lieut. T.J. Meyer, Air Corps, made a 150-mile flight in a Douglas Amphibian from Albrook Field, Panama Canal Zone, to Penas

Bay, Republic of Panama, to transport medicine to a civilian who was seriously ill.

ARMY PLANE FLIES ALMOST SIX MILES A MINUTE

On October 26th, Lieut. Benjamin S. Kelsey, Air Corps, flew a new Army Pursuit plane from Dayton, Ohio, to Buffalo, New York, at an average speed of 350 miles per hour. Lieut. Kelsey stated that this was a record for an Army Air Corps plane.

NAMING OF FIELD AT FORT LEWIS, WASH.

Announcement was made by the War Department under date of April 12, 1938, that the Air Corps flying field at Fort Lewis, Wash., had been named "Gray Field," in memory of Captain Hawthorne C. Gray, Army aeronaut, who lost his life during a free balloon flight from Scott Field, Ill., on November 4, 1927.

CONTRACTS FOR AIRPLANES AND ENGINES

During the calendar year 1938, the award of contracts for airplanes and engines were announced by the War Department on the dates indicated, viz:

January 4. To the United Aircraft Corporation in the amount of \$318,521.67, covering the purchase of spare parts for 315 Model R-1830-13 engines, these spare parts being procured for the engines now serving as power plants in P-26A airplanes. Also a contract to the above company for 142 Model R-1340-47 engines and spare parts for installation in BC-1 airplanes constructed at the plant of the North American Aviation Corporation, Inglewood Calif., at a total cost of \$866,800.59.

March 25. To the Douglas Aircraft Company, Inc., for the procurement of spare parts for the Northrop Attack airplanes in the total amount of \$210,741.71.

May 21. To the Bell Aircraft Company, Buffalo, N.Y., for 13 YFM-1 Fighter planes at a total cost, including spares, of \$3,163,265.

July 1. Contracts totalling the sum of \$14,433,196.88 for 98 airplanes and extensive Air Corps equipment. Included in these contracts was one covering the purchase of 13 additional "Flying Fortresses" (B-17's) at a total cost of \$3,174,802.05; 78 additional B-18A Bombardment planes at a cost of \$5,703,287.64; 7 YA-19 Attack airplanes at a total cost of \$297,180; four large engine contracts, totalling \$2,573,286.65, for 276 of different types. Other contracts were for propellers, trucks, trailers, instruments, cameras and various other accessories.

December 9. To North American Aviation, Inc., Inglewood, Calif., for the construction of 74 O-47B Observation airplanes and spare parts therefor at a cost of \$2,346,128.14; fifty of these airplanes being procured for National Guard Air Corps organizations and the remaining 24 for units of the Air Corps, Regular Army.

DEATH OF GENERAL WESTOVER AND HIS MECHANIC

Tuesday afternoon, September 27th, at the Arlington National Cemetery, marked the final rites, with full military honors, for the late Major General Oscar Westover, Chief of the Air Corps, who with his mechanic, Technical Sergeant Samuel Hymes, were killed in an airplane accident at Burbank, Calif., on September 21st. More than 500 persons were present at the cemetery on this sad and solemn occasion to pay their last respects to the deceased Air Corps Chief.

The funeral at Arlington National Cemetery of Technical Sergeant Hymes took place the preceding day.

NEW RECRUITS FOR SELFRIDGE FIELD

The Selfridge Field Correspondent states that if and when the Army expansion program becomes a law, it is anticipated at that field that a large number of additional recruits will be received. "Preliminary arrangements are being made," he says, "for the housing and feeding of these additional men, together with their training as technical men. No definite word has been received as to the number of this increased allotment, so therefore no information is available as to the method whereby this expansion will take place. Should there be an expansion, the people of this locality will again witness recruits in large bodies going thru their preliminary instruction in 'squads right' etc., the basic training of all soldiers.

The type of recruits received in the last few years at Selfridge Field is very high. The greater percentage of them are high school graduates, and some with college education. They are invariably from fine American families and possess high ideals of character and citizenship. They are anxious to learn and eventually become excellent airplane mechanics or other technical men. The high percentage of reenlistments of these men indicates that it is not entirely an economic reason why they are in the Army, but because they enjoy the facilities offered by the Service. Because of their high personal characteristics, it is frequently difficult to select one man from a group for promotion. A great number of our recent recruits are from neighboring towns and cities. This is particularly advantageous to the morale of Selfridge Field, because these boys are privileged to visit their homes during week ends and holidays. The Army is, indeed, fortunate in obtaining the services of these fine young men.

It is hoped that should the expansion take place, and more recruits are assigned to Selfridge Field, that the local youths will take advantage of the opportunity to become members of the military units stationed at Selfridge Field.

Major George C. Kenney, Air Corps, was relieved from duty with the 97th Observation Squadron at Mitchel Field, N.Y., and assigned to duty at Wright Field, Dayton, Ohio.

HAMILTON FIELD OFFICERS COMPLETE GROUND COURSE IN CELESTIAL NAVIGATION.

The 88th Reconnaissance Squadron, Hamilton Field, Calif., completed a ground course in celestial navigation in February, 1939, under the instruction of 2nd Lieut. G.E. Pierce, Air Corps. A total of 13 officers took the course, consuming 60 hours in lectures and ground practice during a period of four weeks.

The Squadron is now flying actual navigation missions, and it is expected that all students will be qualified navigators in a short time. At that time, says the News Letter Correspondent, twenty of the twenty-one officers in the Squadron will be rated Celestial Navigators.

NEW CADET BARRACKS AT RANDOLPH FIELD ALMOST READY FOR OCCUPANCY.

Finishing touches are rapidly being added to the first of the two new Flying Cadet Barracks at Randolph Field and, according to the present schedule of work, they will be occupied by April 1st. The March class of Flying Cadets, 339 strong, reported for duty on March 1st, and were immediately assigned to companies and rooms, pending the final completion of the first of the two new barracks.

The Cadet Battalion has been reorganized into four companies by Captain James S. Stowell, Commandant of Cadets, in anticipation of the forthcoming move. The former organization consisted of only two companies.

Randolph Field's second Cadet Barracks under construction was started several weeks after the first, and will not be ready for occupancy until late May or early June, according to the latest estimates.

Upon final acceptance of the new building by the Air Corps, moving day for 'C' Company, occupants of the barracks, will be accomplished in short order. The company will probably move en masse from their present location in the east half of 'B' Company Barracks. Upon completion of the move, 'B' Company will take a deep breath and spread out in their own quarters, while 'A' and 'D' Companies will continue to double up until the last of the four barracks is ready for occupancy.

CONTACT WITH HIGH TENSION WIRE PROVES FATAL

Private Richard H. Gable, Operations Section 1st Air Base, Langley Field, Va., was electrocuted on the night of March 7th, when he brushed against a high tension wire while taking down a radio mast from an instruction truck.

The accident occurred at 6:20 o'clock on Harris Creek Road, near Bayview Manor in Elizabeth City County. A Board of Langley Field Officers was appointed to investigate the accident.

Private Gable was operating a radio truck used for blind flying instruction when the accident occurred. He enlisted in the Army on July 25, 1934. He is survived by his mother.

AMBITIOUS MEN IN 63RD SCHOOL SQUADRON

The scribe for the 63rd School Squadron at Kelly Field, Texas, says that at least 60 men in that organization are qualified for entrance into Chanute Field and are very anxious to get there and that many more men expect to qualify in the near future by passing the Alpha Test. He adds:

"Since the bars have let down, permitting more Kelly Field men to attend the schools at Chanute and Denver, the 63rd has sent more men to these schools than any other squadron. This squadron has had more men qualified for entrance at all times, and the men seem to be fighting for the chance to go to school. Along with the usual technical courses offered in the Squadron School, which runs continuously for three hours weekly throughout the entire year, the squadron occasionally operated a basic educational school to assist the men in passing such examinations as that required for entrance to the Chanute and Denver schools."

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NEW CARGO AIRPLANE FOR SELFRIDGE FIELD

Selfridge Field, Mich., recently received as part of its flying equipment a B-18 late type Bomber from Hamilton Field, Calif. It was ferried to the field by Colonel H.B. Clagett and Major W.R. Sweeley, and will be used as a cargo airplane. Although not as large as the "Flying Fortress" type, the News Letter Correspondent states that it has many of the recent improvements, being of high speed and large carrying capacity.

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ACTIVITIES IN 8TH PURSUIT GROUP By the News Letter Correspondent

Now that the new P-36A has claimed the spotlight in this Group, the old PB-2A's, which are being transferred to Maxwell Field, Ala., create very little interest. The first of the PB's were transferred on March 7th, the flight consisting of 10 airplanes, led by Captain Stuart G. McLennan.

35th Pursuit Squadron

Our five latest officers are coming along fine in their familiarization of the P-36A, BC-1, and the PB-2A airplanes. They are especially well pleased with the performance of the P-36A's, which are quite different from the training ships they handled while at school.

Although our hangar is very crowded, we are getting along very nicely with our maintenance work. The 35th Squadron shares the hangar with the Hqrs. and Hqrs. Squadron, 8th Pursuit Group. All told there are about 35 planes in the hangar, which makes it plenty hard for

the mechanics. But seeing that nothing can daunt the fight and courage of the 35th, this obstacle has been diminished to a minimum.

The 35th hated to see General Andrews leave Langley Field, but were honored by being in the personnel formation that saw him off. General Andrews was well liked by the 35th.

36th Pursuit Squadron

The indoctrination of the newest arrivals from the Training Center is in full swing these days. The PB-2A's and BC-1 are fast being mastered, and the seven new officers are looking forward avidly to the day when they can start bending the throttle on the P-36A's.

Comes the new regime! With the commissioned strength of the Squadron up to 25 officers, the long-cherished dream of having a squadron of flights instead of just a squadron has been realized. The 36th is now composed of three flights, led by Captain C.K. Rich and Lieuts. J.E. Barr and J.B. Leagus, Jr. The activities of the organization, operations and engineering are to be handled by flights from now on.

And still the P-36A's keep rolling in. The qualified ferrying pilots in the squadron have been making the Buffalo jaunt almost as regularly as the Air Mail. It doesn't irk anyone, though - the more the merrier for all concerned.

The entire squadron regrets exceedingly the departure on March 9th of 2nd Lieut. Stanley T. Wenrick. Stan terminated his active duty in the Air Corps Reserve to take a position with the United Air Lines. He came to Langley Field from Kelly Field in June, 1938, and during his service here had made many lasting friends on the post.

33rd Pursuit Squadron

The 33rd Pursuit Squadron welcomes seven new Second Lieutenants to its midst. The new officers reporting here from the Training Center are 2nd Lieuts. Robert L. Morrissey, Robert B. Mueller, Kyle L. Riddle, Gerhard J. Schriever, Leonard B. Storm and Sullivan P. Turner.

Under the instruction of Captain John E. Bodle, the new officers are busy getting acquainted with the new ships. The good old PB-2A's are on their way. Four of them were lost to Maxwell Field last week, and more will probably go in the near future. We all hate to see a good old horse go.

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Brigadier General Jacob E. Fickel, Air Corps, has been relieved from duty at Headquarters, 9th Corps Area, Presidio of San Francisco, Calif., and assigned as Wing Commander, 1st Wing, 1st Air Force, March Field, Calif.

MORE RESERVES RECEIVE REFRESHER TRAINING

Nine more Air Corps Reserve officers reported at Kelly Field to pursue a special Refresher course, beginning March 18th. They are Second Lieutenants:

Wilson Gillis (30) Los Angeles, Calif., (600 hours), Attack Section;

Jesse Courts Hayes (30) Shawnee, Okla., (1600 hours), Attack Section;

George William Ireland (25), Cincinnati, Ohio (1200 hours) Bombardment Section;

Clifford W. Ludwig (27) San Antonio, Texas (1300 hours), Attack Section;

Fred Stevens Shipe (25), Claremont, Calif. (1200 hours), Pursuit Section;

James W. Stowell (30), Memphis, Tenn., (1550 hours), Pursuit Section;

John Maurice Tillman (29) Lorain, Ohio, (680 hours), Pursuit Section;

William Nixon Vickers, Jr. (25) Beaumont, Texas. (2500 hours), Bombardment Section;

Andrew Bodwell Walker (29), Miami, Okla. (1900 hours), Pursuit Section.

There are a total of 18 Refresher students undergoing training at Kelly Field, specializing as follows: Attack, 5; Bombardment, 6; and Pursuit, 7. It is anticipated that all the Refresher students at Kelly Field will complete their course within six weeks from the date of reporting.

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SNOWSTORM DELAYS ERRAND OF MERCY

Complying with an emergency call for serum from Scottsbluff, Nebraska, Major F.W. Bonfils, Commander of the 120th Observation Squadron, Colorado National Guard, accompanied by Captain Raymond M. Wilson and Technical Sergeant Charles West, departed from Denver at 9:30 o'clock on the morning of March 15th with the serum, but were forced down at Cheyenne, Wyoming, due to a heavy snowstorm. This necessitated forwarding the serum on to Scottsbluff by automobile.

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RESERVE OFFICERS AT SELFRIDGE FIELD

There were recently assigned to Selfridge Field, Mt. Clemens, Mich., 32 Reserve officers, graduates of the last class at the Air Corps Training Center, thus materially augmenting the officer personnel of the 1st Pursuit Group.

These young officers are rapidly acquiring the technique of flying high speed Pursuit ships, and can be seen almost every hour of the day familiarizing themselves with this new equipment.

Each and every one of these officers is very well pleased that they were assigned to Selfridge Field, declares the News Letter Correspondent; first, because of the honor of serving with the renowned units of the 1st Pursuit Group, and secondly, because of the ideal locality.

BOMBING DEMONSTRATION AT LANGLEY FIELD

A party of officers, headed by Brigadier General Lesley J. McNair, U.S. Army, witnessed on the morning of March 8th, Langley Field personnel flying in the latest types of Bombardment planes drop deadly demolition bombs on be-draggled Plum Tree Island in the Back River.

The Langley planes went aloft at about ten o'clock. Following the bombing practice, the visiting officers were scheduled to go to nearby Fort Monroe to inspect latest anti-aircraft guns of the Second Coast Artillery regiment. They returned to Washington by plane in the afternoon.

In the party with General McNair were Colonel Edmund L. Gruber and Captain Floyd L. Parks, of the General Staff Corps, and Lieut. Colonel Floyd E. Galloway, Commanding Officer of Bolling Field, D.C. They arrived at the Langley Field airdrome at 6:20 p.m., the previous day, from Fort Benning, Ga., where they inspected the Infantry School.

Fishing and boating in Back River, a tributary of the York, were suspended during the aerial demonstration, and patrol boats from Langley Field lingered on the edge of the river to escort river craft out of the danger zone. No mishaps were reported.

The demonstration was the second one staged at Langley Field in the period of two weeks. On February 25th, ranking government and army officials made an overnight tour of both Langley Field and Fort Monroe. Included in this latter party were members of the Senate and House of Representatives Committees on Military Affairs and Appropriations.

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"DUSTER" HITS RANDOLPH FIELD

Riding on the wings of a dry "Norther one of the worst dust storms of the year hit Randolph Field at 11:30 p.m., March 11th, and soon had the visibility restricted to a mile or less. The dust was picked up by the strong wind in the dust bowl, which comprises the arid plains of Eastern Colorado and New Mexico, Western Kansas and the Texas Panhandle. It traveled as far south as the Gulf of Mexico and as far east as Northeastern Georgia. By ten o'clock the next morning, the worst of the dust has cleared away, leaving a liberal coating of silt over everything in its wake. Since only itinerant flying was scheduled on Sunday, the normal training activities were not hampered.

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During February the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled 13 airplanes and 81 engines and repaired 32 planes and 2 engines.

NATIONAL DEFENSE DAY BRINGS IMMENSE CROWD AT MARCH FIELD
By the March Field Correspondent

Dawn of Sunday, March 19th, broke through somber clouds over March Field, Southern California's week-day runway-in-the-Sun, to presage the arrival by noon of the largest crowd of national defense fans in the history of the field. The occasion was the annual meeting of the Los Angeles Chapter of the Army Ordnance Association, but the public was invited and showed more interest than ever had been demonstrated before.

More than 35,000 people flocked through the military gates to witness an aerial demonstration and to inspect aircraft, ordnance and anti-aircraft equipment. The roadway along the line, and the whole parking area of the huge landing mat was filled with a milling, jostling but good-natured and orderly crowd that showed alert interest in the bristling military array of aircraft drawn up for inspection. State highway patrolmen declared that the traffic, which for seven hours clogged main highways with a solid line of cars stretching clear to Riverside ten miles away, was the heaviest Riverside County has ever seen.

Greeting the Ordnance group, among whom were Earl B. Gilmore, President of the Los Angeles Chapter; Major General Ewing Booth, former Assistant Chief of Staff and now retired; and many other dignitaries, was Colonel Rush B. Lincoln, Commanding Officer of March Field. The Association, composed of Reserve officers and prominent businessmen of Southern California, met at 10:00 a.m., to conduct its annual affairs and discussions. Its coordinator was Major Thomas M. Jervey, March Field Ordnance Officer.

At two o'clock, with the regimental band of the 63rd Coast Artillery playing, General Booth presented battle ribbons to Los Angeles' 363rd Infantry in an impressive ceremony.

At 2:30 o'clock, eighteen Northrop Attack planes of the 17th Attack Group, led by Major Lotha A. Smith, Air Corps, thundered down the field in a mock attack against anti-aircraft placements. Flying low over the level terrain, they loosed a water curtain to simulate a smoke screen, and drugged dummy parachute bombs. Shortly thereafter, a stubby P-36A, which took off on a routine carburetor check, thrilled the crowd with acrobatics, climaxing with a long slanting dive that brought the plane rocketing down the line at better than 400 miles per hour.

Among the airplanes on display were the B-15, brought from Langley Field by Lieut. Colonel Robert Olds and Major Caleb V. Haynes; a B-17, also brought from Langley Field by Major McReynolds and Major Crocker; two P-36A's, flown from Barksdale Field, La., by Captain

Sanders and Lieut. Silen; a new Vultee Attack Bomber; the Douglas DC-5, latest tricycle-land-gear high-wing transport, and Douglas Bombers, Northrop Attacks and North American Basic Combat planes regularly stationed at March Field. Fortunately for the visitors, the B-15, the B-17 and the P-36A's had arrived two days before the Show on a routine cross-country fuel check flight.

The visitors wildly cheered the efficient aerial demonstration, and exhibited much interest in the anti-aircraft equipment displayed by batteries of the 63rd Coast Artillery.

When darkness fell under a still, cloudy sky, late stragglers were leaving behind a brilliant day's story of Southern Californians' Army Air Corps mindedness.

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MECHANICS BECOME ATTACHED TO AIRPLANES

Disconsolate over losing his faithful old airplane, the C-14 (494), Sergeant A.M. 1st Class, W.E. Morgan, its crew chief for the past two years, seems to be down and out since its departure, according to the News Letter Correspondent of the 47th School Squadron, Randolph Field, Texas. The Sergeant's only comment to the Correspondent was: "It makes no difference now."

The personnel on the hangar line of the 47th recently bade farewell to this old faithful Transport plane. It had served its time and, due to age, it became the subject of a survey which was recently approved.

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IMPROVEMENTS COME WITH MARCH OF TIME

The scribe of Headquarters and Headquarters Squadron, Randolph Field, Texas, states that that organization is undergoing quite a change these days in many different ways. First, the paint brush can be seen around any part of the barracks, and there is nothing that makes a neater appearance than a good coat of fresh paint.

Another new improvement, he says, is the set of chimes that are being used in the mess hall, adding that a couple of the boys are practicing on them, and in a short time they will be able to play the Army chow call. It is a great deal different from the shrill and raucous chow bell that nearly deafens a man when he happens to walk by the K.P., who usually sees how loud he can pound on it.

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LARGEST COMBINED CLASSES IN HISTORY OF RANDOLPH FIELD.

With 360 Flying Cadets, student officers, foreign officers, and foreign cadets in the new March primary class at Randolph Field, Texas, and 240 student pilots undergoing training on the Basic Stage, the Primary Flying School has the largest combined class in its history, a total of 600 student pilots actually being on duty at the "West Point of the Air."

A year ago, when the March class reported, it was slightly larger than the present Primary Stage class, but at that time the class on the Basic Stage did not approach the present class in point of numbers.

The present class on the Primary Stage, which reported on March 1st and started actual flying training on March 18th, is composed of 8 officers from the Regular Army, 2 Mexican Army officers, 1 Philippine Army officer, 3 Philippine Flying Cadets, 339 Flying Cadets of the U.S. Army, and 7 holdovers, a total of 360.

The Basic Stage class is composed of 89 student officers, 3 National Guard officers, 128 Flying Cadets, and two officers from the Peruvian Air Corps who are taking a special short course and, finally, 18 Reserve officers who are pursuing the Refresher course - all for a total of 240 men in training.

Lieuts. Ernesto Gomez Cornijo and Enrique Espinoza, of the Peruvian Air Corps, reported at Randolph Field on February 27th for a special short course of instruction on the Basic Trainer type planes. Later they will be transferred to Kelly Field for additional training on A-17's before returning to their home airbase at Las Palmas, Peru. The two foreign officers have been in the United States for several months. They will ferry an export version of either the BT-9 or the A-17 to their homeland upon completion of their training. Both officers are graduates of the Peruvian Air Training Center, a counterpart of Randolph Field.

During the first two weeks of the present Basic Class, which started its second four-months' period of instruction on February 25th, there were as many as 247 men undergoing training. This figure includes seven Air Corps officers regularly assigned to Randolph Field, who were undergoing the 30-hour course in the Basic Stage Instructor's Course. Approximately 45 Primary Stage instructors received instruction in this course during the interim between classes, in order that instructional methods on both stages would be better coordinated.

Lieut. Colonel Hugh J. Knerr, Air Corps, having been found by an Army retiring board incapacitated for active service, due to disability incident thereto, was retired on March 31, 1939.

SPIRIT OF AMERICAN YOUTH IS STILL ALIVE

Not exactly typical of the many letters received each day by the Secretary's Office at the Primary Flying School, Randolph Field, which request information or application blanks for the Flying Cadet Battalion, the following letter is reproduced as a matter of general interest and as a graphic illustration that the spirit of youth is very much alive:

----- SCHOOL,
-----, STATE OF-----

Mar. 1, 1939.

Sir:

Here is just the kind of a guy you need to pilot one of your super ships you claim to have. I go to this school, but I don't like it. I want to be a combat pilot and enter your school. I don't need to tell you that I've got the brains, because any bird that can stay in this place has to have brains.

The air force needs plenty of new men at this time, so you had better give me a chance. I am 18 years old, am 6 feet and weigh 180 lbs. I can take care of myself okey. I like the set-up out there and will be waiting to hear from you. I take to the air like Grant took Richmond.

Just address:

John Doe
999 Blank Street
Blank, Blank.

P.S.

Please reply soon because I hope to be able to get the H... out of here and live like a human."

"Honestly, this is an exact reproduction, and is on file at Randolph Field," the News Letter Correspondent declares.

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IMPROVEMENT OF GASOLINE SUPPLY SYSTEM AT RANDOLPH FIELD.

Additional funds in the amount of \$8,230.00 will be expended in the near future for improving the Aqua gasoline supply system of the Air Corps Primary Flying School, Randolph Field, connecting the lines from the gasoline supply tanks to the storm sewer lines and performing incidental work. This was announced by Major F.D. Shawn, Q.M.C., Post Quartermaster.

The State W.P.A. will furnish \$5,210 of the sum needed for the work, while the additional \$2,920 will be furnished locally. When placed in operation, the project will provide employment for 52 men for approximately two months.

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Lieut. Colonel Joseph T. McNarney, Air Corps, has been detailed as a member of the General Staff Corps and assigned to the War Department General Staff.

LANGLEY FIELD PERSONNEL BID FAREWELL TO GENERAL ANDREWS.

Colonel Frank M. Andrews, Air Corps, who assumed command of the General Headquarters Air Force when it was established four years ago and welded it into a potent implement of national defense, left Langley Field on March 10th for a brief leave of absence before assuming his new duties at Fort Sam Houston, Texas.

Officers and enlisted men of the Air Force were lined in military order at nine o'clock that morning to salute him as he walked from his former quarters on Benedict Avenue to the main gate of the airdrome to drive with Mrs. Andrews to Key West, Fla.

Accompanying him in the brief ceremonies that morning were Brigadier General Arnold N. Krogstad, Commanding the 2nd Wing, GHQ Air Force; Colonel Lawrence S. Churchill, Air Base Executive Officer, and Lieut. William L. Curry, aide-de-camp to General Krogstad.

Succeeding Colonel Andrews, who held the temporary rank of Major General during his tenure of office as Commanding General of the GHQ Air Force, is Major General Delos C. Emmons, who took over the command of the GHQ Air Force on February 28th for a period of four years.

Members of Headquarters and Headquarters Squadron of the GHQ Air Force, Langley Field, observed the fourth anniversary of that organization at a banquet on the afternoon of March 4th in the organization dining room.

Colonel Frank M. Andrews was the principal speaker on this occasion.

This organization was authorized by the War Department on March 1, 1935, and its initial strength included 22 Sergeants, 7 Corporals, 18 Privates, 1st Class, and 18 Privates. The personnel now includes 118 enlisted men and 27 officers.

Captain Elwood R. Quesada was the Squadron's first commander. Major John E. Upston took over the command on June 6, 1935, and on August 1st of that year he was relieved by Major Eugene C. Eubank. The latter was succeeded by Major Clyde V. Finter, who had been stationed at Maxwell Field, Ala., on August 20, 1937.

Colonel Henry B. Clagett, Air Corps, Commanding Officer of Selfridge Field, Mich., recently completed an aerial round trip as pilot of the C-33 Transport plane carrying enlisted men to the Air Corps Technical School, Chanute Field, Ill. His itinerary was Langley Field, Va.; Mitchel Field, N.Y.; Selfridge Field, Mich., and Chanute Field. His passengers were students enrolling in the various courses given at the Air Corps Technical School.

SOLDIER'S MEDAL TO PRIVATE JORDAN

Private LeRoy C. Jordan, of the First School Squadron at Chanute Field, Rantoul, Ill., was the recipient on March 22nd at that station of the Soldier's Medal for an act of bravery in saving the life of an 8-year old girl in the Illinois River, near the Chanute Field Rest Camp, Havana, Ill., on August 12, 1938.

The decoration was presented by Major General Stanley H. Ford, Commanding the Sixth Corps Area. The First School Squadron, under the command of Captain Ray H. Clark, Air Corps, stood at attention while Private Jordan received his award. The congratulations of the field go to Private Jordan.

While at Chanute Field, General Ford made an inspection of the post, paying particular attention to the flying equipment and the new construction. The Corps Area Commander appeared to be especially well informed on both the construction and the airplanes allotted to this station.

General Ford concluded his stay with a brief call on Colonel Gerald C. Brant, Air Corps, Commandant of the Air Corps Technical School.

PHOTOGRAPHING GAME FROM THE AIR

Airmen of the Colorado National Guard Air Corps, Captain Harrison W. Welles, Jr., and 2nd Lieut. Edward C. Fackrell, at the request of the State of Colorado Game and Fish Department, flew a new O-47A airplane, on March 2nd, over the mountainous regions of the State and took pictures of deer and elk feeding at various places.

Due to the deep snow lying in the mountains, the State has been feeding the game, and it was desired to secure a count of deer and elk. The photographs secured were highly satisfactory for this purpose, and additional requests were received by the National Guard Squadron for a more complete survey of game feeding grounds throughout the State.

PERUVIAN OFFICERS RECEIVE SPECIAL TRAINING AT KELLY FIELD.

Lieuts. Enrique Espinosa and Ernesto Gomez-Cornejo, of the Peruvian Army Air Corps, reported at the Advanced Flying School, Kelly Field, Texas, on March 18th, to pursue a special course of instruction, specializing in Attack Aviation. Mention of these two Peruvian Air Corps officers is made elsewhere in this issue of the News Letter. They are expected to remain at Kelly Field for a period of approximately two weeks.

WAR DEPARTMENT SPECIAL ORDERS
Changes of Station

To Bolling Field, D.C.: 2nd Lieut. Leroy A. Rainey, from Kelly Field, Texas.

To Fort Knox, Ky.: Colonel Byron Q. Jones, from duty as instructor at the Army War College, Washington, D.C., upon completion of present school year.

To Kelly Field, Texas: 1st Lieut. Thomas J. Gend, Jr., from Hamilton Field, Calif.; 1st Lieut. William M. Garland, from Panama Canal Department (previous orders amended).

To Lowry Field, Denver, Colo.: Major John P. Temple, from Langley Field, Va.

To Inglewood, Calif.: Major Charles E. Branshaw, from Sacramento, Calif., Air Depot, for duty as Assistant Air Corps Representative, Western Procurement District.

To Langley Field, Va.: Captain Wentworth Goss, from March Field, Calif.

To Hamilton Field, Calif.: Lieut. Colonel William O. Butler, from foreign service. Previous orders in his case amended.

To Maxwell Field, Ala.: Major Sam L. Ellis, from duty as instructor at Command and General Staff School, Fort Leavenworth, Kansas, to duty as a member of the Air Corps Board.

To March Field, Calif.: Captain Truman H. Landon, from Panama Canal Department.

To Randolph Field, Texas: 1st Lieuts. Edward W. Suarez, from the Hawaiian Department, and Trenholm J. Meyer, from Panama Canal Department. Previous orders amended.

To Mitchel Field, N.Y.: 1st Lieut. Dolph E. Muehlisen, from Hawaiian Department.

To Washington, D.C., for duty in Office of the Chief of the Air Corps: Major Oliver S. Ferson, from Barksdale Field, La.; Major Edward E. Hildreth, from Maxwell Field, Ala.; Captain Lynn P. Whitten, from Wright Field, Ohio.

To Panama Canal Department: Lieut. Colonel Francis M. Brady (General Staff) from duty with GHQ Air Force, Langley Field, Va.

To Wright Field, Ohio: Major Franklin O. Carroll, from duty as Assistant Air Corps Procurement Representative, Inglewood, Calif.

Extended Active duty for Air Reserve Officers

2nd Lieut. Vandenburg Endress, Fort Worth, Texas, to Brooks Field, Texas, to March 14, 1942.

2nd Lieut. Jeff Coleman Mock, Vivian, La., to Barksdale Field, La., to March 29, 1942.

Transfers

1st Lieut. Maurice M. Simons, Air Corps, to the Coast Artillery, and from duty with the 97th Observation Squadron, Mitchel Field, N.Y., to duty with 51st Coast Artillery, Fort Monroe, Va.

2nd Lieut. Andrew O. Lerche, Corps of Engineers, Fort McIntosh, Texas, transferred to Air Corps and assigned to duty at Randolph Field.

Promotions

To Colonel (temporary): Lieut. Colonel Junius W. Jones, from March 1, 1939.

To Lieut. Colonel (temporary): Major Paul J. Mathis, from March 17, 1939.

To Major (temporary): Captains Julian B. Hadden, from March 15th, and Haynie McCormick, from March 17, 1939.

Colonel Walter R. Weaver has been transferred from Langley Field, Va., to Maxwell Field, Ala., and, effective on or about April 1, 1939, designated as Commandant, the Air Corps Tactical School; vice Colonel Millard F. Harmon, who is designated as Assistant Commandant, the Air Corps Tactical School, vice Lieut. Colonel Donald Wilson, relieved.

Captain Donald W. Norwood relieved from assignment and duty at Denver, Colo.; and directed to proceed to his home to await retirement.

Lieut. Colonel Earl L. Naiden detailed as member of the General Staff Corps with troops and assigned to duty with the GHQ Air Force, Langley Field, Va.

Second Lieut. Will Wright McConnell, Air Reserve, Kenton, Ohio, assigned to extended active duty at Patterson Field, Fairfield, Ohio, to March 20, 1942.

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ARMY AIRMEN MAKE TRIP TO SOUTHERN ISLANDS

The 28th Bombardment Squadron, stationed at Clark Field, P.I., completed the first southern island trip of the new year on February 10th. Seven B-10B's, Major Guy L. McNeil, Air Corps, Commanding, departed from Clark Field on February 8th for Jolo, Jolo, P.I., via Zamboanga, Zamboanga, P.I.

Zamboanga was the first overnight stop, going to Jolo the second day and returning to Zamboanga for the second night's stop.

On the third day, the flight left for San Jose, Mindoro, via Iloilo and other points, but while flying in the vicinity of Panay, word was received that a typhoon was approaching over Mindanao, whereupon the flight returned to Clark Field without stopping at San Jose.

Army pilots on this trip, in addition to Major McNeil, were Captains R.L. Schoenlein, W.A.R. Robertson, 1st Lieuts. Hunter Harris, Jr., L.R. Brownfield, D.N. Motherwell and W.M. Gross.

Several officers from other branches of the service were passengers on the trip, viz: Brigadier General F.W. Honeycutt, Commanding General, Fort Stotsenburg, P.I.; Lieut. Cols. E.W. Taulbee, W.E. Buchly and J.T. Pierce, 26th Cavalry (P.S.); T.G.M. Oliphant, 24th Field Artillery (P.S.); Major P. LeToney, 31st Infantry, and 1st Lieut. C.V. George, Air Reserve, from PAA.

Enlisted men accompanying the flight as flight chief, crew chiefs and radio operators, were Tech. Sgt. M. Brucher, Staff Sgts. S. Daniels, M. Paschini, J. Stockwell, Sgt. A. Spade, Privates S.W. Stacy, C. Poly, W. Ott and D. Jenkins, while Pvt. 1st Cl. G.M. Tweedy, 2nd Obs. Squadron, Nichols Field, was the photographer on the flight.

The natives of Jolo, coming in from the hills, gave the flight quite a reception, as it was their first opportunity to see the B-10's, this being the first time the Squadron had landed there. The landing fields at Jolo

and Zamboanga have been enlarged, and the B-10's have plenty of room for landing and taking off. Servicing facilities, for the benefit of all oldtimers that have blazed the trail before, are the same as usual - out of the good old 5-gallon cans. The pesata saves a lot of sore muscles and back aches, as 400 gallons per airplane is rather a nice workout.

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AIRMAN FROM SOUTH AFRICA VISITS ARMY STATIONS

Captain G.A. King, of the South African Permanent Force, was a visitor at Kelly Field on March 7th and was shown the installations and various activities of the Air Corps Advanced Flying School by members of the faculty. He also witnessed student training in progress on that date.

Captain King is a member of the South African Instruction Corps, and his present status is that of Instructor in Signals at the South African Military College, Pretoria. He is spending three months in the United States after a 17-months' assignment at the British School of Signals. Prior to his visit at Kelly Field he made calls at Forts Monmouth, Benning, Sam Houston, Riley, Knox and Sill.

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ACTIVITIES AT ADVANCED FLYING SCHOOL

A total of 40 students was assigned to the Bombardment Section of the Air Corps Advanced Flying School. These students, belonging to Class 39-B, started flying training on March 1st. Since that date six officers, taking the Refresher flying course, were added to the class.

Flying instructors present on March 1st were Major John V. Hart, Captains Delmar T. Spivey, Leroy Hudson, 1st Lieuts. Roger J. Browne, Roy D. Butler, David N. Crickette, Norman L. Callish, Laurence B. Kelley, William L. Kennedy, Troup Miller, J.W. Campbell, E.J. Timberlake, 2nd Lieuts. N.K. Warner, Leroy A. Rainey and Flying Cadet J.E. Stiles.

Since March 1st, Lieuts. Rainey and Warner have been lost to the Section, the former being transferred to Bolling Field, D.C., while the latter was relieved from active duty to accept a position with the Eastern Air Lines. Captain Hudson was transferred to other duties at Kelly Field.

Twenty-four students of Class 39-B, including two officers of the Regular Army, two officers of the Philippine Army and twenty Flying Cadets, reported to the Observation Section of the Air Corps Advanced Flying School on March 1st. Under the supervision of Captain R.E. Randall, Chief of that Section, training is conducted in flying the Observation type airplanes on such missions as visual reconnaissance, aerial photography, instrument flying and navigation training.

Ground instruction in the use of photographic and radio equipment and artillery adjustment procedure have taken up the afternoon periods and filled up the evening periods with home work study.

It is anticipated that the present class will complete the course of training in three months' time instead of the usual four months heretofore allotted. Good weather and good luck have prevailed thus far, and it is believed no insurmountable difficulty will be experienced in completing the course in the time scheduled.

During the past year (February, 1938 to February, 1939) 162 regular students (student officers and Flying Cadets) have been trained by the Pursuit Section of the Air Corps Advanced Flying School. This is by far the largest number of students that have been trained by any one Section at this School. In addition, Reserve Officers undergoing a Refresher course have been graduated during each class. All students undergoing training received the major portion thereof in the P-12 type airplane, supplemented with some training in the Seversky BT-8 and instrument flying training in the BT-2B1 type airplane.

The flying instructor personnel of the Pursuit Section include Captain Burton M. Hovey, Jr., Chief of Section; 1st Lieuts. Dyke F. Meyer, Operations Officer; Melie J. Coutlee, Commander of 1st Echelon; John H. Bundy, Commander of Second Echelon; Benjamin J. Webster, Daniel S. Campbell, Earl F. Signer, Fred N. Ward, William I. Fernald, Wilbur W. Aring, 2nd Lieuts. William Eades, Roy W. Osborn, Robert F. Worden, Chester L. Sluder, James M. Jones and Joseph C. Mackey.

Second Lieut. William Irvin Fernald, Air Reserve, now on active duty at Kelly Field, was promoted to 1st Lieutenant, with rank from March 1, 1939.

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CONFUSION IN NAMES AT PRIMARY FLYING SCHOOL

The middle names of two Flying Cadets who enrolled in the March, 1939, Class at the Air Corps Primary Flying School, Randolph Field, Texas, became important to Army officials when it was discovered that both bore the name of John D. Wynne. Since both were listed as being Californians that did not help to dispel the confusion, because inquiry revealed that John Douglas Wynne's home is in Los Angeles and John Davis Wynne came from El Centro. In order to simplify matters, the Los Angeles Wynne was designated as Wynne No. 1, because he was assigned to the first squad in the Cadet Battalion. The El Centro Wynne was dubbed Wynne No. 5, because he is a member of the fifth squad. John Douglas Wynne attended the Oregon State College and was a Private in the 4th Air Base Squadron at March Field, Calif., before he was appointed a Flying Cadet. John Davis Wynne was appointed from civilian life. He attended the University of Arizona at Tucson.

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First Lieut. Bierne Lay, Jr., Air Reserve, at his own request, was relieved from extended active duty at Langley Field. Bound for Hollywood, Calif., he is to devote his time to a motion picture depicting the life of an Army flyer. He wrote the book "I wanted Wings."

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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THE EXPANSION OF THE ARMY AIR CORPS

By Brigadier General Barton K. Yount, Air Corps,
Assistant to the Chief of the Air Corps

An address before the Philadelphia Chapter, Veterans of Foreign Wars, at Philadelphia, Pa., on Army Day, April 6, 1939.

Mr. Chairman, Members of the Philadelphia Chapter, Veterans of Foreign Wars, and your guests:

It is a great pleasure to be with you today and a great honor to address a patriotic organization such as yours on Army Day. After listening to the preamble of your Constitution and knowing of your splendid organization and your great interest in military affairs, it is unnecessary to review for you the record of the United States Army in the wars in which this country has participated. You know that splendid record as well as I do and you know that the United States has never been defeated.

I am sure that you are also familiar with the Army's accomplishments in helping to build up our great nation. It is enough to say that the United States Army has been a veritable "Vanguard of American Civilization" and that its influence in peaceful pursuits has matched its exploits in war.

Gentlemen, we are living in troubled times. Our press is filled with records of the pestilence of present wars and the threats of wars to come.

God grant that we may never again be called upon to defend our shores or the institutions which we have struggled to build and which we have fought to protect. But one thing is certain, and with this I know that you gentlemen will agree, we will fight, if necessary, to protect them.

And so today, instead of talking of our past, I am going to devote a few minutes to telling you something of our plans for the future and in particular as to how those plans apply to the expansion of our Air Corps.

In January, the President of the United States in a message to Congress said:

"What needs to be emphasized is the great change which has come over conflicts between the nations since the world war and especially in the past five or six years."

Later he said:

"Military aviation is increasing today at an unprecedented and alarming rate.

Increased range, increased speed, increased capacity of airplanes have changed our requirements for defensive aviation."

There is a new range and speed to offense. It has, therefore, become necessary to restudy the defense required to meet present possibilities of offense against us. What was adequate national defense 15 years ago, or even five years ago, is now insufficient. The proper strength for our defensive forces may be figured from several different points of view:

- 1st - The amount of national defense which can be provided without causing general objection to what must be paid in taxes.
- 2nd - The maximum defensive strength which we may conceivably require, and
- 3rd - A necessary compromise between the two (considering the forces which may probably be brought against us) - the minimum necessary to safeguard the interests of the United States in this Hemisphere and to protect us from invasion.

The President's proposed aviation expansion program is this minimum. This program, when necessary appropriations are made, will provide an Army Air Corps of 6,000 planes.

Last July, Mr. J.M. Spaight, in his AIR POWER IN THE NEXT WAR, said:

"History is full of wars that were never fought. Air power will probably add to their number. Is it not conceivable that we are on the threshold of an era in which wars will be won before they are fought?"

Under such conditions the nation which is hopelessly outclassed in military strength has in the past and must in the future accept such terms as the nation with the overwhelming military power is pleased to dictate.

When its citizens are attacked by foreign nationals with the open acquiescence and even the encouragement of a stronger foreign government, the

weak nation must meekly accept this condition and must, perhaps, be duly thankful that matters are not worse.

For forty years this nation has been a first-class power. We must now decide whether or not we will continue to be a first-class power - whether or not we will protect our citizens abroad from being abused - whether or not we shall be able to protect our flag from being insulted by some arrogant foreign power - whether or not we shall be able to protect our country from foreign invasion - whether or not we are willing to fight, if needs be, in defense of our own principles of democracy.

We believe that the President's Army Air Corps expansion program provides the minimum force which will give the necessary air protection to our nation and to our citizens at home and abroad.

In the ground arms the fire power of the defense has so outstripped the power of the offense, in recent years, that fronts may quickly become stabilized.

To the commander having the dominant air power, aviation provides a means of effective attack behind the hostile lines. No longer can the Maginot Line protect Paris; no longer can the English Channel protect London; no longer can munitions of war be safely and peacefully produced to supply armies locked in a struggle on a frontier 200 to 300 miles away.

Today, the bombardment of Continental United States is not a practical military operation. But, who can say what tomorrow will bring?

Last November, two planes flew non-stop from Egypt to Port Darwin, in Australia - a distance of more than 7,100 miles. This is some 1,000 miles more than a round trip between the European coast and New York City and, according to the published figures, an equivalent in fuel of a 2,000-lb. bomb. In other words, on this flight it would have been physically possible for the planes to have taken off from Europe, flown to New York, dropped a 2,000-lb. bomb, and returned to Europe without landing.

Throughout the world today there are on the drawing boards numerous designs capable of flying over 9,000 miles non-stop, but so far as we know there is today no foreign Air Force able effectively to bomb any point in the United States from either Asia or Europe and return to its home. There is, however, no reason why potential enemies may not, at the present time, peacefully acquire and organize commercial air bases on Atlantic and Pacific islands, or even in continental North or South America.

There is no essential difference between a large well-equipped commercial air base and a military air base. From such commercial air bases in this Hemisphere mass attacks could readily be

launched against vital elements of our military defenses even prior to a declaration of war.

Such bases could be made ineffective only by the use by us of a powerful Air Force. Our aviation must remain strong, if for no other reason than that no foreign nation may be tempted to use commercial air bases from which to attack us.

We must have a strong and readily expandable aviation industry, capable not only of maintaining in peace the number of planes required for our Air Force, but capable of meeting the demands which will be made upon it in war.

We must remember, however, that a strong aeronautical industry and an adequate provision of airplanes do not, of themselves, insure an efficient Air Force.

The other elements of a properly balanced Air Force are trained aerial and ground crews to fly, service, and maintain the aircraft, and the necessary buildings and equipment to make possible the proper maintenance, repair, and supply functions.

Whatever its size, our Air Force must be balanced. Once the amount of funds which can be provided has been determined, the proper composition of its various elements can be determined. It is most essential that each of these various components shall be in proper proportion. It is impossible to improve any one of these elements after war has been declared.

Wars will be fought (certainly during the first few months) with the planes and trained personnel available in peace. In peace we must maintain each element of this balanced Air Force at the strength we will require during the first few months of war and not for just the opening date. To attain the minimum of trained pilots necessary under the President's program, before the end of 1940, will require that some 370 Flying Cadets begin training every six weeks between now and then. This is more than twice the number now being trained. The War Department plan allows nine months for the training of each class. The first three months - the Primary Stage - will be given at selected private commercial flying schools. The second three months - the Basic Stage - will be given at Randolph Field, Texas, and the last three months the Advanced Stage - will be given at Kelly Field, Texas.

The three months' instruction at the selected private commercial flying schools should not be confused with the flying instruction to be given by the Civil Aeronautics Authority in the College Flying Clubs.

The President recently made available \$100,000 to conduct an experiment in

the training of pilots in the flying units which have been organized at thirteen colleges distributed throughout the United States. If the experiment proves successful, he hopes to be able to provide a fund of around \$7,000,000 a year to give training to as many as 20,000 college students annually. These students will have no connection with Army Flying Cadet training. However, such of them as prove particularly apt will constitute a valuable reservoir from which to select cadets for Army Flying Cadet training.

Heretofore, of those who passed the rigid physical examination, some 60% or less have shown the natural aptitude for flying necessary for our military pilots. By selecting those of proven aptitude, it is hoped that we can graduate a much larger percentage of those entering our flying schools.

Under the present plan for Air Corps training, the Advanced Flying School at Kelly Field will be expanded to accommodate the additional students necessary. Randolph Field, the present Primary School, which now includes both Primary and Basic Stages, will give Basic training only.

The new feature of this plan, which has not been tried out up to the present time, is the method of giving instruction in the Primary Stage. For this type of instruction, it is planned, as previously stated, to use selected commercial flying schools owned and operated by private individuals.

After numerous conferences with their present operators, a sound plan has been agreed upon by the War Department. Under this plan the Air Corps will purchase at a reasonable price flying instruction from those schools which meet the government standard. To insure uniformity of product and to acquaint the instructors at all of these schools with the Army standard, all of the civilian instructors will attend a course for Flying Instructors at Randolph Field. The government will also maintain at each school one or more Regular Air Corps officers to check each student from time to time. They will function just as inspectors at manufacturing plants, who inspect the manufacturer's product to see that it meets Army standards. In fact, the same sort of inspection has been going on for years at the Army Flying Schools, where each student must pass a check-pilot at every stage of his instruction. The only essential difference is that the flying instruction under this plan will be given by a civilian at a civilian school instead of an Air Corps officer at an Air Corps School.

Not only the flight crews, but also on the ground, trained men are a necessity. The Army Air Corps must have skilled crew chiefs and crew men, radio opera-

tors, radio repair men, electricians, photographers, stock keepers and clerks.

The aircraft industry also needs similar expert mechanics, draftsmen, electricians, etc. Outstanding individuals in these various categories rise to executive positions and form the backbone of the industry.

We must train our high school graduates to fill vacancies in the Army Air Corps and in the American aircraft industry if we are to secure the full effect from our increased numbers of aircraft. To complete the President's program, the Air Corps will require slightly more than 25,000 men such as these, in addition to those we now have.

At Chanute Field, Rantoul, Ill., and at Lowry Field, Denver, Colo., the Air Corps maintains schools for training mechanics. At present some 900 to 1000 men are enrolled in these two schools. The enrollment will soon be greatly increased. It will be impracticable, however, for these two schools to meet our training needs. Some additional facilities must be provided.

During the World War we found it necessary to organize a mechanic's school and some 5,000 to 6,000 men were graduated from it. At present there are very probably as many students in training at private and public mechanic's schools of various kinds throughout the country. The necessity for the utilization in war of every existing facility applies equally well to such schools. We believe the easiest and most efficient way to solve our present problem is to use these schools in somewhat the same manner as is planned for the pilot schools. The graduates of these civilian mechanics' schools are filling positions, not only in aviation but in many other branches of industry. These schools, under their present management, with an increase of instructors, principally in the lower grades, could be enlarged to train several times their present enrollment, and the Army plans to use them at least to a limited extent.

I have talked at some length on the President's Air Corps expansion program. Although the Congress has passed the authorization bill for 6,000 planes and the President has signed it, the appropriation bill must still be passed and we are certain that it will be.

TO SUMMARIZE:

Here briefly are some of the important things the President's air program will do for the country:

1. It will give us an efficient Air Force, in the shortest possible time, of the size required for national defense. It is not an offensive force built to carry war to foreign shores. Far from it. It will provide an air defense for the continental United States and its

possessions - that and that only. It will not then be as large as some of the others in the world, but it will serve notice to all international trespassers not to encroach upon our continental shores except at their own risk.

b. It will raise the aircraft industry to a proper level. The aeronautical industry in this country is at present wholly inadequate to supply our needs for military aircraft in a major emergency - the facilities are available but they are not being utilized. This program will inaugurate military airplane building in many aviation factories, which have had no experience in building military aircraft. It will train a large additional group of engineers and skilled workmen, supervisors and foremen in military aircraft manufacture.

c. It requires the training of a large number of additional military pilots. By providing a certain amount of training in civilian flying schools we will train these schools in the type of work they would have to do immediately in the case of a major war. It is wise indeed to give them this experience now. It permits us to perfect, in peacetime, a system which we know we shall have to use in time of war.

We believe that the President's new air program is an essential step in air preparedness for this country. We believe that the Congress of the United States expressed the will of our people when it voted recently by an overwhelming majority to authorize that program.

This new program will be carried out to the last detail and on time. We are ready to start - our plans are perfected, our machinery is oiled - but it remains for Congress to throw the switch by making the appropriations available and Congress will carry out its part.

Let us not make the mistake of beginning too late. We must bear in mind that much time is required to build up an Air Force. It cannot be done overnight - 18 months are required to reach quantity production in planes - two years are required to train personnel to make them competent to handle our complicated aircraft of today. Delay in beginning will make for undue haste in trying to catch up and frenzied haste makes for waste and extravagance.

I urge then that we remember this: A strong Air Force may go a long way toward keeping America out of war, also a strong Air Force may be absolutely vital in keeping war out of America.

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TRAINING PERIOD COMPLETED IN CANAL ZONE

The annual training period for troops in the Panama Canal Zone came to a close on March 28th with a final critique, held in the Fort Clayton theater, on the maneuvers which had been conducted during the past three weeks.

During the maneuver period, all available forces in the Panama Canal Department had been offering a concentrated resistance to a simulated Black Army of invaders, bent upon the destruction of the Canal, and who attacked from land, sea and air. During most of the exercise, the 6th Bombardment Group from France Field, and the 74th Attack Squadron represented the carrier-base air force of the invaders, carrying out bombing and chemical attacks upon Canal installations and upon ground forces.

The 24th and 29th Pursuit Squadrons were assigned defensive missions with the Blue forces, aided by reconnaissance missions by the 44th and 7th Reconnaissance Squadrons.

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MITCHEL FIELD ACTIVITIES

A 13-ship formation of the 9th Bombardment Group, under the command of Captain F.R. Upthegrove, Air Corps, took off from Mitchel Field, New York, on April 12th, for Fort Benning, Ga., for the purpose of staging a bombing demonstration at the Infantry School at Fort

Benning, Ga. The demonstration took place on April 13th, and the flight returned to Mitchel Field the following day.

Six B-18A airplanes from the 18th Reconnaissance Squadron took off from Mitchel Field, under the command of Captain Emmet O'Donnell, Air Corps, for a flight to Ford Airport, Detroit, Mich. Upon arriving at that airport, luncheon was served for the crews, following which the Air Corps personnel were conducted upon a very interesting tour through the Ford Plant at Dearborn. The flight then proceeded to Selfridge Field, Mt. Clemens, Mich., for servicing, and then followed a night flight back home. All members of the flight expressed their sincere appreciation for the cordial hospitality accorded them while visiting the Ford Airport and Ford Plant.

Mitchel Field was called upon to fly the C-33 airplane to Ithaca, New York, on an errand of mercy, i.e., to transport Staff Sergeant John Graham, ROTC, Cornell University, to the Walter Reed Hospital, Washington, D.C. Major H.B. Chandler, Air Corps, piloted the C-33, and Captain L.H. Lawson, Air Corps, was the co-pilot. Lieut. Colonel R.K. Simpson, Medical Corps, and two enlisted medical attendants accompanied the flight.

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WEATHER AN IMPORTANT CONSIDERATION AT TRAINING CENTER.

Aided by an uninterrupted stretch of ideal weather, flight training on both Primary and Basic Stages at the Air Corps Primary Flying School, Randolph Field, Texas, is moving ahead at the normal pace, with the Basic students already into their first phases of night flying.

With the largest number of student pilots ever to be in training at Randolph Field, 222 on the Basic Stage and 336 on the Primary Stage, the weather necessarily plays an important part. A few days of low overcast, or rain, results in the loss of literally thousands of flying hours which must be made up when the weather clears. During the early portion of the course, training on the Primary Stage is particularly hampered by the appearance of bad weather, for the students before solo have difficulty in retaining instruction for several days unless flying is conducted daily. This problem also faces the Basic Stage students, but to a lesser extent.

Both sides of the flying field have benefitted greatly by the lay-off between classes, tiny green sprouts of grass making their appearance where before vast barren areas met the eye.

Lieut. Louis W. Proper recently reported to Randolph Field from the Hawaiian Department and was assigned as an instructor on the Primary Stage. Lieuts. Joseph G. Gordon and Daniel A. Cooper have been assigned to the Basic Stage as instructors on the BT-9's.

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RETIREMENT OF TECH. SERGEANT CAMINSKE

Technical Sergeant Joseph Caminske of the 19th Pursuit Squadron at Wheeler Field, T.H., was retired from the U.S. Army on March 1, 1939.

The veteran Air Corps technician wound up 30 years of service with the colors. He first enlisted in the Army in 1908 with the 137th Company, Coast Artillery Corps, and he served with this branch of the Army until 1914. From then on until 1929, when he was transferred to the Air Corps, Sergeant Caminske served with the Quartermaster Corps. He was a member of the 61st Service Squadron until 1935, and since then until his retirement he has been in Hawaii with the 19th Pursuit Squadron of the 18th Pursuit Group at Wheeler Field.

The service wishes Sergeant Caminske a long life in his well earned retirement.

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Colonel Henry W. Harms, Air Corps, has been relieved from duty in the Office of the Chief of the Air Corps, Washington, D. C., and assigned to the Headquarters, 9th Corps Area, Presidio of San Francisco, Calif.

RANDOLPH FIELD METEOROLOGICAL OFFICE MAKES ANNOUNCEMENT.

The Polar front or separation line of Polar Continental air from Canada and the Arctic Region and the Maritime Air over the Pacific Ocean, Gulf of Mexico, and South Atlantic Ocean, is slowly moving northward. The wave developments along this front, known as a family of cyclones, are less intense because the marked contrast between the two different types of air is decreasing.

The earth moving on its orbit around the sun is at its greatest distance from the sun during the spring and summer months; however, the directness of the sun's rays, inclination of the earth's axis, and the variation in the absorptive properties of the air are slowly bringing about warming conditions in the northern latitudes. Since the Polar front is displaced to the north and the dynamic and convective components of these wave formations causes an east to northeastward movement, we find most of the United States, and Texas in particular, covered with a continental inflow of warm, moist air, accompanied by an increase in temperature to maximums which should be reached during the months of July and August.

For those not completely familiar with meteorological terminology, a layman's translation of the above article has been prepared by the Randolph Field News Letter Correspondence. This translation is as follows:

"Spring is just around the corner and summer is not far behind."

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RADIO BROADCAST OF MOCK COMBAT

Hundreds of residents in the neighborhood of Langley Field, Va., seated by their radios on Sunday afternoon, April 2nd, listened to the thrilling details of a simulated attack by enemy planes and their successful repulse by giant "Flying Fortresses" and Pursuit planes from that field.

The demonstration of the nation's efficiency on land and in the air was preliminary to the observance of Army Day on Thursday, April 6th.

The running comments on the demonstration were made by Brigadier General Frederic H. Smith, of Fort Monroe, Va., Commander of the 3rd Coast Artillery District, and Major General Delos C. Emmons, who recently assumed command of the General Headquarters Air Force at Langley Field. Microphones distributed at various points at Fort Monroe recorded the commands of the officers, the sound of whirling planes, the barking of machine guns and the reports of attacking officers that the invasion had

(Continued on Page 6).

SAN ANTONIO AIR DEPOT EXPANDS

Having reference to the Air Corps Expansion Bill (approved by the President on April 3, 1939), the News Letter Correspondent of the San Antonio Air Depot, Duncan Field, Texas, declares, in effect, that so far as the personnel of the Supply Department of the Depot are concerned, this expansion program appears to have been in effect as far back as six months ago, so considerable has been the increase in activities thereat during that period of time.

The consolidation with the Lighter-than-Air Depot of Scott Field was completed during the six months past, all supplies and equipment having been transferred to San Antonio. While the establishment of the Engineering Branch of the Lighter-than-Air activity at Brooks Field has been indefinitely postponed, the Depot will carry on with the supply of Lighter-than-Air materials to stations all over the United States.

There is considerable activity in the warehousing department, brought about by the necessity for constructing new warehouses for the O3 classifications and a new rubber storage room. In the meantime, it has been necessary to employ a number of additional temporary laborers for the numerous rewarehousing projects under way that were made necessary by the influx of new and additional supplies. Numerous stocks must be relocated and rearranged in order to utilize to the maximum all available storage space.

The annual audit of the property account is now in progress. It is anticipated that five or six months will be required to complete this audit.

The shipping department was reorganized in preparation for the additional packing and shipping activity. During the six months period ending January 31, 1939, the total inbound and outbound rail freight reached 3,065 tons. The total inbound and outbound air freight hauled during the six months was 877,520 pounds, compared with 713,798 pounds during the entire fiscal year 1937 and 1,422,677 pounds during the entire fiscal year 1938. The total inbound and outbound tonnage for the six months was 9,736,982 pounds (not including movement of supplies within the Depot to the Engineering Department).

The number of airplanes in the San Antonio control area has increased approximately one hundred percent since 1936. Several new types of airplanes and engines have been acquired, making it necessary to stock many new replacement items for this equipment.

Another significant index to the increased activities at the San Antonio Air Depot during the present fiscal year is shown in the increase in the number of property vouchers issued. Approximately sixty thousand vouchers had been issued up to March 1st during the fiscal year

1938. Seventy-two thousand vouchers have been issued up to the same date this year, an increase of twelve thousand vouchers for the first eight months of the fiscal year.

Some fifty-five thousand items were carried in stock at the beginning of the fiscal year 1938. A conservative estimate at the present time would place the number of items in stock at sixty-five thousand, an increase of some ten thousand items during the past year.

A work order section was added to the Supply Department a few months ago to coordinate and expedite this important function of supply with the Engineering Department. This section is a feature that has been needed for some time, due to the great number of work orders issued daily, and is proving of benefit in many ways to the Supply function of the Depot. Since this section has been inaugurated, work orders are issued promptly, filed properly and accurate credits posted to the work orders upon completion by the Engineering Department. Material needed for work orders are traced promptly and a close liaison is maintained with the Engineering Department to insure prompt completion of material needed for issue to the various stations in this area for stock.

In conclusion, the News Letter Correspondent states that the Expansion finds the Depot Supply Department of the San Antonio Depot well ahead of schedule and ready to absorb the additional duties that will devolve upon it by reason of this expansion.

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Radio Broadcast of Mock Combat (Continued from Page 5)

been repulsed.

In a simulated aerial battle somewhere out in Chesapeake Bay, the "enemy" was driven off with the loss of numerous bombers, and an attack by another squadron was frustrated by the machine gun and anti-aircraft weapons of Batteries C and D of the 2nd Coast Artillery, stationed at Wilson Park. Many people witnessed a part of the demonstration from the Chamberlin Hotel and other vantage points in the vicinity.

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With the arrival of Spring, the building program at Scott Field, Belleville, Ill., shows evidence of rapid growth. Quarters are beginning to grow out of the holes that have been planted with basements all winter. The upward surge is due to the fact that the weather has been above freezing for a change, and work on concrete pouring and brick laying has not been interrupted.

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RANDOLPH FLYING CADET "BIBLE" COMPILED
By the News Letter Correspondent

The first effort to bind between the covers of one small pamphlet all the information, history, advice and other pertinent data a newly reporting Flying Cadet should have at his fingertips, culminated successfully.

As each of the 342 Flying Cadets of the March 1st Class reported to Captain James S. Stowell, Commandant of Cadets at Randolph Field, they were handed a 24-page mimeographed pamphlet, edited by the cadets themselves under the supervision of an officer assigned to the Cadet Detachment.

In the first section of the booklet there is given a short history of Randolph Field, dating back to 1927, when the United States Congress first discussed the appropriation of funds for the construction of facilities for "a new air field in the vicinity of San Antonio." The remainder of this section deals with the problems incident to obtaining the necessary land and the drilling of water wells, and a financial resume is given of the total cost of construction.

In the second portion of the newly compiled pamphlet a resume is given of Flying Cadet social and extra-curricular activities. Various formal dances and their significance is discussed. Considerable space is devoted to the traditional G.I. Church, the show produced for each class by the lower classmen. Lampooning of the upper classmen and burlesques of various scenes and activities of the Field usually make up the major portion of the thrice annual G.I. Church.

"...it is no disgrace to be 'washed out' at Randolph," the outgoing Cadet First Captain declares in his section, headed "Advice from 1st Captain." "It (washing out) does not mean that you are not a flyer; it simply means that you do not quite approach the high standards set for pilots who will shortly be entrusted with airplanes which cost as much as a half million dollars apiece. Do not let the fear of 'washing out' be a 'bogey' to you - rather let it be the spur that encourages you on to greater efforts toward achieving your goal," the 1st Captain advised.

"Inasmuch as Flying Cadets are potential officers, the Honor System is used. The Honor Committee is comprised of a group of carefully chosen Flying Cadets who handle all cases involving breaches of honor. The system has been tried and it works," the advice concluded.

Customs and conduct of lower classmen comprise the third section of the Cadet "Bible." In it are discussed behavior of the lower class at all times, the spirit that should be prevalent at all times, and the conduct of Flying Cadets

while on leave or on a visit to San Antonio.

The Honor System, as used at the Flying Cadet Detachment, comprises what is perhaps the most important section of the "Bible." Carefully worded so as to explain in great detail what a breach of honor consists of, this section discusses numerous concrete examples and the ruling on them.

Then comes an informal discussion of the flying training, and advice for the men who are just starting their primary training. "Be a 'Gloomy Gus' rather than an 'H.P.'" (Hot Pilot) is the gist of the advice given in this department. The final two pages of the "Bible" are devoted to a compendium of Cadet Terminology and Slang, practically all phrases being completely unfathomable to anyone but a Flying Cadet.

Plans are now going forward to publish for distribution to classes to follow an enlarged edition of the Cadet "Bible," possibly bound and printed rather than mimeographed.

All States, except Delaware, were represented by the present Flying Cadet class which entered Randolph Field in March. Two of the three foreign possessions are represented, with two cadets from the Philippines and one from Hawaii. Other States represented and the number of cadets from each are as follows:

Illinois, 31; Texas, 29; California, 24; Oklahoma, 18; Massachusetts, 15; North Carolina, New York, Pennsylvania and Wisconsin, 14 each; Georgia, Florida, Michigan, Nebraska, and New Jersey, 9 each; Tennessee and Minnesota, 8 each; Alabama, Arizona and Indiana, 7 each; South Carolina and South Dakota, 6 each; Arkansas, Kansas, Iowa and Virginia, 5 each; Kentucky, Oregon, Colorado and Utah, 4 each; Connecticut, Mississippi, Missouri and Maryland, North Dakota, Ohio, 3 each; Louisiana, Maine, Washington and Rhode Island, 2 each; Idaho, New Hampshire, Montana, District of Columbia, Vermont and Wyoming, 1 each.

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Under Special Orders of the War Department, recently issued, two field officers of the Army Air Corps were relieved from their present assignments and duties and ordered to proceed to their homes to await retirement. These two officers are Colonels John H. Howard and John H. Pirie, the former having been on duty as Air Officer of the 7th Corps Area, Omaha, Nebraska, and the latter serving as Commanding Officer of Maxwell Field, Ala.

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SIXTH PURSUIT CELEBRATES 22ND BIRTHDAY

The 6th Pursuit Squadron, stationed at Wheeler Field, T.H., celebrated the twenty-second anniversary of its organization with a picnic at Kawaihoa Military Reservation on the north shore of the Island of Oahu. The Squadron was originally organized as the Sixth Aero Squadron, Aviation Section, Signal Corps, on March 13, 1917.

Food and refreshments were served from 9:00 a.m. to 5:00 p.m., fried chicken being the main dish. The schedule for the day included baseball games, volleyball and horseshoe pitching.

Captain Robert W. Douglass, Jr., Squadron Commander, gave a brief history of the Squadron, and presented leis and alohas to "short-timers" who, two days later, on March 13th, left for the mainland on the U.S. Army Transport REPUBLIC. A letter of congratulations from the Commanding Officer of the 19th Infantry was also read.

A letter, giving an account of the early history and service of the Squadron in Hawaii, was received from Colonel John F. Curry, Air Corps (new Commanding Officer of Hamilton Field, Calif.), the first Squadron Commander of the 6th Squadron. It arrived too late, however, to be read at the Organization Day picnic.

The Honolulu ADVERTISER honored the Squadron by printing a history of the organization with a group of pictures in its magazine section on March 12, 1939.

NEW COMMISSIONED PERSONNEL FOR SELFRIDGE

The 27th Pursuit Squadron, 1st Pursuit Group, Selfridge Field, Mich., recently added eleven newly commissioned Reserve officers to its roster, namely, 2nd Lieuts. Joseph C. Smith, Lewis M. Sanders, Harry A. Jenkins, John L. Brownell, Frederick C. Grambo, James A. Barnett, Archibald W. Moore, Paul L. G. Moore, Heman W. Randall, Jr., Eugene L. Strickland and Charles N. Fendrich.

The training of the new men has been progressing quite smoothly, with but one mishap in the way of a forced landing by 2nd Lieut. Paul L.G. Moore. The circumstances were extremely fortunate, as the landing occurred over the Packard Proving Ground, the center of which is an emergency field itself.

The 94th Pursuit Squadron extends its welcome to the newest members of the organization, 2nd Lieuts. Eugene L. Clark, Robert L. Baseler, Woodrow B. Wilmot, Newton R. Dick, Robert D. Van Auken, Thomas B. Summers, William H. Swanson, Edgar A. Romberg, Robert R. Rowland, John J. Van der Zee and Harold J. Whiteman, Air Reserve. It is with regret that the 27th bids farewell to 2nd Lieuts. John R. Ulricson, Air Corps;

Charles E. Trostel and Andrew D. Moore, Air Reserve, transferred to the 17th Pursuit Squadron and Headquarters and Headquarters Squadron. May their new homes be pleasant.

SAN ANTONIO AIR DEPOT PLAYS HOST TO FERRYING PERSONNEL FROM PANAMA

The San Antonio Air Depot, Duncan Field, Texas, greatly enjoyed being a host to the recent Panama Flight, composed of some 24 officers and 17 enlisted men, with Captain H.H. Couch in command of the flight and Captain T.H. Baxter as flight leader, who arrived on March 26th, ferrying ten Bombing planes from Panama to the Depot for reassignment to various other stations. The flight departed on March 30th, ferrying back to Panama ten Bombardment planes, recently overhauled by the Depot. The flight was accompanied by an OA-8 Amphibian plane.

General officers of the Air Corps, who were recent visitors at the San Antonio Air Depot, included Brigadier General Frederick L. Martin, Third Wing Commander, Barksdale Field, La., on March 20-21, during the course of a cross-country flight to this vicinity, and Brigadier General George H. Brett, Chief of the Materiel Division, Air Corps, on April 3rd. This was General Brett's first visit to the Depot since his recent appointment to his present position. He was accompanied by Major T.H. Chapman, of the Materiel Division. They left on April 4th en route for a visit to the Sacramento Air Depot.

RANDOLPH FIELD CADET DIES IN CRASH

Flying Cadet Warren L. Ward, 27, of Auburn, Nebraska, was instantly killed shortly before noon on April 5th when his Basic Trainer, a BT-9, crashed from a low altitude just a half mile short of Krueger Field. Witnesses declare that Cadet Ward, who was practicing solo landings at the auxiliary airrome was in a gliding turn into the field when the plane whipped into a spin from 500 feet.

Entering Randolph Field in the October, 1938, Class, Cadet Ward successfully completed the Primary Stage and started his Basic training on February 25th. He had more than 35 hours' flying time in the BT-9 type plane at the time of the accident.

Funeral services were held in the Randolph Field Chapel on April 5th. Flying Cadet Robert D. Postlewaite accompanied the remains of the deceased Flying Cadet to Auburn, Nebraska, as official escort.

ARMY DAY AT CHANUTE FIELD

"Open House" for Army Day, April 6th, was held at Chanute Field, Rantoul, Ill., and it proved to be the most successful celebration of this event in the history of that field.

The preparations for this event and the publicity incident thereto were effectively handled, and this, coupled with favorable weather, resulted in an outpouring of more than 65,000 visitors.

The local and Chicago newspapers featured the "Open House" idea, published numerous photographs of the field activities and cooperated generally in presenting the Chanute Field invitation to the citizens of Illinois.

Radio Station WDWS, of Champaign, Ill., donated thirty minutes of radio time during the evening of April 5th, and the field supplied the entertainment. The Chanute Field Wing Chorus, an organization of thirty male voices, under the direction of Chaplain Wallace I. Wolverton, assisted by 2nd Lieut. Paul H. Dane, Air Corps, appeared in a program of five numbers. Major Harry A. Johnson, Air Corps, read an especially prepared invitation to the public. The program was well conducted and, no doubt, contributed materially to the success of Army Day.

The features of "Open House" included tours of the Air Corps Technical School while classes were in attendance, special displays of student work and airplane displays. Outbound traffic was routed through the new construction area and afforded all visitors an insight as to future conditions at the field. Major Winfield S. Hamlin, Air Corps, was the officer in charge of parking and traffic.

The success of the program was gratifying to the personnel of Chanute Field, and they feel that their efforts have, in a measure, served to inform the citizens of the community of the peacetime activities of an Army Air Corps station and the Air Corps Technical School.

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QUARTERMASTER GENERAL VISITS CHANUTE

Unannounced, Major General Harry Gibbins, Quartermaster General of the Army, paid a brief visit to Chanute Field on April 6th. General Gibbins arrived in Champaign, Ill., during the evening of the preceding day and was the overnight guest of Colonel Gerald C. Brant, Air Corps, Commandant of the Air Corps Technical School.

General Gibbins visited Chanute Field on Army Day, and numerous visitors were present when the customary salute to a General officer was fired.

The Quartermaster General met with Captain Benjamin F. Vandervoort, Quartermaster Corps, Constructing Quartermaster, and inspected the new construction. He

expressed his pleasure at the progress of building and stated that he would shortly depart for Scott Field for a similar inspection.

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WHERE IS SELFRIDGE FIELD?

It is said that visitors see and know more about a locality than the inhabitants who have lived there for years. "This would appear very true," declares the Selfridge Field Correspondent, "for sometime back two officers walked down Woodward Avenue (in Detroit) with the express purpose of determining just what percentage of strangers they accosted could tell them where Selfridge Field was. From Grand Circus to the City Hall, twenty individuals who appeared to be representative citizens were asked the question 'Where is Selfridge Field?' Of the twenty, three had a very definite and accurate idea of its location; five had a very general idea; four had a vague idea and eight did not have the remotest idea where it was located, although some of them knew it was some place in Michigan.

"Here at the very door of Detroit, adjacent to the city of Mt. Clemens, is located Selfridge Field, the home of the renowned First Pursuit Group. This unit's war record is outstanding and comparable to none. It has to its credit more enemy planes than the combined U.S. Air Units which fought in France. It names amongst its former members the most famous 'Aces' of the American forces, including Eddie Rickenbacker, America's Ace of Aces, who commanded one of its squadrons, the 94th Pursuit Squadron. Incidentally, that Squadron is appropriately commanded at present by Major Harold H. George, Air Corps, himself a famous 'Ace' during the World War. Yes, the First Pursuit Group is, indeed, steeped in glorious traditions.

"Every working day of the year, single airplanes and large formations can be seen practicing their maneuvers over Selfridge Field and adjacent territory. The drone of the powerful motors of the latest high speed Pursuit planes, the 'fighters' of the skies, is commonplace to the people of Mt. Clemens. But few realize that each maneuver is a definite item in the training of these guardians of our air - that each flight has a purpose in the scheme of national defense.

It is evident that a great portion of the populace in the vicinity of Detroit are unaware that they have a sky protector of such magnitude and efficiency within their borders. Selfridge Field is not a restricted area, and the public is privileged to visit it at any time during daylight hours, to inspect the equipment and to witness the operation. In fact, it should be the duty

(Continued on Page 10).

TRANSIENT AIRCRAFT AT LANGLEY FIELD

By Norman E. Noll

In checking the records of the emergency crew at Langley Field, Va., it was learned that members of this organization during the Fiscal Year 1938 proved themselves an important factor to the local division of the Army Air Corps, for they participated in the required service, inspection and maintenance labor of approximately 3,600 military and civilian aircraft coming from localities all over the United States.

Second Lieut. Richard Kight, Officer in Charge of the Traffic Section and the emergency crew, announced that of the above number of military and civilian aircraft which were serviced, approximately 1700 were stored overnight in local hangars.

The emergency crew, now consisting of three noncommissioned officers and eight privates, who hold various classifications of Air Mechanics ratings, was formed some 14 years ago, and occupied the old Operations Building of the 59th Service Squadron, which was commanded at that time by Major William Hayward, who recently retired from the service. The outfit was maintained with the Service Squadron for a period of almost ten years before joining with Base Headquarters and 1st Air Base Squadron in March, 1935, when the General Headquarters Air Force was created.

Naturally, like the servicing of a family automobile at a nearby garage, someone must do the cleaning, servicing, lubricating and adjusting labor on all visiting aircraft, and so upon the shoulders of the members of the emergency crew were placed the important responsibilities of keeping the planes in safe mechanical operation, inspecting the radio and auxiliary equipment and determining whether or not transient aircraft were in safe condition for the continuance of a further scheduled navigation training flight.

Included among the leading civilian aircraft handled by the emergency crew are those flown by inspectors of the Civil Aeronautics Authority, who arrive from Washington once each month for the purpose of inspecting commercial aircraft in this locality.

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Where is Selfridge Field (From Page 9)

of each American citizen to obtain all the information possible of the present active units of national defense within his locality. For this reason, there are no restrictions placed on visits of the public.

"To obtain the most knowledge a visit during the mornings of week days affords the maximum opportunity to view all activities."

GRADUATION OF FLIGHT SURGEONS

The following-named Medical Officers, who have been pursuing the four months' basic course of instruction at the School of Aviation Medicine, Randolph Field, Texas, graduated as Flight Surgeons on March 31, 1939, and were assigned to duty at the station appearing after each name:

Captain John D. Morley, France Field, Panama Canal Zone;

Captain Clarence A. Tingman, Selfridge Field, Mt. Clemens, Mich.

1st Lieut. Levi M. Browning, March Field, Riverside, Calif.

Captains Raymond W. Kerwin, Medical Corps Reserve, Chicago, Ill., and Aaron H. Horland, National Guard of New Jersey, Newark, N.J., joined the class on February 15, 1939, for the six weeks' practical course. Both officers, having already completed the extension course prior to coming to the School, graduated with the resident class as Flight Surgeons.

Colonel A.W. Robins, Commanding Officer of the Air Corps Training Center, delivered a very interesting and inspiring address to the class, following which he presented diplomas to each of the students and added his personal congratulations and words of good cheer.

The introductory remarks were made by Lieut. Colonel Fabian L. Pratt, Medical Corps, Commandant of the School of Aviation Medicine. The invocation and benediction were delivered by Chaplain J.W. Westerman, of Randolph Field. A number of distinguished guests, relatives and friends of the student officers were present.

This class makes the forty-ninth to graduate from the School since its establishment in 1919. In addition to the resident courses, the School also conducts a correspondence course for medical officers of the Organized Reserves and the National Guard. There are 448 students enrolled in this correspondence course at the present time.

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Second Lieutenants Phillip Thaddeus Durfee and Jack Ferguson Todd, Air Reserve, the former hailing from Barlingame, Calif., and the latter from Visalia, Calif., have been assigned to extended active duty to April 6, 1940. Lieut. Durfee was ordered to Hamilton Field, Calif., and Lieut. Todd to March Field, Calif.

Announcement was made of the appointment of Captain Cornelius O'Connor, Air Corps, to the grade of Major (temporary) with rank from March 20, 1939.

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A BANQUET FOR KELLY FIELD CHOW

A letter recently received by the Mess Sergeant of the Kelly Field Flying Detachment from the father of a Flying Cadet, who is a student in the Pursuit Section of the Air Corps Advanced Flying School, reads as follows:

"Dear 'Sarg':

My son, F/C A. V. has written to me several times about the wonderful food in the mess at the cadet mess. I had the pleasure of visiting Kelly Field and my son last week March 10th, 11th and 12th and being there at noon mess my son asked me to eat with him and I readily accepted as I still had visions and remembrances of the Army food of '17, '18 and '19 and had not swallowed his letters about the food at Kelly.

Well, Friday I had lunch with him and it was good but I did not say anything. Sunday I had lunch with him again and that was too much. I had to fess up that he was right. After the meal I went with him to tell you personally about it but was informed by the cook that you had left so am taking this means to let you know that all that my son has written is true and that the quantity, quality, and seasoning is all that any fair minded person could possibly want or wish for. All I have heard is 'Oh Boy the food at Kelly.' So I say 'Sarg' you and the Cook must be the cause of those earnest desires of the Cadets to get over to Kelly Field."

Staff Sergeant Childress, of Headquarters and Headquarters Squadron, Air Corps Advanced Flying School, is the Mess Sergeant of the famous Kelly Field Flying Cadet Detachment Mess.

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COLONEL BRANT ADDRESSES MILITARY ORDER OF THE WORLD WAR.

Colonel Gerald C. Brant, Air Corps, Commandant of the Air Corps Technical School, substituting for Major General Henry H. Arnold, Chief of the Air Corps, was the principal speaker at the Army Day Celebration and Banquet conducted by the Military Order of the World War in St. Louis, Mo.

General Arnold was prevented from attending the banquet, due to the press of official business. Colonel Brant entertained the Quartermaster General of the Army, Major General Harry Gibbins, at Chanute Field during the morning of April 6th, and departed, via air, early in the afternoon to fill the speaking engagement in St. Louis.

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Master Sgt. Paul Kurutz, 11th Air Base Squadron, Air Corps, is placed on the retired list at Randolph Field, Texas, effective April 30, 1939.

FLYING CADETS ARE NOT ALL NOVICES

The Primary Stage at Randolph Field usually expects to start training Flying Cadets whose association with airplanes has been limited to seeing them from afar, but the present class of more than 350 student pilots built up 3,030 hours of flying time before reporting to the "West Point of the Air."

Thirty-one members of the class of 40-A had flown solo in planes, varying from the tiny power gliders to the larger single-engined cabin type airplanes. One Flying Cadet has a background of more than 400 hours, while one young man reported his total flying experience as "one hour dual--one hour solo--one landing solo."

A total of 69 of the Cadets had previous flying time dual before entering Randolph Field, their records show.

During the first two weeks of the present Primary class, more than 1,900 hours were flown, bringing many of the students up to and over the hump of their first solo. The "Dodoes" - those who haven't soloed, are beginning to feel the weight of their goggles around their necks, the traditional position for goggles at all times, except when actually in an airplane. "I thought the weight of these things would put a permanent hump in my back," one cadet declared to his instructor, as he proudly raised his goggles to his forehead after his first solo.

Two officers who were recently assigned to the Primary Stage as instructors are Lieuts. L.W. Proper and C.E. Peeler. The previous stations of these two officers were in Hawaii and Panama, respectively.

The Basic Stage at the Primary Flying School continues to maintain the schedule of flying despite the spring fog that often rolls in to blanket the air-drome during the early morning hours. Night flying, both dual and solo, is well under way, flare landings having been started.

Lieut. A.O. Lerche, former instructor on the Basic Stage, who received a commission in the Corps of Engineers, U.S. Army, last year, has been transferred back to the Air Corps and assigned to his former duty of instructor at Randolph Field. Lieut. Lerche spent his tour with the Engineers at Fort McIntosh, Laredo, Texas.

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Gunnery exercises for the 15th Observation Squadron, Scott Field, Ill., began April 3rd, when the outfit, under the command of Major Baez, took off for Eglin Field, Valparaiso, Fla. If shooting weather holds up, the organization expects to get in plenty of practice, as it will be down in Florida for the month of April.

BOMBING TARGETS FOR AIRMEN IN HAWAII

Members of the 5th Bombardment Group in the Hawaiian Department have for some time been endeavoring to construct and provide suitable targets for bombing practice. Constant effort resulted in a considerable improvement of target facilities, but weather conditions and other restrictions imposed by nature have made complete success difficult. While perfect flying weather is the rule rather than the exception in this general area, it is almost axiomatic that there are a few clouds over certain parts of the Islands, especially Oahu. The fact that these clouds usually exist over locations most suitable for target areas causes no end of trouble. In addition, the physical features of Oahu are such that these areas are within the danger zone of seacoast and anti-aircraft artillery when those units are conducting firing.

Two targets were constructed and fixed in position in desirable locations adjacent to Oahu. They have been used for considerable bombing but, as indicated, use of either or both is not always feasible. Under the accelerated program of bombing training, these targets are entirely inadequate for the needs of the Group. One means of solution has been in the use of aluminum slicks.

Certain designated areas, usually free of clouds, have been assigned for slick bombing. When neither of the fixed targets is available, it is often possible to continue bombing by dropping slicks in one of the areas assigned. The 23rd Bombardment Squadron has just completed a course of TR 440-40 bombing, using slicks extensively. Bombing was conducted every flying day, which would have been impossible if it had been necessary to use one of the fixed targets at all times. In general, very satisfactory results were obtained. Slick bombing, however, is hardly a complete solution of the problem. The slick disintegrates quickly in a heavy sea and is often difficult to locate, especially when approaches are made at any angle towards the sun. The expense of slick material is another adverse factor. Slicks are usable, however, and the fact that they provide needed targets is welcomed by the 5th Bombardment Group.

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Two Captains of the Army Air Corps were recently promoted to the grade of Major (temporary), Captain Park Holland, with rank from April 2, 1939, and Captain Donald F. Stace, with rank from April 10, 1939.

First Lieut. Loren B. Hillsinger, Air Corps, was transferred to the Cavalry, April 5, 1939, and assigned to the 2nd Cavalry at Fort Riley, Kansas.

RANDOLPH FIELD PARENT-TEACHERS ASSN.

The Parent-Teachers Association of the Randolph Field Grade School recently held their annual election of officers, with results as follows:

President, Mrs. Arthur LaSalle Smith; Vice President, Mrs. Bernard Wallace; Secretary, Mrs. Paul Jacobs; Treasurer, Mrs. Wilber Lage, and Historian, Mrs. Robert Warren.

Following the election, an interesting and educational lecture was given by Dean Shelby, of the Department of Education, University of Texas. The Dean spoke on "Radio in Education." The entire school was fortunate in having Dean Shelby present and being able to hear this authority to speak on a subject in which he has won world renown. Dean Shelby has received the Rockefeller Education Award for his treatise on this subject.

"The Parent-Teachers Association," declares the News Letter Correspondent, "can well afford to be proud of their local accomplishments in the past year, and their efforts as interested parents has brought to the School many celebrities who, in their treatment of many educational subjects, have brought about a closer and more cooperative understanding between the Parent and the instructor."

"The Randolph Field Post Grades School is indeed a source of pride to us parents at this command who are fortunate enough to have children attending the School, and in no small way do we attribute the high standing of the School to the Principal, Miss Sheila Burcham, assisted by Miss Jane Pope, Miss Lucille Jennings, Miss Dorothy Scully and Miss Betty Montgomery, for in their inauguration and execution of modern instruction principles who knows but from this School the future CHIEFS OF THE AIR CORPS may arise."

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PERVERSITY OF THE WEATHER

The 94th Pursuit Squadron, 1st Pursuit Group, Selfridge Field, Michigan, completed a very constructive period of training at the gunnery camp at Valparaiso, Florida. First Lieut. Anderson remained several days after the Squadron returned home and reports that the day after the Squadron left the weather cleared and the winds remained calm for several days. This is rather ironical, because for the nine weeks the Squadron was at Valparaiso there were only four or five days suitable for record flying, and it surely needed a couple of good days towards the end of the camp to finish record.

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NEWSPAPER FEATURES FULL PAGE STORY ON AIR CORPS TRAINING CENTER.

A full page story covering the one-year course of training at the Air Corps Training Center appeared in the Sunday edition of the KANSAS CITY STAR on March 26th. Photographs, supplied by the Randolph Field Photographic Department, supplemented the article, written by Mr. Justine D. Bowersock, aviation editor of the STAR, after a two-day visit to the South Texas School.

"When a student is 'washed out,' as they say, it will be the decision of perhaps six officers who have had a total of fifty man-years' experience as fliers," Mr. Bowersock declared in his story, which pointed out that, contrary to the opinion of many uninformed, every effort is made to complete the training of as large a percentage of student pilots as possible. He outlined in detail the procedure of compiling daily grades for each student, followed at periodic intervals by check rides by the flight commanders. Concrete examples, without names, were cited by Mr. Bowersock, one case showing that a student had been transferred to another instructor when he failed to progress satisfactorily with the original one. Later rides with two flight commanders and, finally, the Primary Stage Commander, confirmed the statement of the first instructor that the student did not have the "makings of a military flier," as Mr. Bowersock phrased it.

The KANSAS CITY STAR Aviation Editor was given a taste of actual instruction on a Primary Trainer to give him an insight into the methods used. This was also incorporated in his feature story.

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ASSIGNMENT OF AIR CORPS OFFICERS TO COMMAND AND GENERAL STAFF SCHOOL.

Under Special Orders of the War Department, recently issued, nine Air Corps officers are assigned to duty as students at the Command and General Staff School, Fort Leavenworth, Kansas, for the 1939-1940 course, reporting at this School not later than August 30th next.

Five of these officers, Major James A. Mellison, Captains Charles P. Cabell, John H. McCormick, William L. Ritchie and Donald F. Stace, are at present on duty as students at the Air Corps Tactical School at Maxwell Field, Ala.

The remaining four officers are: Major Samuel M. Connell, Mitchel Field, New York.

Major Edward W. Raley, Office of the Chief of the Air Corps, Washington, D.C.

Major George P. Tourtellot, Instructor, Air Corps, Michigan National Guard, stationed at Detroit, Mich.

Captain Thomas M. Lowe, Fort Columbus, Columbus, Ohio.

ADDITIONAL FUNDS FOR CONSTRUCTION PROJECTS AT RANDOLPH FIELD.

Sums of money from various sources, totalling \$47,813.55, have been allotted to Randolph Field, Texas, for necessary construction and repair work, according to Major F. D. Shawn, Quartermaster Corps, the Post Quartermaster. A W.P.A. project, amounting to \$40,000, has been approved for the rehabilitation of various buildings, grounds, and for the construction of additional landing mats. Work on this project has been started and will provide employment for 182 skilled and semi-skilled men until June 30th, it was estimated.

Another allotment from the War Department, totalling \$11,584.55, has been made to Randolph Field for the replacement of certain underground cables. It is estimated that 38,000 feet of trenching will be necessary to complete the work. Improvements to the Aqua gasoline system also will be made from funds received from the State W.P.A., amounting to \$6,229.00. Connecting lines from the gas system to the main storm sewer system will be made with these funds.

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RIFLE AND PISTOL SHOOTING COMPETITION IN 46TH SCHOOL SQUADRON.

The annual small bore pistol and rifle matches for the Major Stanton T. Smith Trophy, conducted by the 46th School Squadron, were captured by Corporal Charles W. Jones with an aggregate score of 434. Corporal Jones thus displaced Corporal Norman G. Hower as Squadron Champion. The matches were held on the indoor range of the Squadron at Randolph Field.

Corporal Jones registered a 90 with the pistol, slow fire; 78 at rapid fire; 98 with the rifle, prone; 81 with the rifle, kneeling, and 81 with the rifle off-hand, to outdistance his closest competitor, Corporal Myron Lamparty, who took second honors with a total of score of 427.

Other good marks turned in by some of the Squadron's shots included Private Elmer Johnson, with a 423 total; Corporal Hower with 421, and Staff Sergeant Bangham, who placed fifth, with 415.

Individual awards were as follows: Pistol medals - 1st place, Staff Sgt. Bangham, with a 95 out of a possible 100; 2nd place, Master Sergeant Stevenson; 3rd place, Corporal Jones.

Rifle medals - 1st place, Corporal Jones, with 266 points out of a possible 300; 2nd place, Private Johnson; 3rd place, Corporal Hower.

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Major Otto G. Trunk, Air Corps, was appointed a Lieut. Colonel (temporary) with rank from April 1, 1939.

NOTES ON AIR CORPS ADVANCED FLYING SCHOOL

Officers of the Air Corps Advanced Flying School, Kelly Field, Texas, once again are confronted with the extremes in height in two of its Flying Cadets now undergoing advanced instruction with the present class (39-B).

Cadet Charles Edward Gregory, a native of Port Lavaca, Texas, who is specializing in Attack Aviation, is nine inches taller than his classmate, Cadet Charles Gardner Chandler, a native of Evanston, Ill., specializing in Observation Aviation, who is 5 feet, 5 inches tall.

Cadet Gregory graduated in 1938 from the Texas A. & M. College with a B.S. degree, while Cadet Chandler attended Northwestern University.

The present class undergoing instruction at Kelly Field consists of 165 students, the second largest class to receive advanced training in the history of the Air Corps Training Center. It is expected that graduation day for this class will be on May 31, 1939.

Eight Flying Cadets of Class 39-B attended Purdue University, West Lafayette, Indiana, prior to their appointment as such. They are Harvey Emil Grieger, Robert Lee Matthews, William Benjamin Reed, John Rinier Van de Lester, Paul Stanley Emrick, Bailey Cavanaugh Cook, Charles Houston Terhune, Jr. and Kenneth Wayne Sprankle.

All of these students, save Cadet Cook, graduated from Purdue with a B.S. degree in Mechanical Engineering. Cadet Cook, son of the late Lieut. Colonel Seth W. Cook, Air Corps, U.S. Army, attended the U.S. Military Academy, West Point, N.Y., for two years; George Washington University, Washington, D.C., for two years, and Purdue University for a similar period of time. He is specializing in Attack Aviation.

Cadets Emrick and Van de Lester are specializing in Bombardment, and Cadets Grieger, Matthews, Reed, Sprankle and Terhune in Pursuit.

With the exception of Cadets Van de Lester, Cook and Terhune, the men of Purdue hold commissions as second lieutenants in the Field Artillery Reserve, having had four years of ROTC training.

First Lieut. James Baird Buck, Infantry, a member of Class 39-B, who is specializing in Bombardment, is the son of Major General Beaumont B. Buck, U.S. Army, Retired. Lieut. Buck graduated from the U.S. Military Academy in 1935, and prior to being ordered to flying training served three years as a commissioned officer in the Infantry.

Texas again leads all other States of the Union in representation in Class 39-B. The Lone Star State leads with 14 students, closely followed by California

with 11, and Illinois with 10. Other States represented by five or more students are Indiana and Minnesota, 7; Florida, Kentucky, Massachusetts and New York, 6; Kansas, Oregon and Pennsylvania, 5.

The only foreign students in Class 39-B are four Philippine Army officers, namely, 2nd Lieut. Bienvenido Exequiel Ferrer, 3rd Lieut. Victor H'Yong, 1st Lieut. Ruperto Bayron Luzon and 1st Lieut. Godofredo Mariano Juliano.

Lieuts. Ferrer and Luzon hold commissions in the regular Philippine Army Air Corps, while Lieuts. Dizon and Juliano, who reported to Kelly Field as Flying Cadets, were recently appointed 3rd Lieutenants by the Commonwealth Government of the Philippines.

Lieuts. Luzon and Dizon are specializing in Observation; Ferrer in Pursuit, and Juliano in Attack.

These four officers have high hopes of satisfactorily completing the advanced course of flying instruction on or about May 31, 1939, at which time they expect to receive orders from their government, through the War Department, assigning them to tactical units of the U.S. Army Air Corps for duty and further instruction, pending the beginning of courses of instruction which they will be selected to pursue at the Air Corps Technical School at Chanute Field, Rantoul, Ill., and Lowry Field, Denver, Colo. Following such post-graduate instruction, they will return to their native country.

Six members of Class 39-B are the sons of Regular Army officers, namely, Lieut. James Baird Buck, Flying Cadet Bailey Cavanaugh Cook, Jerry Dentler Page, Tarleton Harvin Watkins, Harrie Dean Riley and Frederick Gerald Wilson.

Lieut. Buck and Cadet Cook were previously mentioned in these notes.

Cadet Page, son of the late Colonel William Tracy Page, Infantry, born at Manila, P.I., 24 years ago, graduated from the University of Southern California in 1937 with a B.S. degree.

Cadet Watkins is the son of Captain W.W. Watkins, Air Corps, U.S. Army, Aberdeen Proving Ground, Md. He attended the University of Maryland, the University of Dayton and Texas A. & M. College.

Cadet Riley, 25, who was born at Poughkeepsie, N.Y., attended the Michigan College of Mining and Technology for three years. He is the son of Major Harrie D.W. Riley, Corps of Engineers.

Cadet Wilson, 22, son of Lieut. Col. Louis C. Wilson, Q.M.C., was born in Washington, D.C., and graduated in 1938 from Ohio Wesleyan University with a Bachelor of Arts degree.

Cadet Watkins is specializing in Attack, Cadet Riley in Pursuit, Cadet

Wilson in Bombardment and Cadet Page in Observation Aviation.

Seven former enlisted men of the Regular Army are members of Class 39-B, Cadets Harry Gilbert Libbey, Lawrence Monroe Brooke, Clair Edmund Ryan, John Irvine De Vine, Jr., and Ralph Monroe Fawcett serving with the Air Corps, James Dimitri Motyl with the Coast Artillery, and Franklyn Thomas Green with the Corps of Engineers. They are receiving specialized training at Kelly Field, as follows: Flying Cadets Motyl, De Vine and Fawcett as Observation Pilots and Airplane Observers; Brooke and Ryan as Attack pilots and Libbey and Green as Pursuit pilots.

Cadet Libbey, 25, of Mobile, Ala., attended Springhill College, 1934-1935, and Centenary College in 1938.

Cadet Brooke, 24, of Mission, Texas, attended Wentworth Military Academy for two years.

Cadet Green, 25, of Bolivar, New York, attended Cornell University from 1932 to 1934.

Cadet De Vine, 22, of Atlantic City, N. J., attended Pennsylvania Military College from 1934 to 1937.

Cadets Motyl, 27, of Wilson, Conn.; Ryan, 26, of Springfield, Minn.; and Fawcett, 27, of Ottawa, Ohio, received their Cadet appointments through the difficult process of passing the written educational examination required in the absence of the required amount of college credits.

Major Robert T. Cronau, Air Corps, Post Operations Officer of Kelly Field, was recently named as president of a special Flying Cadet Examining Board which will function for a period of two months, beginning April 5, 1938, visiting colleges and universities in the 7th and 8th Corps Areas for the purpose of contacting prospective applicants for appointment as Flying Cadets, selecting and examining applicants for such appointment, and disseminating information on the subject of flying training at the Air Corps Training Center. The states to be visited include Missouri, Kansas, Iowa, Arkansas, Nebraska, Minnesota, North Dakota, South Dakota, Texas, Oklahoma, Colorado, New Mexico and Arizona.

Two other members of the Board are Captain Edward J. Kendricks, Medical Corps, and 1st Lieut. Jacob E. Smart, Air Corps, both of Randolph Field.

Major Cronau, stationed at Kelly Field since September 10, 1936, was Director of Flying of the Advanced Flying School from June 15, 1937, to June 16, 1938. He has been serving as Post Operations Officer since February 18, 1937.

RESERVE OFFICERS COMPLETE REFRESHER COURSE.

Four Reserve officers of the Air Corps, all second lieutenants, satisfactorily completed the prescribed course of instruction at the Air Corps Advanced Flying School, Kelly Field, Texas, on March 31, 1939. They are Albert J. Baumler, of Trenton, N.J.; Christian J. Jensen, of Eureka, Kansas; Seth S. Strachan, of Portland, Oregon, and Wm. H. Turner, of San Antonio, Texas.

Lieut. Strachan, who specialized in Bombardment Aviation, was assigned to duty at March Field, Riverside, Calif., and departed for his new station on April 5th.

Lieuts. Baumler, Jensen and Turner, all of whom specialized in Pursuit Aviation, were assigned for duty with the Air Corps Advanced Flying School on April 1st as instructors in Pursuit, Bombardment and Attack, respectively.

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HANDLING THE AIR TRAFFIC AT THE ARMY FIELDS NEAR SAN ANTONIO.

Kelly Field's Post Operations Office joined with the main lines of the Civil Aeronautics Authority teletype system, beginning on April 1st, to handle aircraft movement messages for all the Army air fields in the San Antonio area (Randolph, Brooks, Duncan and Kelly). The office was tied in with Circuit 53 of the C.A.A. teletype system, which includes nearby as well as distant points.

Three teletype machines were recently installed in the Kelly Field Operations Office. Upon receipt of aircraft movement messages from all points of the United States, the operator delivers them to the Operations Chief Dispatcher who, in turn, posts the various information contained in the messages on the huge Aircraft Traffic Board maintained in that office. The upper portion of the board is reserved for Kelly Field navigation flights, and it is the exception when all lines are not filled in; particularly during student navigation training. The lower part of the board is for the handling of transient aircraft traffic, and hardly a day goes by without at least several visiting pilots' names being registered thereon.

Frequently, and especially over weekends, the twenty or more lines are completely occupied with visiting plane data arriving at Kelly Field from Air Corps stations all over the nation on routine training missions. Aircraft movement messages which concern the other three Army air fields in the San Antonio area are relayed to the respective Operations Offices by Kelly Field

(Continued on Page 16)

PERSEVERANCE WINS

Private Walter Richard Taliaferro, whose name conjures up memories of the early days of military aviation, appears to be on the road toward realizing his ambition of becoming a commissioned officer of the United States Army. Recently this 21-year old enlisted man of Kelly Field, Texas, was the recipient of an appointment to the United States Military Academy, West Point, N.Y., tendered him by the Hon. Brent Spence, representative in Congress of the 5th Congressional District of Kentucky.

Private Taliaferro won the competitive examination conducted by Mr. Spence at Fort Thomas, Ky., last November, and expects to receive orders directing him to report to the United States Military Academy for the class beginning July 1, 1939. He is the son of Lieut. Colonel Lucien H. Taliaferro, U.S. Army, Retired.

Private Taliaferro served a one-year enlistment with the 15th Field, Artillery at Fort Sam Houston, Texas, and then reenlisted with the Air Corps on July 13, 1937, since which time he has been a member of the Headquarters and Headquarters Squadron of the Air Corps Advanced Flying School. During his enlisted service in the Regular Army, he attended the West Point Preparatory School at Camp Bullis, Texas, for six-month periods during the past three years.

Aside from his ambition to graduate from West Point, Private Taliaferro is also anxious to be permitted to undergo flying training at the Air Corps Training Center and become a flying officer, in order that he may follow in the chosen career of his famous uncle, the late 1st Lieut. Walter R. Taliaferro, Aviation Section, Signal Corps, who at the time of his unfortunate death in an airplane accident at San Diego, Calif., in 1915, was the holder of the endurance flying record in heavier-than-air craft.

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Handling Air Traffic at Kelly Field (Continued from Page 15).

on a local or more commonly known "pony" circuit.

Circuit 53 handles only aircraft movement messages, and in view of this exclusive service is able to give instantaneous information to all receiving stations on the movement of aircraft. Weather reports will continue to be received and sent by the Kelly Field Weather Office, which is also housed in the Post Operations Office but as a separate activity, over Circuit 18 of the CAA teletypesystem.

The Kelly Field Operations Office is a beehive of activity, for in addition to handling an immense amount of aircraft traffic movements it also maintains the Flying Time Record Section, which records

the flying time of all the permanent flying personnel assigned to that airdrome, as well as those pertaining to the approximately 200 students normally receiving training at the Air Corps Advanced Flying School. Other activities of the Operations Office include a Map and Navigation Section which maintains and keeps posted the latest navigation maps and information on the many aids to air navigation, for the use of the several hundred rated and student airplane pilots at Kelly Field. The Airdrome Control Section handles incoming and outgoing traffic, and the Miscellaneous Section handles miscellaneous administrative work of this important activity.

Major Robert T. Cronau, Air Corps, is the Post Operations Officer. His staff consists of Warrant Officer Joseph Brown, U.S. Army, Chief Clerk; assisted by Staff Sergeants Collin L. DeBall and Frederick W. Seidler, both veterans of many years service at Kelly Field; and 15 additional enlisted men, all of whom are members of the Headquarters and Headquarters Squadron, Air Corps Advanced Flying School.

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FORCED LANDING REPORT

Poor Doe was flying around one night
As complacent as could be,
Thinking of two months from now,
When a Second "Luey" he'd be.

He was thinking of that Gal back home,
As he whipped about the sky,
Everything was as he had planned,
And his spirits rose on high.

Suddenly his motor conked,
It sputtered and it spit.
Poor Doe just sat there frozen,
And he nearly had a fit.

All his dreams turned to the past tense
His head whirled as it fell,
"An Officer-husband I'll never be,
Cuz I'm headed straight for H..."

But he did recover consciousness
And glided toward the Field,
He made it by the Fates above
And the magic that they wield.

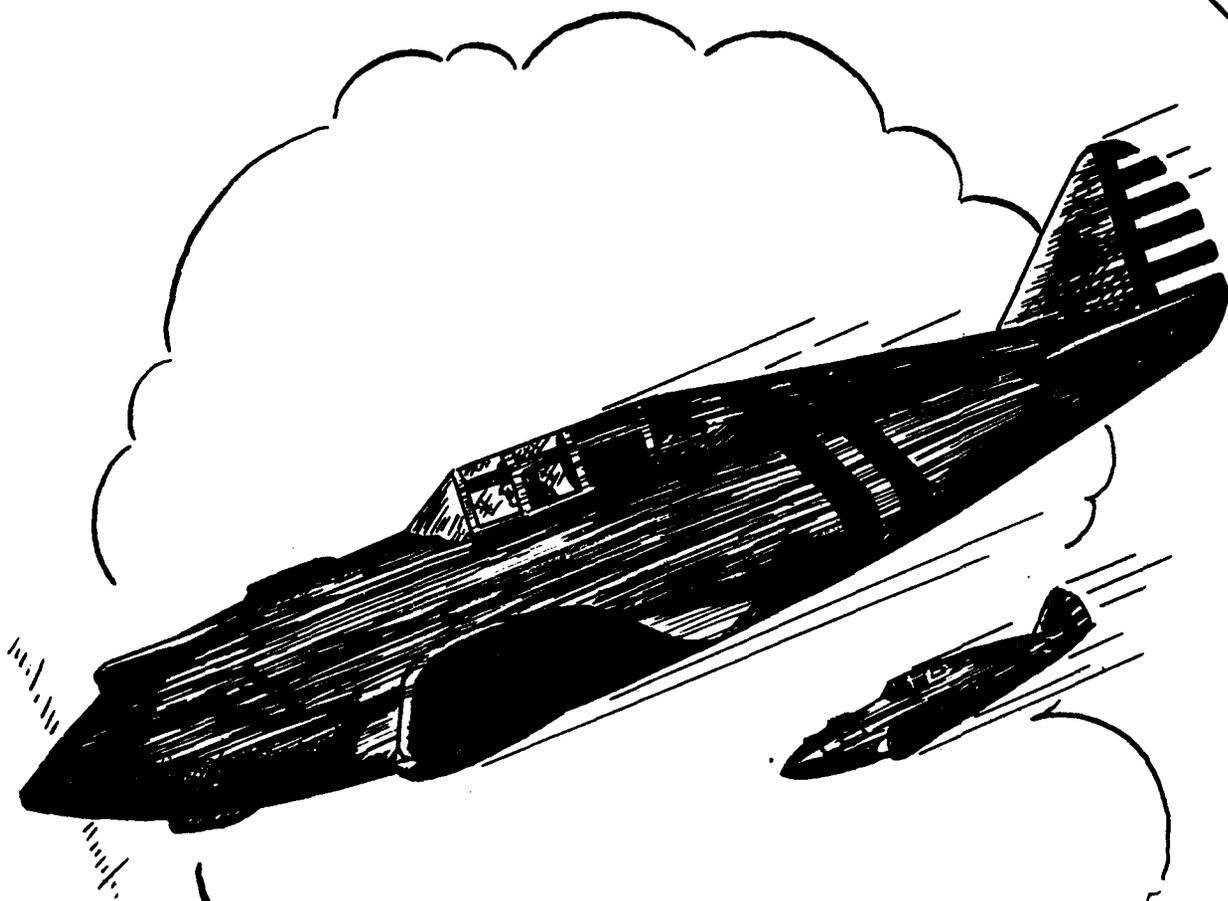
"A 5 star landing this will be
And my classmates I will thank."
But instead he got two silver stars
For running on an empty tank.

- Submitted by an anonymous Attack student, A.C. Advanced Flying School.

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The Annual Conference of Air Reserve Officers will be held this year at Mitchel Field, L.I., New York, on Monday, Tuesday and Wednesday, October 9th, 10th and 11th. October 10th is designated as "Air Reserve Officers Day" at the N.Y. World's Fair.

The Air Corps News Letter -



ISSUED BY OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT WASHINGTON, D.C.

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Information Division
Air Corps

May 1, 1939

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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HEAVY DUTY TRACTOR FOR TOWING AIRPLANES

A heavy-duty tractor for towing large airplanes has appeared on the flying line at Wright Field, Dayton, Ohio. As it pulls the great skyliners from flying field to hangar, it reminds one somewhat of the small tugs which draw the huge ocean liners from their harbor piers out into deep water.

This small tractor, although not constructed of iron, is known in hangar parlance as the "iron mule." Weighing approximately 6,000 pounds, it develops a drawbar pull in excess of 4800 pounds. It is 108 inches long, 67 inches wide, and has a 6-inch clearance. Fenders cast to a thickness of approximately four inches provide weight and ruggedness. It is designed especially for

towing large airplanes such as the B-15, B-17, etc. It is powered with an engine capable of 40 brake horsepower at 1800 r.p.m.

Operated by one man with the conventional automotive controls, it is about twice as powerful as the towing trucks previously designed. It starts very gently, so that there is no jar to the airplane. The top speed is a trifle over 15 m.p.h., while its low speed is that of barely perceptible movement. It is capable of turning within a circle having a radius of 122 inches.

The towing facilities on airports for large airplanes will be greatly improved by the advent of this equipment.

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ACCESSORY POWER PLANTS

The Materiel Division, Wright Field, Dayton, Ohio, has been actively engaged for some time in the development of accessory power plants. These power plants, which consist of a small gasoline engine on which is mounted an electric generator, are for the purpose of making available power other than that obtained from the aircraft propulsion engine. This additional power of the accessory system is used for the operation of generators, pumps, and many other items of electrical equipment.

A 10 KVA (kilovolt-amperes) power plant, designated as Westinghouse AC-101, has been delivered to the Materiel Division and has successfully completed a 150-hour type test. This is the first unit to complete such a test, as the two power plants now being used in the XB-15 airplane were submitted to only a 50-hour test, due to the necessity of delivering them to the airplane contractor.

The Westinghouse unit is small and compact and occupies the space of a cube approximately two feet on each side. It consists of a four-cylinder, air-cooled engine with double crankshafts. A roots blower to provide internal supercharging is mounted between and is driven by these crankshafts. A 10 KVA alternator is mounted directly on the engine crankshaft and crankcase. The weight of the unit is 330 pounds, which is distributed

as follows:

Engine,	165 pounds
Alternator,	125 "
Voltage regulator,	25 "
Battery charger,	15 "

Tests show that the unit could be rated at approximately 25 percent higher capacity than required by Air Corps specifications. This over-rating accounts for a part of the fixed weight, which is higher than desired. Economical fuel results were obtained during the type test. Values for specific fuel consumption were as follows:

50 percent load -	1.73 lb/kw. hr.
75 percent load -	1.3 lb/kw. hr.
100 percent load -	1.1 lb/kw. hr.
125 percent load -	1.0 lb/kw. hr.
150 percent load -	0.96 lb/kw. hr.

These values may be compared with those of the conventional engine-driven generator now used in the majority of Air Corps airplanes, where a specific fuel consumption of 1.1 pounds per kilowatt-hour was obtained. The oil consumption at 75 percent load was .0364 pound per kilowatt-hour. At this value it would require two gallons to provide sufficient oil with a 50 percent reserve for a 50-hour flight.

The unit will be subjected to further development to reduce the fixed weight.

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GRADUATION DATE SET FOR CLASS 39-B

Instructions from the War Department were received recently by the Commandant of the Air Corps Advanced Flying School, Kelly Field, Texas, that the present class now undergoing instruction at this school will be graduated on Thursday, May 25, 1939, with the customary graduation day ceremonies.

The Flying Cadets are to be commissioned second lieutenants in the Air Corps Reserve on May 25th, discharged from their enlisted status the same day, and ordered to extended active duty at Kelly Field on May 26th for a period of ten days prior to being ordered to various Air Corps stations. These newly commissioned Reserve officers will be placed on commutation of quarters status for the ten-day period of active duty at Kelly Field.

Class 39-B, which commenced training at Kelly Field on February 25, 1939, consists of 4 Regular Army officers, 4 foreign officers and 157 Flying Cadets, and no losses have occurred to date. The class has been making satisfactory progress and is maintaining its prescribed schedule. Since training began, a total of 4½ days was lost from flying, due to inclement weather.

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LAST OF RESERVE OFFICERS COMPLETE REFRESHER COURSE AT KELLY FIELD.

The last of the 18 second lieutenants of the Air Corps Reserve have completed the special refresher course of instruction at the Air Corps Advanced Flying School, Kelly Field, Texas.

Second Lieutenants Arthur A. Aro, Earl A. Field, Walter R. Ford, Arthur A. Goldsmith and Douglas N. MacOdrum, completed the prescribed course on April 7th. Lieuts. Aro, Ford and MacOdrum specialized in Bombardment Aviation, the first two named officers being assigned to March Field, Calif., and the last named to Mitchel Field, N.Y. Lieuts. Field and Goldsmith specialized in Attack Aviation, the former being assigned to Barksdale Field, La., and the latter to Langley Field, Va.

Nine of these officers completed the prescribed course of instruction on April 14th. Lieuts. Wilson Gillis, Jesse C. Hayes, Clifford W. Ludwig specializing in Attack Aviation; Lieuts. George W. Ireland and William N. Vickers, Jr., in Bombardment Aviation, and Lieuts. Fred S. Shine, James W. Stowell, John M. Tillman and Andrew B. Walker in Pursuit Aviation.

Lieuts. Gillis, Ludwig, Shine, Walker, Tillman were assigned to station at Barksdale Field, La.; Lieuts. Hayes and Vickers to March Field, Calif., and Lieuts. Ireland and Stowell to Langley Field, Va.

The other four of the 18 Reserve offi-

cers referred to, completed the course on March 31st, as mentioned in the previous issue of the Air Corps News Letter. These four officers are Lieuts. Albert J. Baumler, Christian J. Jensen, Seth S. Strachan and William H. Turner.

Lieut. Strachan, who specialized in Bombardment, was assigned to duty at March Field, and the remaining three officers, who specialized in Pursuit, were assigned to duty at the Advanced Flying School, Kelly Field, as flying instructors.

A total of 42 second lieutenants of the Air Corps Reserve were given the refresher course of training at Kelly Field during the period of Classes 39-A and B, bringing the grand total to 75 trained since the initiation of this type of training.

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NARROW ESCAPE FOR KELLY FIELD CADET

Flying Cadet John Irvine DeVine, Jr., 22, of Atlantic City, N.J., a student in the Observation Section of the Air Corps Advanced Flying School, Kelly Field, was on April 19, 1939, forced to resort to his parachute in order to save his life.

Cadet DeVine had been on a day and night navigation mission to Barksdale Field, La., in an O-25 airplane with the Observation Section. After clearing Hensley Field, Dallas, Texas, on the return night flight, he was unable to regain control of his airplane which had gone into a spin. He resorted to his chute and landed safely about 10 miles south of Waco, Texas. The O-25 airplane he was piloting was completely demolished though, fortunately, there was no damage to private property or injury to either the pilot or other persons.

Cadet DeVine phoned this information to Kelly Field Headquarters late Wednesday night, April 19th. At this writing the full details as to the cause of his "bailing out" are not definitely known.

Captain Charles D. McAllister, Air Corps, Base Engineering Officer and member of the Aircraft Accident Classification Committee, departed from Kelly Field in an O-43 airplane for the scene of the crash, in order to investigate the accident and return Cadet DeVine to Kelly Field.

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Two Air Corps officers under orders for duty in the Office of the Chief of the Air Corps, Washington, D.C., are Majors Harold L. Clark and Paul E. Burrows. The former is nearing the completion of his tour of duty in the Hawaiian Department, while the latter has been serving with the Organized Reserves in the 9th Corps Area and stationed at Pearson Field, Washington.

V-8043, A.C.

STUDY COURSES FOR OFFICERS OF FIFTH BOMBARDMENT GROUP.

Examinations held in several subjects during the last week of March completed most of the training conferences that have been conducted every available afternoon during this calendar year. The courses which have been completed include Bombardment Aviation and Air Force, conducted by Major K.N. Walker; Reconnaissance Aviation, by Captain Homer W. Ferguson; and a course in Chemical Warfare, under the supervision of the 18th Wing Chemical Officer, Captain Sterling E. Whitesides, C.W.S. In addition, several lectures of one or two-hour duration have been given on important subjects.

The courses in Bombardment Aviation and Air Force followed the latest texts on the subjects now being used for instruction by the Air Corps Tactical School. A complete and detailed course of instruction was given, at the same time affording officers the opportunity of advancing their own theories, questions and ideas relative to all phases of the training. All officers of the Group feel that instruction in these courses has been of the greatest interest and has provided an unusual opportunity for training.

The course in Reconnaissance Aviation was especially interesting to officers of the Fifth Group, due to the fact that most officers were trained in Bombardment Aviation. The problems and scope of Reconnaissance Aviation, as ably explained by Captain Ferguson, were to many an entirely new phase of training and, therefore, proved to be extremely interesting.

The Chemical Warfare course included all officers, as well as noncommissioned officers of the first three grades, of the Air Base and of the Group who had not previously attended the school. A total of ten hours' instruction was given to more than two hundred officers and noncommissioned officers. Included in the course was a trip to the Chemical Warfare Depot at Schofield Barracks, T.H., where practical instruction was given in identifying modern war gases and in neutralizing contaminated areas.

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ASSIGNMENTS OF INDUSTRIAL COLLEGE GRADUATES.

Effective upon the completion of their present course of instruction at the Army Industrial College, Washington, D.C., Majors Howard Z. Bogert, Emile T. Kennedy, Alfred W. Marriner, Clifford C. Nutt, Rudolph W. Propst, Captains Lawrence C. Craigie and Clarence S. Irvine are assigned to duty with the Materiel Division, Wright Field, Dayton, Ohio, and Major Fred S. Borum in the Office of the Chief of the Air Corps, Washington, D.C.

RECOGNITION FOR "THE FLYING DOG."

With the greatest of solemnity and military pomp, a citation was bestowed upon a member of the command of Hamilton Field, Calif., at 10:00 a.m., Saturday morning, April 8th.

That member was "Teddy," the Flying Dog.

It seems that Teddy first came to the notice of the Hon. Louis Johnson, Assistant Secretary of War, during a flight in which both participated (part of Teddy's regular cross-country training), when Mr. Johnson thought he could partake of a sandwich, which had been brought along for lunch, without offering some to the pup. Teddy not only protested, but did it in typical dog fashion, via the teeth way on one of Mr. Johnson's pedal extremities.

It was nip and tuck over the lunch for a while, it is told, but all ended well, with Teddy reclining, for the remainder of the flight, on the lap of the Assistant Secretary of War.

The Hamilton Field Correspondent transmitted to the Information Division a photograph of the citation, which is printed in Old English type. Two lengths of narrow ribbon are fastened along the left margin of the document by means of two seals, one at the top and one at the bottom of the sheet.

The citation reads as follows:

"To All Who Shall See These Presents, Greetings:

This is to Certify that
"TEDDY"

is hereby awarded this
Distinguished Flying Dogtificate
for

Especial Performance
While Participating in Aerial Flights

Teddy, flying mascot of the Seventh Bombardment Group, Hamilton Field, California, by his endurance and dignified restraint, by his alertness and pleasing impression on airplane personnel during long, fatiguing flights, by his enthusiasm while flying 524:45 hours, has brought great credit to himself, high morale to the Seventh Bombardment Group, and fine service to the Army Air Corps.

Given under my hand at the City of Washington

This first day of April, 1939.

LOUIS JOHNSON
The Assistant Secretary of War"

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Lieut. Colonels Laurence F. Stone and Gerald E. Brower, Air Corps, are under orders for duty as Instructors at the Command and General Staff School at Ft. Leavenworth, Kans. At present Col. Stone is on duty at Selfridge Field and Col. Brower is a student at the Army War College.

KELLY AIRMEN SEARCH FOR COAST GUARD PLANE

At about 9:00 a.m., April 7th, the Commandant of the Air Corps Advanced Flying School, Kelly Field, Texas, Colonel Frank D. Lackland, received a radio-gram from the Commanding Officer of Biggs Field, El Paso, Texas, stating that Lieut. Grantham, of the Coast Guard Air Service, had left Biggs Field the day before for Galveston, Texas, via Del Rio and San Antonio, and that no word had been received from him after he was sighted over the Airdrome at Marfa, Texas. The radio asked for assistance from Kelly Field.

Within an hour after the receipt of this information, a crew of eight officers, one airplane mechanic and one radio operator, in five Observation type airplanes, in command of Colonel Eugene A. Lohman, Assistant Commandant of the Air Corps Advanced Flying School, took off from Kelly Field to conduct a search for the missing plane, while the local radio stations were requested to broadcast this information and wire any "clues" to Dryden, for Colonel Lohman's information.

Later in the day the Kelly Field party was joined by three Coast Guard planes. The available information was very meager, but the search got under way in the rugged country in the vicinity of Alpine and Marathon, Texas.

The following day, Colonel Lohman received a report that three survivors were at a ranch house 30 miles south of Alpine. They reported that the pilot of the plane, realizing he was in a storm in mountainous country and there was no hope, had ordered them to jump. The three Coast Guard enlisted men were successful in "bailing out" and the pilot went down with his plane, which burned when the crash occurred.

Colonel Lohman stated that the Coast Guard authorities acted very efficiently and were prepared for an intensive search. Two radio trucks were dispatched to Dryden; fuel was placed at Marfa, and authority was obtained from the Mexican government to permit Army and Coast Guard planes and other equipment to enter Mexico at will.

The feeling of respect and cooperation between the two Air services was demonstrated by the promptness with which Army authorities responded to the request to search for the Coast Guard plane, and the manner in which the Coast Guard authorities turned over equipment and other facilities to Colonel Lohman.

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COMMENDATION FOR SERGEANT HARTLEY

Technical Sergeant Earnest H. Hartley, 63rd School Squadron, Air Corps, Kelly Field, Texas, received a letter of commendation from the Commanding Officer of

the Station Hospital at Fort Sam Houston, Texas. Sergeant Hartley was a blood donor on March 27th in the case of Mrs. Madeline Toohy, wife of Technical Sergeant Thomas F. Toohy, Air Corps. This letter was forwarded to Sergeant Hartley by Colonel Frank D. Lackland, Commandant of the Air Corps Advanced Flying School, who added his commendation thereto.

When the call for volunteer blood donors was made, 18 enlisted men of Kelly Field volunteered within the hour, three being sent to the Station Hospital for typing and Sergeant Hartley being selected.

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CHILEAN AIR ATTACHE VISITS KELLY FIELD

Squadron Leader Ismael Sarasua, Air Attache to the Chilean Embassy, visited Kelly Field on April 18th, and was shown all activities and installations there by Colonel Lohman, Assistant Commandant of the Air Corps Advanced Flying School.

Squadron Leader Sarasua expressed his pleasure for the courtesies extended to him and stated that his visit was very instructive. Prior to his arrival at Kelly Field he had visited Langley, Maxwell and Randolph Fields. Upon his departure from Kelly Field he was scheduled to visit Fort Leavenworth, Kansas.

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FILIPINO OFFICER IN FORCED LANDING

Third Lieutenant Ruperto B. Luzon, of the Philippine Army Air Corps, who is a student in the Observation Section of the Air Corps Advanced Flying School at Kelly Field, Texas, made a forced landing about midnight April 19th, some 15 miles north of San Antonio while on a return night flight from Hensley Field, Dallas, Texas, after visiting Barksdale Field during daylight hours. Lieut. Luzon reported that the O-38 airplane he was piloting ran out of gas, and he located a landing area in open country by the use of his aircraft flares. He made a successful landing without any injury to himself or damage to the airplane.

On the morning of April 20th, Captain Russell E. Randall, Air Corps, Chief of the Observation Section, flew an O-38 airplane to the scene of the landing, carrying with him 1st Lieut. Charles F. Densford, Jr., Observation Instructor. The latter, after servicing Lieut. Luzon's airplane, flew it back to Kelly Field.

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During March, the Engineering Department, San Antonio Air Depot, Duncan Field, Texas, overhauled 12 planes and 38 engines and repaired 35 planes and 13 engines

AIRCRAFT CLOCK

By the Materiel Division Correspondent

There has been standardized for Air Corps use an eight-day clock that would seem to be the answer to the question of time for the pilot and navigator for purposes of dead reckoning. This clock is the Type A-8. It is larger than that in present use, having mounting dimensions corresponding to the altimeter, air-speed indicator, and other like instruments.

The indications shown on the dial are conventional or zone time, elapsed time from a departure, and a stop sweep second hand. The dial is $2\frac{1}{4}$ inches in diameter, with the time graduations around the periphery and the hands mounted in the center. The hand runs continuously.

The elapsed time dial is a small circle of graduations between the top of the dial and the center. There are two hands for this dial, indicating hours and minutes. These are controlled by a push knob near the eight o'clock position. Successive operation of the push knob causes the elapsed time hands to start, stop, and to fly back.

The stop sweep second hand is controlled by a push knob at the four o'clock position. Successive operation of this knob causes the sweep second hand to start, to stop, and to fly back. In addition to the seconds indications around the periphery of the dial, there is another small circle of graduations between the six o'clock position and the center. On this dial is indicated the minutes to sixty accumulated by the sweep second stop hand (a minute register). The hand on this dial turns counter-clockwise.

Under the six o'clock position is a small knob controlling the color of a dot immediately above. This is used to stop and start the elapsed time hands at any position of their travel. When the elapsed time hands are started, a dot in that (upper) dial turns to red, when stopped it is half red and half white, and when the elapsed time hands are at their zero position the dot is white. If, for any reason, it is desired to take "time out" on the elapsed time indications, the small knob at the bottom is turned clockwise which causes the lower dot to show white. The elapsed time hands may then be started again by turning this knob counter-clockwise to cause the lower dot to show red.

Regardless of the starting or stopping of the elapsed time and stop sweep second hand, the conventional time indications continue running at the same rate.

The clock is wound by turning the knurled sleeve around the elapsed time push knob counter-clockwise. One should not attempt to turn this knob or sleeve clockwise as there is no ratchet, the incorporation of which would result in

bulky complications in the clock and case.

Every organization conducting service test of this equipment has recommended its standardization.

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MORE P-12 PLANES FOR ADVANCED FLYING SCHOOL.

All of the P-12 type of airplanes in the Panama Canal Zone are being shipped, dismantled, by freighter to the United States, destined for the Advanced Flying School at Kelly Field, Texas.

Despite their age, the P-12's are in excellent condition and show the excellent maintenance they have received in the Panama Canal Department. "Certainly they will be of greater value in training than the older types in use at the present time at Kelly," declares the News Letter Correspondent. "Their departure leaves a blank file in the Air Corps equipment in the Canal Zone, where their versatility was put to good use."

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DUTY ASSIGNMENTS OF GRADUATES OF THE ARMY WAR COLLEGE.

Effective upon the completion of their present course of instruction at the Army War College, Fort Humphreys, D.C., the following-named Air Corps officers, now on duty as students at this institution, are assigned to duty, as follows:

Lieut. Colonel William O. Ryan to duty as instructor at the Army War College.

Lieut. Colonel Oliver P. Echols to the Air Corps Materiel Division, Wright Field, Dayton, Ohio.

Major Max F. Schneider to Maxwell Field, Ala., for duty with the Air Corps Board.

Major Victor H. Strahm to Langley Field, Va.

Lieut. Colonels Arthur B. McDaniel, George E. Stratemyer, Major John E. Upston and Captain Hoyt S. Vandenberg to the Office of the Chief of the Air Corps, Washington, F.C.

Major Morton H. McKinnon to Mitchel Field, N.Y.

Lieut. Colonel Edmund W. Hill to Bolling Field, D.C.

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Three Air Corps officers, now on duty in the Office of the Chief of the Air Corps, are under orders for duty as students in the 1939-1940 course at the Army Industrial College, Washington, D.C., namely, Lieut. Colonels Michael F. Davis, Arthur E. Easterbrook and Captain James W. Spry.

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NEW PHOTO LABORATORY FOR MARSHALL FIELD

A photographic laboratory for Marshall Field, Fort Riley, Kansas, is being built around the old Polo Bungalow on the west end of the hangar line. The construction will be of stone, tile, and concrete throughout. To eliminate all dust and insects, it is contemplated filtering all air entering the laboratory. The photographic personnel are looking forward to moving from the present location (three rooms in the hangar wing) to the new laboratory designed for photographic purposes sometime in June.

Plans for the new laboratory were drawn up by 2nd Lieut. Hilmer C. Nelson, photographic officer, with the able assistance of Warrant Officer Nico G. Loupos and Technical Sergeant Lambert C. Walsh.

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COMMENDATION FOR NATIONAL GUARD PILOTS

Lieuts. Robert L. Ainsworth and Harley A. Teall, of the 120th Observation Squadron, Colorado National Guard, were commended officially by Major General Albert H. Blanding, Chief of the National Guard Bureau, in a letter received April 10, 1939.

While on an aerial mission during army maneuvers in Wyoming last August, they saw a cloudburst wash away a railroad bridge. The prompt measures they took to report this occurrence no doubt resulted in the saving of lives and property. At a formation following drill on the night of April 12, 1939, Major Frederick W. Bonfils, Commanding Officer of the Squadron, read General Blanding's letter of commendation to the personnel thereof.

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THE LANDING FIELD AT FORT KNOX, KY.

The 12th Observation Squadron (C. & A.) is now using the major part of the halves of two runways when the wind permits. However, between the soft shoulders and fifteen-foot drops on the sides of the one hundred-foot strips and an inclined angle of only fifty degrees between runways there are frequently unfavorable winds that preclude using the field. Due to the hazardous conditions, the field has not yet been opened to visitors lest some pilot (like many of us have done, according to the News Letter Correspondent) should come in without having previously carefully read the Notice to Pilots. The Correspondent states that if the too-frequent rains abate for a spell, it is hoped to open the field by the end of May at the latest. Even then the utmost caution will be necessary, because it will take many months to fill the fifteen-foot canyons.

THE NAMING OF HICKAM FIELD
By the News Letter Correspondent

In an airplane accident at Fort Crockett, Texas, on November 5, 1934, there died one of the most outstanding officers in the Air Corps - Lieut. Colonel Horace M. Hickam - and in honor of his memory that Hickam Field has been named.

In the naming of the boulevards, parks and avenues of the new air base, the War Department deemed it appropriate to remember also those pioneers of aviation who were killed in the Hawaiian Islands as the result of airplane accidents through the years.

It was in 1917 - twenty-two years ago - that the first aviation unit arrived in Honolulu. During these years, that one small unit has grown to a powerful arm in the combined defenses of Oahu, but not without the loss of a number of the men who given their lives to aviation.

We who today are enjoying the scenic beauty of the boulevards and parks of Hickam Field should silently pay tribute to those flyers who have passed on - to those men in honor of whom the following avenues have been commemorated:

- Fox Boulevard
1st Lieut. Robert R. Fox 1920*
- Cornet Avenue
Private Herman J. Cornet 1920*
- Boquet Boulevard
1st Lieut. Ulric L. Boquet 1921*
- Manzelman Circle
1st Lieut. Earle H. Manzelman 1921*
- Vickers Avenue
Staff Sgt. Vernon Vickers 1921*
- Owens Street
Sergeant Ross Owens 1922*
- Julian Avenue
1st Lieut. Rupert Julian 1923*
- Monthan Street
1st Lieut. Oscar Monthan 1924*
- Moore Street
1st Lieut. William G. Moore 1924*
- Brandt Park
1st Lieut. Howard C. Brandt 1925*
- Catlett Street
2nd Lieut. Carter Catlett 1925*
- Wyatt Park
1st Lieut. John W. Wyatt 1925*
- Porter Avenue
Technical Sgt. Aaron A. Porter 1925*
- Williams Park
1st Lieut. Charles L. Williams 1927*
- Worthington Avenue
1st Lieut. Robert S. Worthington 1927*
- Signer Boulevard
Captain John W. Signer 1927*
- Kuntz Avenue
1st Lieut. Clyde A. Kuntz 1929*
- Works Park
2nd Lieut. Maurice M. Works 1930*
- Atterbury Circle
2nd Lieut. Ivan M. Atterbury 1930*

Mills Boulevard
 Staff Sergeant Ralph O. Mills 1930 *
 Scott Circle
 2nd Lieut. William J. Scott 1931**
 Baker Street
 2nd Lieut. George C. Baker 1931**
 Wilson Street
 Private 1st Cl. Hicks G. Wilson 1935*
 Beard Avenue
 1st Lieut. William G. Beard 1936*
 * Luke Field
 **Wheeler Field

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COOPERATIVE MISSIONS WITH ANTI-AIRCRAFT

Air Corps units in the Hawaiian Department are offered excellent opportunities for cooperative missions with anti-aircraft units due to the numbers, size, proximity and strength of the latter units as well as their requirements on the Air Corps for training.

Cooperative missions, including daylight tracking and firing on towed targets, are conducted throughout the year. In addition to these regular cooperative missions, the 31st Bombardment Squadron has just completed special tests with the 64th Coast Artillery, (AA). In conducting these tests, three B-18 airplanes were used. One of the airplanes was equipped with muffled engines and night camouflage paint, the second with night camouflage paint only, and the third was a standard airplane with neither muffled engines nor camouflage paint.

A series of tests were devised, the purpose being to determine the effectiveness of the muffled engines and camouflage paint. Several Air Corps officers visited the anti-aircraft installations and observed the tests.

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OFFICERS OF GROUND ARMS STUDY AIR CORPS TACTICS.

During the week of March 26th, several Mitchel Field officers were busily engaged in explaining Air Corps tactics, equipment methods, etc., to twelve officers of the ground arms who had assembled at the Post for an Air-Ground contact course.

Major S.F. Landers, the Base S-3 Officer, was in charge of the course, and the instructors included most of the officers of the Base Staff and the 97th Observation Squadron, as well as some from the 9th Bombardment Group.

Officers from posts in the Metropolitan area came by automobile, while those from more distant stations were ferried by airplane. Bad weather interfered considerably and resulted in several officers missing the first part of the course and also caused cancellation of some of the flying which had been scheduled to demonstrate Air Corps methods. The first half of the week was devoted

to work with Observation units, and the ground officers reported that a great deal of valuable information was obtained which it is expected will result in smoother operation of the cooperative missions which are scheduled later in the year with the 97th Observation Squadron.

The latter part of the week was occupied with Base and GHQ Air Force matters and included conferences on Bombardment, Attack and Pursuit Aviation. The B-15 Bomber was flown up from Langley Field by Major Caleb V. Haynes, Air Corps, in order to give the ground officers a view of the latest Bombardment equipment. They were also taken on a bombing mission in the B-18 airplanes by the 9th Bombardment Group, during the course of which they had an excellent opportunity to observe practice bombs being dropped on a target.

The week's work was concluded with a night mission, during which the ground officers had an opportunity to ascertain for themselves how much could be learned of ground activities by Observation Aviation at night. In view of the fact that most of the officers had not heretofore flown at night, this mission was probably one of the most popular features of the course.

The officers taking the course all had more than fifteen years' service to their credit and many were eligible for General Staff duty, in view of which every effort was made to avoid details and to give a broad general picture of the Air Corps and its activities. Both Air and Ground officers received a great deal of benefit from the course, and several of the ground officers stated that it was the most interesting course that they had ever attended.

The following named officers attended the course:

- Major Chauncey A. Gillette, 9th Coast Artillery, Fort Banks, Mass.
- Major Arthur H. Rogers, 18th Infantry, Fort Hamilton, New York.
- Major Harold D. Wooley, 28th Infantry, Fort Niagara, New York.
- Captain John R. McGinness, 5th Infantry, Fort Williams, Maine.
- Captain Clarence P. Townseley, 5th Field Artillery, Madison Bks., N.Y.
- Captain Numa A. Watson, 1st Tank Co., Miller Field, N. Y.
- Captain Francis H. Falkner, 1st Engineers, Fort Dupont, Delaware.
- Captain Fred J. Woods, 52nd Coast Artillery, Fort Hancock, N.J.
- Captain Maurice E. Jennings, C.W.S., Fort Hamilton, New York.
- Captain Samuel M. Lamsing, 16th Infantry, Fort Jay, New York.
- Captain Lester J. Tacey, 7th Field Artillery, Fort Ethan Allen, Vt.
- Captain John Mesick, 25th Field Artillery, Madison Barracks, N.Y.

ARMY DAY OBSERVANCE AT AIR CORPS FIELDS

Selfridge Field:

Army Day at this field was observed in a very elaborate manner, and people from all over the State of Michigan and parts of Ohio visited the field. Although no accurate official count could be made, the crowd was estimated at about 15,000 by Major Benjamin B. Cassidy, Air Corps, Base Intelligence Officer.

The field was opened to the public at 8:00 a.m., and at first only a few cars drove in, but a little later on in the morning the traffic became so thick that it was a problem finding sufficient parking space.

The entire morning was given to the display of airplanes and equipment in hangars 3 and 4. At all times from about 9:30 a.m. until the flying activities started, a steady stream of people poured in and out of the hangars.

The recruiting office at Detroit, Mich., sent representatives to assist local personnel in answering questions regarding enlistment and passing out recruiting pamphlets. Personnel were also on hand to give information concerning Flying Cadet appointments. A great deal of interest was shown by the public as a whole in each subject.

At 12:00 noon, Major Benjamin B. Cassidy, acting for Colonel Henry B. Clagett, Air Corps, Base Commander, who at that time was in Cleveland, Ohio, greeted the people and delivered a speech on Army Day and the history of Selfridge Field.

At 1:30 p.m., the First Pursuit Group took off for aerial formations, these terminating with an aerial review. An exhibition of parachute dropping with dummies was put on, starting at 2:00 o'clock. Half an hour later, the 1st Pursuit Group again took off for a final aerial review.

Barracks No. 3, of the Base Headquarters and 3rd Air Base Squadron, was open for public inspection during the day, except for the period of the noon meal.

The crowd began to depart at 4:00 p.m., and at 5:15 most of the people had left the post. Traffic was a problem throughout the day. There were no traffic accidents, however, and the personnel assigned to directing it performed their duties in a most efficient manner.

The Post Exchange erected small hot dog stands here and there around the field, and the personnel thereof were hard put at times to keep a sufficient supply of hot dogs and bread on hand.

Although the day was cold, everyone appeared to be having a fine time, and it is believed that Army Day has brought a new and better understanding between the public and Selfridge Field.

As tending to shed further light on Army Day observance at Selfridge Field, the Correspondent of the 27th Pursuit

Squadron submitted the following report: Selfridge Field contributed a memorable celebration to this year's Army Day. In spite of forecasted rain and snow, the threatening weather privileged the planned activities to be demonstrated to a huge crowd of approximately 20,000 civilian spectators.

Army Day was by no means another day for Selfridge Field. Each organization participated in the day's program, either in the air or on the ground. Exhibits were to be seen in the Base Hangar, giving the public a complete story of how the Air Corps is operated and maintained. Seven different types of tactical airplanes were on display, ranging in size from the P-26A to the B-18. Certain airplanes on display were provided with wooden scaffold-type stands, which privileged elderly people to view the cockpit and controls of a modern aircraft. An officer was present with each airplane on display, explaining its tactical value and answering questions. Other exhibits include Armament, Communications, Hospitals, Parachutes, Instruments, Engines, Flying Clothing and Oxygen Equipment. Hot lunches were available in the Base Hangar.

Throughout the day, music was provided through the Public Address System. In this manner also the spectators were guided to the various exhibits and announcement was made from time to time as to the time and place of various demonstrations.

The day's activities were climaxed by a 24-ship aerial exercise, led by Captain Dixon M. Allison, Air Corps, Commanding Officer of the 17th Pursuit Squadron. Twelve of the 24 planes were from the 27th Pursuit Squadron, and the remaining 12 from the 17th Pursuit Squadron. Following the spectacular take-off, Captain Allison maneuvered the 24 planes through various formations, revealing the precision and flexibility of the pilots of the First Pursuit Group in flying modern equipment. Perhaps the most spectacular phase of the air work was the Luftwaffe Circle, followed by a rat race, which was best described by one spectator to wit: "The sky is being torn asunder by man and metal."

Following the formation flying, the planes of the 27th Pursuit Squadron, led by Captains Israel and Woodbury, made a simulated diving attack on a B-10 Bombardment plane, thus demonstrating a combat exercise with Pursuit versus Bombardment. During the actual attack, two dummy parachutes were released from the Bombing plane, giving the demonstration the appearance of paralleling war time tactics.

Colorado National Guard:

The 24th Observation Squadron, Colorado National Guard, Denver, participated in Army Day celebrations on April 6th by furnishing a flight of four C-47A airplanes, led by Captain John K. Nissley, Air Corps Instructor. This flight was part of a larger formation made up by the Denver Branch of the Air Corps Technical School.

At the conclusion of the flying, open house was observed at the Municipal Airport, and the air-minded citizens of Denver were afforded the opportunity to inspect the aircraft on the flying line. Following the formation flying, Captain Nissley flew Major General William K. Herndon, Commanding General of the 24th Cavalry Division, to Kansas City, Kansas.

Marshall Field, Fort Riley, Kansas:

In observance of Army Day, the 1st Observation Squadron of Marshall Field, Fort Riley, Kansas, sent a flight of C-47As to visit nearby cities. The formation passed in review at R.O.T.C. demonstrations at Wichita University, Wichita, Kansas, and Kansas University, Lawrence, Kansas. Newspaper representatives from the cities visited were passengers on the trip.

Fort Knox, Ky.:

"As everyone knows," declares the News Letter Correspondent, "our Chief made the Defense Day Dinner speech at Louisville on April 6th, and ever since the Air Corps personnel in these parts have been pardonably strutting. And our non-Air Corps friends not only seem to forgive us but think it appropriate and proper. Not a day has passed that someone has not gone out of his way to tell us how he enjoyed the General's talk."

Kelly Field, Texas:

Plans for the observance of Army Day contemplated a number of interesting events especially arranged by Colonel Frank D. Blackland, the Commandant, for the entertainment and inspection of the 5,000 or more visitors expected on the air-drome that day. To Major George M. Palmer, Air Corps, Executive Officer of the Air Corps Advanced Flying School, was delegated the task of coordinating all necessary arrangements.

While routine flying by practically all the 185 students now at Kelly Field was scheduled for the entire day, employing all of the 168 airplanes in commission, an afternoon program - an "Open House" affair, was arranged for the convenience and benefit of those who had planned to visit Kelly Field.

From 2:00 to 4:30 p.m., the four flight sections of the Air Corps Advanced Flying School were to engage in the following flying missions at the air-drome:

Pursuit, flying three and six-ship formations, to perform accuracy maneu-

ers, as well as conduct instruction on instrument or "blind" flying, using BT-8, P-12 and BT-2B1 airplanes.

Observation Section to perform simulated artillery adjustment problems, engage in instrument flying, and reconnaissance and photographic missions, using O-25, O-38 and BT-2B1 airplanes.

Attack and Bombardment Sections to perform missions similar to that of the Pursuit Section, using A-17, B-18 and BT-2B1 airplanes.

Arrangements were made for displaying on the hangar line west of the Post Operations Office, for the inspection of visitors, one of each type of airplane used at Kelly Field, such as Observation, Bombardment, Attack, Pursuit, Instrument and Cargo airplanes. The Miniature Range, located in the white concrete building on the east end of the hangar line and used in the instruction of Observation students in Artillery Adjustment, was to be open for inspection by the public.

In Hangar No. 12 was scheduled a demonstration on the Link Trainer, a miniature plane used in the training of student pilots in instrument or "blind" flying, beacon orientation, and beam flying.

As the final event of the day, from 4:15 to 4:30 p.m., 1st Lieut. John H. Bundy, Air Corps, instructor in the Pursuit Section, was scheduled to make a blind landing on Kelly Field in an instrument training plane.

Specially qualified personnel were selected to announce and describe all events over a public address system. Military police were detailed to handle traffic and direct visitors to the various events, activities and installations, and qualified personnel stationed at strategic locations to disseminate information of interest to the public.

San Antonio Air Depot:

This Depot joined in celebrating Army Day, April 6th, by holding open house for visitors all day. The very large number of visitors who were interested in viewing the operations of the Depot, particularly the Engineering Shops, was exceedingly gratifying and rather unexpected, in view of the very interesting special programs and exhibits of more popular appeal held at the other Army stations in this vicinity.

Among the visitors, the Depot was delighted to welcome Douglas Corrigan, the noted transcontinental flyer, who was then on a visit to San Antonio, and who stated that he greatly enjoyed his trip through the engineering shops, as he had been an airplane mechanic for eleven years. The personnel of the Depot were quite as much interested in Mr. Corrigan as he appeared to be in the Depot, since he was kept busy signing autograph after autograph.

THE WEATHER MEN
By Private Nathan E. Smith, Air Corps
1st Weather Squadron, March Field, Calif.

They're never off duty,
Their days never end;
Chasing Old Dame Nature
Right into her den,
And they'll tell you exactly
Which way she will bend.
Who are they? You guessed who -
The Weather Men.

It's midnight to seven,
And seven to four,
Four to midnight,
And again as before.
A service for Pilots
Nigh perfect in score;
Using thermometers, barometers,
And instruments galore.

Pressures and temperatures,
Convergence and bars,
Are placed on maps
At ungodly hours,
To show Pilot's routes
On their flight 'neath stars,
In order to miss
Nature's lofty spars.

But behind it all,
With your feet like lead,
With recordings all made
You're off to bed;
From the way you feel
You're sure you're dead.
(There are a lot of things
Best left unsaid).

When inspections are over
You're in the red
For dust over there -
But nothing is said
Of the meals you've missed
Just to be in bed,
To rest your bones
And your aching head.

And then - there's your Buddy,
Your very best friend,
Transferred somewhere,
Never seen again;
And that furlough - postponed
'Til God knows when.
You swear, "I'll buy out
If it happens again!"

But after all - it's the Army
And not the men,
For a soldier will growl
Often, now and then;
But in an outfit like this,
With the C. O. as their friend,
They're mighty proud to say - we're
The Weather Men.

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EIGHTH PURSUIT GROUP ACTIVITIES

Headquarters and Headquarters Squadron:

The arrival of Spring with the attendant excellent flying weather has been a stimulus to the activity of this organization. The final acquisition of eleven P-36A's has enabled Headquarters Flight to take to the air with a vengeance. In fact, according to some of the tactical squadrons, the sky is practically covered with Headquarters ships in strange formations and attitudes of flight.

Like everyone else, the personnel of this outfit are all atwitter over the mysterious possibilities of "E" day. The clouds of rumor preceding the coming expansion are causing a slight overcast in this area.

36th Pursuit Squadron:

The Fleet's in!!! - Nobody's quite sure yet how this is going to affect the 36th Squadron, but at least it will give the officers and men a chance to look over battle wagons and find out some things of interest about our sister branch of the national defense. The four aircraft carriers anchored out in the bay should come in for their share of being stared at - if, as the News Letter Correspondent puts it - "they let us get on board."

Lieuts. Wallace, Wells and Sakowski returned to the Squadron from what was virtually a detached service status while they were attending the school operated by the Eighth Pursuit Group to aid Air Reserve officers in preparing themselves to take the examination for permanent commissions in the Air Corps under the provisions of the Thomason Act. The examinations are all over, and now comes the watching and waiting. The entire organization wishes these officers the best of luck on the outcome of their exams.

35th Pursuit Squadron:

The 35th Squadron is operating very efficiently under its new set-up, which consists of two flights - "A" and "B". Both flights are composed of nine planes. Another unit, the Engineering Flight, is more of a miscellaneous character, and it supplies the "A" and "B" Flights with planes to replace those which make out of commission.

Referring to "A" and "B" Flights, the News Letter Correspondent states: "We will not get ourselves into a lot of trouble by saying which flight is more efficient, but we will say that as a whole these two flights are hard to beat, whether it be flying or what have you."

The pilots in the 35th are very much interested in getting to the top of the ladder. Seven officers took the examination for a commission in the Regular Army, namely, Lieuts. Leonard C. Lydon, Homer M. Truitt, Don Cowland, George B. Greene, David L. Lewis, Edwin M. Ramage and Gilbert L. Meyers. The Squadron wishes them the best of luck and hopes that they will make the grade.

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AWARD OF CONTRACTS INITIATING AIR CORPS EXPANSION PROGRAM

With the signing by the President on April 26th of the Army Appropriation Act (H. R. 4630), the Honorable Louis Johnson, Assistant Secretary of War, announced the following day the award of contracts for 571 airplanes and their equipment under the authority of that Act. The purchase of these planes aggregates a total of \$50,000,000, including the requirements of engines and various accessory equipment needed for the complete airplanes. Immediately after the President had affixed his signature, Mr. Johnson closed contracts amounting to \$19,535,320, as follows:

- (1) Heavy four-engined Bombardment airplanes, type B-24, from the Consolidated Aircraft Corporation, San Diego, Calif., for a total of \$2,880,000.
- (2) Pursuit airplanes, single-engined, type P-40, from the Curtiss Aeroplane Division of Curtiss Wright Corporation, New York, N.Y., totaling \$12,872,398.
- (3) Pursuit Interceptor airplanes, two-engined, type YP-38, from the Lockheed Aircraft Corporation, Burbank, Calif., for a total of \$2,180,728.
- (4) Pursuit Interceptor airplanes, single-engined, type XP-39, from the Bell Aircraft Corporation, Buffalo, N.Y., totaling \$1,073,445.
- (5) Photographic airplanes, type F-2, from the Beech Aircraft Corporation, Wichita, Kansas, totaling \$528,749.

The remainder of the above \$50,000,000 will be used by the government to purchase from the manufacturers quantity lots of engines, propellers, instruments, accessories, etc. The equipment procured in these quantity orders is furnished by the government to the airplane contractors to be incorporated into complete airplanes. A saving in the cost of the complete airplane to the government is thereby effected, and the production of airplanes by the manufacturers is facilitated. The contracts will soon be announced.

In addition, approximately \$19,000,000 will be expended within the next few days in the procurement of Attack Bombers. This design competition at the Army Experimental Station, Wright Field, Dayton, Ohio, has been completed and is being evaluated.

A portion of the total expenditures involved will be met from regular fiscal year 1939 appropriations available for that purpose.

The War Department plans required to put into effect the provisions of the Act were initiated as early as last November, and were complete at the time the President affixed his signature to the Act. Anticipating that these funds would be available by this Spring, the War Department had directed the preparation of data and contracts, so that if such an

Act became a law the Army would be ready to purchase without delay the latest and most effective fighting aircraft, with necessary engines, instruments, and equipment to operate them.

In discussing the contracts already let, Mr. Johnson stated that the success of the four-engined Bombardment airplanes heretofore developed is well known. They fly at speeds in excess of 250 miles per hour, carry 5 machine guns, a crew of 6 to 9 men, and have very long range. All members of the crew can freely exchange stations, and reliefs can be arranged for long missions. From the point of view of maintenance, ruggedness of structure and national defense requirements, the four-engined Bomber meets a specific need in Army aviation.

The Consolidated Aircraft Corporation has had considerable experience in the manufacture of large planes. It furnished the U. S. Navy with its seaplanes which made a mass flight from Norfolk, Va., to San Diego, Calif., in 1935, and from San Diego to Hawaii in 1937.

The single-engined Pursuit type is exemplified in the Air Corps by the XP-40 type, developed by the Curtiss Company. The P-40 differs from its predecessors which are in use now principally in the fact that it is powered with the Allison liquid-cooled engine. This engine has a built-in blower type of supercharger. This plane will develop speeds considerably in excess of 300 miles per hour. The P-40 is an internally-braced monoplane of all-metal construction, except for the control surfaces, which are fabric covered. The landing gear is retractable into the wing. Two machine guns are provided, and oxygen equipment is standard for operation at extremely high altitudes.

The interceptor Pursuit is a recently developed type designed to intercept and attack enemy aircraft, particularly heavily armored Bombers. These planes are powered with Allison engines and have a tricycle type landing gear, which improves the landing characteristics. They develop speeds of considerably over 350 miles per hour.

The Beech photographic airplane being procured by the Army is an all-metal 3-place, 2-engined, low-wing monoplane, and is designed to carry two aerial mapping cameras in tandem. It is especially built for use for rapid and accurate mapping of large areas and has therefore been so designed that the maximum possible visibility is afforded the photographic observer and the pilot. It is also able to use the relatively small airdromes which so frequently must be used when mapping the mountainous sections of our country.

(Continued on Page 12).

ACTIVE DUTY FOR COLONEL LINDBERGH

Colonel Charles A. Lindbergh, Air Reserve, reported to the Chief of the Air Corps on April 19th for a period of active duty, and for several days spent practically his entire time in conference with various officers of the War Department and of civilian research activities, one of the most important of which was the conference held on April 20th at the National Advisory Committee for Aeronautics.

Colonel Lindbergh left Washington on the morning of April 22nd in an Army P-36 Pursuit airplane, following the completion of his preliminary work incident to his survey of aeronautical research facilities of the nation available to the Army Air Corps. The fact that he has had a unique opportunity to observe the progress of aeronautical development both in this country and abroad prompted the War Department to take advantage of his knowledge in making a study of the research activities of the United States which are available to the Army Air Corps.

There are in the United States at the present time some 25 to 30 separate organizations and activities engaged in aeronautical research. Of this number, but one, the Army experimental station at Wright Field, Dayton, Ohio, is directly under the control of the Army Air Corps. Due to the close cooperation and coordination existing among these activities, any discoveries or any improvements made along aeronautical lines become immediately available to Army engineers. Colonel Lindbergh probably visited all these activities whose facilities are available to the Army Air Corps. These consist not only of the Army Air Corps experimental station at Wright Field, the National Advisory Committee for Aeronautics, the National Bureau of Standards of the Department of Commerce and other purely governmental experimental and research establishments, but also the plants of the various aeronautical experimental departments of those manufacturers in the United States which maintain such research establishments. Several colleges in the United States also carry on aeronautical research along specialized lines and will be included in Colonel Lindbergh's survey.

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Majors John M. Clark, Roland C.W. Blessley and Arthur Thomas, Air Corps, who have held temporary rank, were promoted to the permanent rank of Major in the Air Corps, effective April 1, 1939.

Captain Jack Greer, Air Corps, Fort Riley, Kansas, is retired from active service by reason of disability incident thereto, on April 30, 1939.

OFFICERS DETAILED TO ARMY WAR COLLEGE

Under special orders of the War Department, recently issued, the following-named Air Corps officers are detailed for duty as students in the 1939-1940 course at the Army War College, Fort Humphreys, D.C.:

Lieut. Colonel Howard C. Davidson and Major Charles Y. Banfill, from the Office of the Chief of the Air Corps, Washington, D.C.

Lieut. Colonel Robert L. Walsh, now on duty as a student at the Army Industrial College, Washington, D.C.

Lieut. Colonel Floyd E. Galloway, from Bolling Field, D.C.

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New Contracts for Equipment (From Fall)

The funds required to cover the cost of planes in the contracts mentioned are only part of that necessary to carry out the Expansion Program. Engines, instruments, auxiliary power plants, aircraft radio equipment, machine guns, ammunition, bombs, etc., must also be provided. Funds to permit the enlistment of additional mechanics, flying cadets, etc., are also provided. The purchase of other types of aircraft for training, cargo, etc., is contemplated when the anticipated additional funds for the complete expansion program are made available on July 1st.

War Department plans for the distribution of the \$250,000,000 remaining of the \$300,000,000 recommended by the President for the expansion of the Army Air Corps have been made and will be submitted to Congress at an early date. The present appropriation, including as it does \$50,000,000 of this \$300,000,000, provides the necessary money to start the Army Air Corps well on its way to the achievement of the 6,000 Army Air Corps planes authorized by Congress for the Army Air Corps.

The expenditure of the total of \$300,000,000 for the expansion program will take into account basic air defense requirements in addition to aircraft, and will cover the procurement of personnel, air bases, armament, equipment, engines, housing for personnel and other items necessary to the creation of an air force.

Steps are being taken to insure that the provision for more personnel, their training, including pilots and mechanics and other flight and ground crew members, the preparation of bases and the acquisition of other items will go forward on a balanced basis with the production of aircraft.

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Colonel John H. Howard, Air Corps, having been found by an Army Retiring Board incapacitated for active service on account of disability incident thereto, is retired from active service on April 30, 1939.

FIRST PURSUIT GROUP ACTIVITIES

One flight of the 17th Pursuit Squadron is now participating in aerial gunnery under the direction of 2nd Lieut. James G. Guthrie, Air Corps, at Camp Skeel, Oscoda, Mich. Those pilots who did not meet the requirements of gunnery at Eglin Field, Valparaiso, Fla., are now included in this present gunnery practice.

To comply with Chemical Warfare training, the 1st Pursuit Group recently completed a gas chamber. "We are all waiting to 'test hop' this new chamber," says the News Letter Correspondent, "but when it comes time to do so that will be another thing."

Since the 27th of March, the 1st Pursuit Group has been receiving on an average of one new P-36C a day. Ferry pilots, of course, are wondering if their home is in the air between Buffalo and Selfridge Field or here at Selfridge. Nevertheless, they are proud to be sporting a new Curtiss P-36C and, declares the Correspondent, "these mechanics to whom the planes are assigned are so proud of their new planes that they stay up all night to groom them. Ask the 27th Squadron; they ought to know about it."

Fifty-three Air Corps Reserve officers who are eligible for Regular commissions were scheduled to start school on Monday, April 24th, in order to prepare for the final examination on June 1, 1939.

Officers of the 94th Pursuit Squadron are taking much interest in the plotting exercises which are being held in the Air Command Section. Valuable training is being received with these "mock" interception problems and through the endeavors being made to "cross" each side up.

ASSIGNMENT OF GRADUATES OF THE COMMAND AND GENERAL STAFF SCHOOL.

Upon the completion of their present course of instruction at the Command and General Staff School at Fort Leavenworth, Kansas, the following-named Air Corps officers are assigned to stations, as follows:

To the Panama Canal Department: Lieut. Colonel Adlai H. Gilkeson and Major Edwin J. House.

To the Hawaiian Department: Majors Edwin B. Bobzien and Albert F. Hegenberger.

To Wright Field, Ohio: Major John F. Whiteley.

To Kelly Field, Texas: Captain David M. Schlatter.

To Mitchel Field, N.Y.: Captain Joseph Smith.
To Randolph Field, Texas: Captain Claire Stroh.
To East St. Louis, Ill.: Captain Leonard H. Rodieck.

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WHITE POINT MAXWELL FIELD RECREATION CENTER VALPARAISO, FLORIDA

Weekly Rates on Cottages

\$ 8.00 per week - 2 room cottage
\$10.00 per week - 3 room cottage
\$ 9.00 per week - 3 rooms in lodge
\$ 7.00 per week - 2 rooms in lodge
\$14.00 per week - 5 rooms 2 baths in lodge
\$ 4.00 per week - Auto trailer space

One-Half Week Rates

\$ 4.00 per week - 2 room cottage
\$ 5.00 per week - 3 room cottage
\$ 4.50 per week - 3 rooms in lodge
\$ 3.50 per week - 2 rooms in lodge
A maximum of four days applies to the above.

Daily Rates

\$1.75 per day - 2 room cottage
\$2.50 per day - 3 room cottage
\$1.75 per day - 2 rooms in lodge
\$2.50 per day - 3 rooms in lodge

Mess Rates

\$9.00 per week per person
\$4.50 per week for children seven years of age and under.

Daily Mess Rates

\$1.50 per person
\$1.00 for children seven years of age and under
\$.50 per meal

Address all communications to the Secretary, Maxwell Field Officers' Club, Maxwell Field, Alabama.

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Major Lowell H. Smith, Air Corps, who for the past four years has been on duty as Chief of the Inspection Division, Office of the Chief of the Air Corps, Washington, D.C., has been assigned to duty at Inglewood, Calif., as Air Corps District Representative, Western Procurement District.

Major Sam L. Ellis is relieved from duty as Instructor, Command and General Staff School, Ft. Leavenworth, Kans., and assigned to Atlanta, Ga., for duty with the Organized Reserves, 4th Corps Area.

INTER-ISLAND FLIGHT BY 18TH PURSUIT GROUP

Pursuit planes of the 18th Pursuit Group, under the command of Lieut. Colonel William E. Lynd, Air Corps, taxied out on Wheeler Field on the morning of March 25th and took off on an inter-island flight, with Hilo, Hawaii, as the destination.

The 26th Attack Squadron led the Group formation, with the 19th Pursuit Squadron in a left echelon of elements on their left flank, and the 6th Pursuit Squadron in a right echelon of elements on their right flank. A Headquarters Flight, consisting of three P-26A airplanes, two B-12A airplanes and one OA-8 airplane, led the formation.

After climbing to 8,000 feet, the formation immediately headed for the Island of Molokai, which is separated from the Island of Oahu by the Kaiwi Channel. "In a few minutes," reports the News Letter Correspondent, "we were flying over Laau Point, which is the western tip of Molokai. We crossed this narrow tip of the shoe string island and found ourselves over the Kaloahi Channel that separates the Island of Molokai from the small Island of Lanai. We kept this beautiful green spot of land on our right as we approached the Island of Maui, which is the second largest island of the Hawaiian Group. On Maui we saw our first snow, high on the mountain of Haleakala (10,025 feet above sea level). This white cap made the rest of the green islands seem enchanted and unreal.

After leaving Maui we found ourselves over the biggest and roughest channel of them all, Alenuihaha Channel, which separates Maui from the big Island of Hawaii.

As we approached this beautiful island we could see the famous Mauna Loa Mountain. This gigantic mass of lava and volcanic ash is one of the few active volcanoes in the world today.

When we were directly over the northern tip of Hawaii, Upolu Point, the group formation broke up into individual squadron formation, and proceeded to an individual landing at South Cape.

As we proceeded down the southeast side of this beautiful island, we were treated to a sight that can be found nowhere else in the world. On our right was the boundless expanse of the blue Pacific, and on the left was a range of towering green cliffs. The tops of the cliffs were hidden in the clouds and the sides were covered with a thick mat of tropical plants of every description, penetrated only by numerous waterfalls.

Far ahead and to our left we could see the top of the extinct volcano, Puu O Keo Keo, and the black roads in the green landscape that were caused by the lava flow of 1907. As we drew nearer to this blackened mass we could see more clearly the great damage done by the

last eruption, as there were huge areas with no sign of vegetation. In a few minutes we rounded this desolate expanse and saw the green pastures of South Cape and the runways of Morse Field. We landed there to eat lunch and to refuel our ships.

At 1425 we took off for Hilo and, as we advanced up the east side of this immense island, we saw the mountains give way to cattle ranches, pineapple and cane fields. In the distance we could see Hilo Harbor. Before we realized it, we were touching our wheels on the paved runway at Hilo Airport, where we staked down our airplanes and prepared for rest at the Kilauea Military Camp.

On Monday, March 27th, we took off from Hilo Airport and, at 8,000 feet, formed the group formation for an uneventful trip back to the Island of Oahu and Wheeler Field."

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INCREASING INTEREST IN SELFRIDGE FIELD

Whatever the cause, the general public in the vicinity of Selfridge Field, Mt. Clemens, Mich., is becoming vitally more interested in that field, as indicated by the hundreds of persons visiting it each Sunday.

Since Army Day, each Sunday afternoon has seen the ramps black with people, and parking space on the main roads is at a premium. The roads adjacent to the field are also crowded with parked cars.

Although on Sundays the only flying activities are confined to arrivals and departures of transient aircraft and some miscellaneous flying, the public has evinced a great interest in viewing the airplanes parked on the flying line. On week days, there are groups of high school and college students, also aeronautical and flying clubs, visiting the field. The number of young men inquiring about flying training and Air Corps enlistments points to the fact that for them it is more than idle curiosity which brings them to Selfridge Field. There are ample guards and guides on duty at all times to safeguard and assist the public.

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A group of 51 students of the San Antonio Vocational and Technical School made a tour through the Engineering Shops of the San Antonio Air Depot at Duncan Field, Texas, on April 14th. The young men expressed great interest in viewing the processes of aeronautical mechanics.

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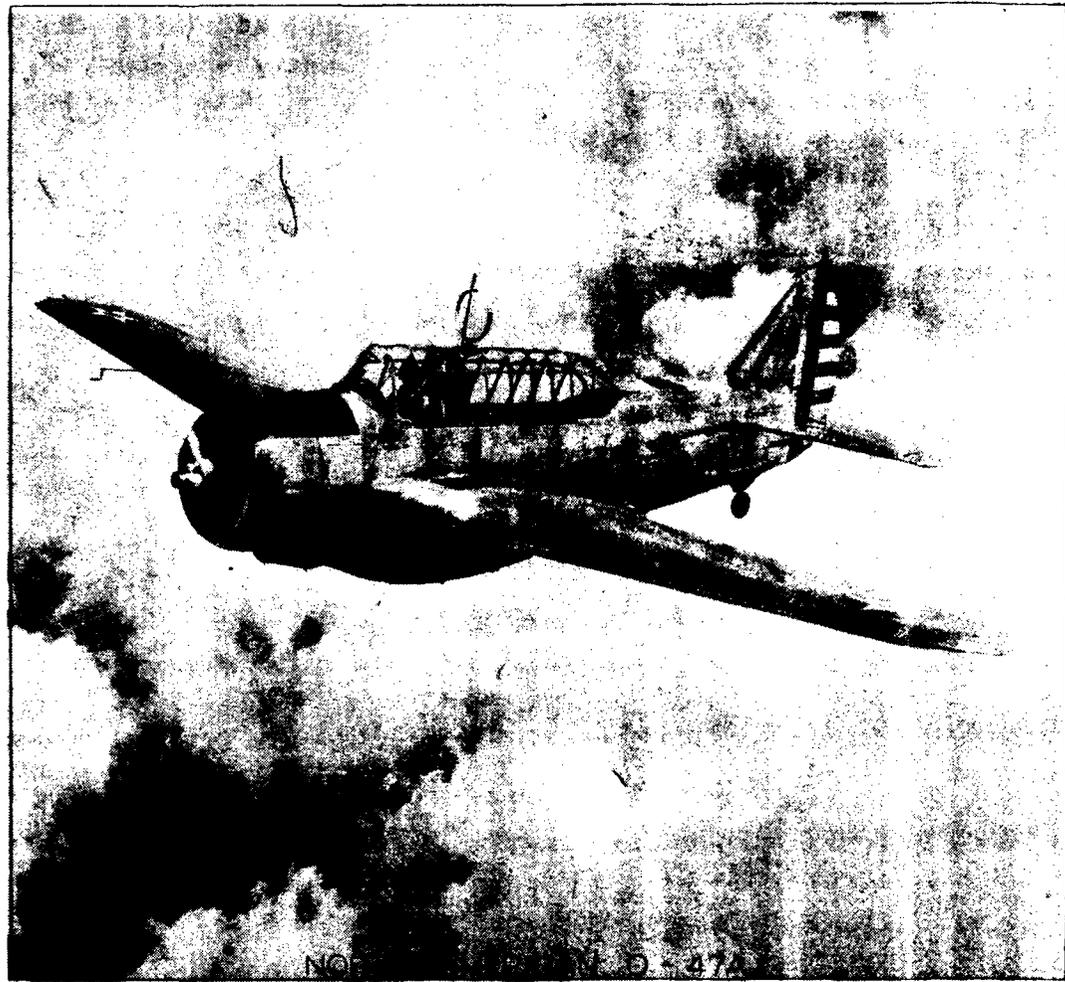
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 AIR CORPS 
NEWS LETTER



ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT
WASHINGTON

MAY 15, 1939

NO. 10

NOV 1954

CONFIDENTIAL

SECRET

CONFIDENTIAL
SECRET

Information Division
Air Corps

May 15, 1939

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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GRADUATION OF CLASS 39-B FROM ADVANCED FLYING SCHOOL

In accordance with instructions issued by the Chief of the Air Corps, the class now undergoing instruction at the Air Corps Advanced Flying School, Kelly Field, Texas, will be graduated on Thursday, May 25, 1939. Plans have been completed for the graduation exercises to be held at Kelly Field on that date, as follows:

- 8:55 a.m. Student Officers and Flying Cadets from Basic Stage at Randolph Field form in front of Post Operations Office.
- 9:00 a.m. Graduating class take stations in airplanes.
- 9:05 a.m. Graduating class taxi on the field.
- 9:10 a.m. Take-off.
- 9:30 a.m. Aerial Review.
- 9:45 a.m. Training airplanes on display in front of Operations Office.
- 10:30 a.m. Graduating class arrives at Theater.
- 10:45 a.m. Graduation Exercises at Post Theater.
- Invocation by Chaplain Edmond J. Griffin, U.S. Army.
- Introductory remarks by Colonel A.W. Robins, Air Corps, Commanding Officer, the Air Corps Training Center.
- Address by Colonel Herbert A. White, U.S. Army, Retired.
- Presentation of Diplomas by Colonel White.
- Benediction by Chaplain Griffin.

The students who are expected to graduate with the present class are listed in the roster which is given hereinafter.

All stations are requested to consult this roster as to specialized training received by such of the students as may be assigned thereat to preclude the necessity of numerous telegraphic inquiries as to type of specialized training received by Regular Army and Reserve officers assigned the various Air Corps stations. The asterisk preceding a Flying Cadet's name indicates that he has made application for appointment as a second lieutenant in the Regular Army Air Corps.

Three of the four Regular Army officers listed among the prospective graduates have applied for and expect to receive orders transferring them to the

Air Corps. One officer declined to make such application.

It is expected that the four Filipino students listed on the roster will receive orders upon graduation assigning them to tactical units of the Regular Army Air Corps for additional instruction pending commencement of courses of instruction which they will pursue at the Air Corps Technical Schools at Chanute and Lowry Fields, following which they will return to their native Philippines.

The Flying Cadets of the class will be commissioned second lieutenants in the Air Corps Reserve and ordered on their initial extended active duty for a period of approximately ten days at Kelly Field, pending receipt of permanent assignment orders.

It may be interesting to note that of the 157 Flying Cadets in this class, 90 (or 57%) are college graduates, holding degrees in the various arts and sciences from colleges and universities in the entire nation. Almost all had ROTC training prior to being appointed as a Flying Cadet, as attested by the fact that 64 (or 40%) Flying Cadets in the class already hold commissions in five arms of the Officers Reserve Corps, as follows:

Infantry	2 1st Lieuts. and 25 2nd Lieuts.
Field Artillery	1 1st Lieut. and 17 2nd Lieuts.
Coast Artillery	8 2nd Lieuts.
Cavalry	1 1st Lieut. and 5 2nd Lieuts.
Corps of Engineers	5 2nd Lieuts.

These commissions will be automatically vacated upon acceptance by the Flying Cadets of their appointments as second lieutenants, Air Corps Reserve. Several of these Cadets also hold certificates of capacity for promotion to the grade of first lieutenant or captain in their respective branches of the Officers Reserve Corps.

With the recent announcement of the examination to be held throughout the country for the appointment of second lieutenants in the Air Corps, Regular Army, 127 of the Flying Cadets listed on the roster and indicated by aster-

isks, as previously mentioned, have made application to compete in that examination. All of these young hopefuls have high aspirations of passing these examinations successfully and being one of the fortunate 300 or more candidates who will be commissioned in the Regular Army on or about July 15, 1939.

The Kelly Field examining board consists of Colonel Eugene A. Lohman, the Assistant Commandant of the Advanced Flying School; Major Albert B. Pitts, Director of Ground Training; Captain Delmar T. Spivey, Operations Officer of the Bombardment Section, all Air Corps; and Captain Clyde L. Brothers, Medical

Corps, Flight Surgeon. The preliminary examinations will be completed by May 15th, and the final examinations June 7th. It is believed that the Kelly Field examining board is beyond doubt handling the largest number of candidates in any Army Post, State or Corps Area; and all in all, what with graduations, active duty assignments of the newly commissioned Reserve officers, Regular Army examinations, reassignments of graduates to new stations, and a new class of approximately 190 students reporting to Kelly Field for training on June 1, 1939, many busy days are ahead for the Army's famous Air Corps Advanced Flying School.

ROSTER OF PROSPECTIVE GRADUATES, CLASS 39-B

Specializing in Attack Aviation Foreign Students

3rd Lieut. Godofredo Mariano Juliano,
Philippine Army, Reserve.

Flying Cadets

*Anthis, Rollen Henry	El Reno, Okla.
*Ballard, Norman Luellen	Bay City, Mich.
*Barthelmess, Karl Theodore 3	Dixon, Ill.
*Beck, George Donald	Houston, Texas
*Bratton, Leslie Raymond	Denver, Colo.
*Brooke, Lawrence M.	Randolph Field, Texas
*Carlson, Francis Bernard 8	Ossining, N.Y.
*Carlton, William Clayton	Minden, La.
*Clark, Donald Leonard 6	Alta, Iowa
*Cook, Bailey Cavanaugh	New Castle, Del.
*Cunningham, Joseph A. 2	Clarksburg, W. Va.
*Curry, Jack Harold 2	Rogers, Ark.
*Dahlberg, Charles William	San Antonio, Texas
*Danley, James Ramey	West Los Angeles, Calif.
*Evanoff, Alexander G. 2	Belle Plains, Iowa
*Evans, Robert Chester 4	Detroit, Mich.
*Franks, Perry LeRoy	Lincoln, Nebr.
*Frazier, Robert Mark	Nogales, Ariz.
*Goetz, Albert John	Dodge City, Kans.
*Gregory, Charles Edward	Houston, Texas
*Higgins, Edward Wm., Jr.	Arlington, Mass.
*Hubbard, Harry Vaughn	Hayward, Calif.
*Kittel, Robert Stewart	Colorado Springs, Colo.
*Kuhl, Philip John 2	Riverside, Ill.
*Laborde, Fred Nestor	Southbury, Conn.
*MacPhee, Angus C.B. 2	Los Angeles, Calif.
*Martin, Maurice Leslie	Vancouver, Wash.
*McNelly, Fred Wright	Anoka, Minn.
*Newton, Dorr Ellsworth, Jr.	Malvern, Pa.
*Northamer, Kenneth Walter	Fresno, Calif.
*O'Connor, Robert Goodwin	Northampton, Mass.
*Pike, Harry MacC. 2	Portage, Wis.
*Rector, Walter Stokes	Houston, Texas
*Rehmann, Orville Herman 2	Bertha, Minn.
*Riddle, Samuel Stuart, Jr.	Birmingham, Ala.
*Ryan, Clair Edmund	Springfield, Minn.
*Sams, Burton Kresge	Culver, Kans.
*Savoie, Wm. Frank 2	Chicago, Ill.
*Schurter, Orie Olin 2	Burlington, Okla.
*Tarrant, Yancey Smith	Waco, Texas
*Thornquest, Wm. L., Jr.	Redlands, Calif.
*Vosper, Stanley R., Jr. 2	Akron, Ohio
*Watkins, Tarleton H.	Aberdeen Proving Gds., Md.

*Wheless, Hewitt T. 1

Menard, Texas

Specializing in Bombardment Aviation Regular Army Officers

1st Lt. James Baird Buck, Inf.
2nd Lt. Jack Alban Gibbs, C.E.

Texas
Oregon

Flying Cadets

*Alder, Glen M. 2	North Los Angeles, Calif.
Beard, Robert Wallace	Eugene, Ore.
*Boyd, Wm. Ellsworth	Boulder, Colo.
*Brown, Don C.P.	Venice, Calif.
*Brown, Paul Douglas	West Orange, N.J.
*Bussey, Carver T. 7	Florence, S.C.
*Carpenter, Randall H. 7	Wilmington, Del.
*Carter, John Henry	Pasadena, Calif.
*Chadwell, Geo. Theodore 6	Furden, Okla.
*Cox, Ray Lawrence	Vernon, Texas
*Cranston, George E.	Winfield, Kans.
*DuRant, Francis Hill 2	Georgetown, S.C.
*Emrick, Paul Stanley 6	West Lafayette, Ind.
*Ezzard, Richard F. 6	Winter Garden, Fla.
*Fitzwater, John Timothy	Buckhannon, W. Va.
*Hahn, Delbert Henry	Milwaukee, Wis.
*Hendrix, Wm. Murray 8	Fort Belvoir, Va.
*Henry, John Elwood	Ridgefield Park, N.J.
*Holt, James Wm., Jr. 2	Harard, Ky.
*Itz, Milford Felix 7	Osage City, Kans.
Jeffrey, Thomas S., Jr. 6	Lexington, Va.
*Jones, Jack Carey 1	Dobbs Ferry, N.Y.
*Maney, John Randolph	Cedar Rapids, Iowa
*Miller, Samuel Hudson	Decker, Ind.
*Morse, Raymond S. 6	Fort Sill, Okla.
Myer, Glen Anthony	Cupertino, Calif.
*Pratt, Carlos Conrad 2	Bearden, Tenn.
*Preston, Joseph James 7	St. Paul, Minn.
Reeve, Ralph Amos 2	Milbank, S.I.
Rogers, George Wendell 4	Tucson, Ariz.
Rozwenc, George Stephen	Northampton, Mass.
*Simpson, John Gilliland 5	Chey Chase, Mo.
*Smith, Pinkham 6	Providence, R.I.
*Spieth, Harry Edwin, Jr.	Portland, Ore.
*Tarter, Jerome	Mintonville, Ky.
*Van de Lester, John R.	Hammond, Ind.
Whitaker, Narce	Bozons, Ky.
Wilson, Frederick G.	Delaware, Ohio

Specializing in Observation Aviation Regular Army Officers

2nd Lt. John Thomas Shields, Cav.

Observation Aviation Regular Army Officers

2nd Lt. Wm. Swinton Steele, Inf. S.C.

Foreign Students

3rd Lt. Ruperto Bayron Luzon Philippine Army
3rd Lt. Victor H' Yongco Dizon Philippine Army Reserve

Flying Cadets

*Allan, Charles Oran, Jr. 2 Panama City, Fla.
*Barham, James Carlton Houston, Texas
*Boaz, Wm. Nelson, Jr. Lexington, Ky.
*Chandler, Charles G., Jr. San Antonio, Texas
*Cole, Nester Evan 2 Florence, S.D.
*Dach, Keith Wesley 7 Minneapolis, Minn.
*Davine, John Irvine, Jr. Philadelphia, Pa.
*Dempsey, Ralph Monroe Ottawa, Ohio
*Folts, John Lloyd 2 Herkimer, N.Y.
*Habberstad, Edward Clair, Blooming Prairie, Minn.
*Jones, James Dalton Sarasota, Fla.
*Kinnaird, Eugene F., Jr. Lexington, Ky.
*Luker, James Wester Porterville, Calif.
*Motyl, James Dimitri Wilson, Conn.
*Page, Jerry Dentler Los Angeles, Calif.
*Pancake, Frank Robbins 6 Staunton, Va.
*Parker, Frank R., Jr. 4 Old Greenwich, Conn.
*Ragland, Richard Milner Handley, Texas
*Wilkins, John C. 6 Corvallis, Ore.
*Williams, Adrial Newton Shelbyville, Ky.

Specializing in Pursuit Aviation

Foreign Students

5d Lt. Bienvenido Exequiel Ferrer, Philippine Army.

Flying Cadets

*Barnick, Roland John 2 Max, N.D.
*Boyer, Arnold Walter Fort Lauderdale, Fla.
*Bowen, Wm. Joseph Alvin Oak Park, Ill.
*Bowen, Wm. Sebastian Huntington, W. Va.
*Cate, Albert Murray 2 Plainfield, Vt.
*Cherry, Wm. Terrell, Jr. Abilene, Texas
*Conway, Ralph Francis Socorro, N.M.
*Cory, Albert Arnold Oak Park, Ill.
*Darling, Henry Bosworth, Jr. 2 Lexington, Va.
*Davie, Allyn Taylor Los Angeles, Calif.
*Dusard, Leo Francois, Jr. Kirkwood, Mo.
*Egan, Wyatt Patrick Goldsboro, N.C.
*Fisch, Ted Bernard Milwaukee, Ore.
*Gilbert, Wm. Frank, Jr. Lyman, S.C.
*Gilchrist, Wm. David 6 Auburn, Ala.
*Gordon, Michael Jacob 6 Chicago, Ill.
*Gorman, Paul Joseph Detroit, Mich.
*Green, Franklyn Thomas Fort Logan, Colo.
*Grieger, Harvey Emil 6 Wanatah, Ind.
*Grossetta, Anthony Vincent Tucson, Ariz.
*Hacker, Ward W. Detroit, Mich.
*Hester, John Kenton 6 Peoria, Ill.
*Hornsby, Thomas Wm. 7 Columbia, S.C.
*Hubbard, Thomas Harvey San Diego, Calif.
*Jackson, Thomas Walter Ames, Iowa
*Kelly, Joseph Anthony Westville, Ill.
*Koopke, Fred Vinton 6 LaMoille, Ill.
*Lawrence, Samuel E. Jr. 8 Baton Rouge, La.
*Labbery, Harry Gilbert, Jr. Mobile, Ala.
*Lichter, Carl Jerome 7 St. Paul, Minn.
*Loomis, Donald Eugene 8 Chicago, Ill.
*MacDonald, Charles Henry Baton Rouge, La.
*Matthews, Robert Lee 6 South Bend, Ind.
*McCafferty, Guy Franklin 4 Fort Bliss, Texas
*McMillan, George Bray Winter Garden, Fla.

*Meng, Lewis Bruno 7 Avondale Estates, Ga.
*Milne, Jack Gillespie 2 Meyersdale, Pa.
*Munsemeyer, Wilmer Walter Kent, Ohio
*Norris, Robert Parks Banks, Ala.
*Ort, Rudolph King Wichita Falls, Texas
*Reed, Wm. Benjamin 6 South Bend, Ind.
*Richmond, Luther Henry, North Wilbraham, Mass.
*Riley, Harrie Dean Chicago, Ill.
*Rosasco, Henry Peter Washington, D.C.
*Salmela, Oliver Reino East Weymouth, Mass.
*Seymour, Rudolph Romulus Cary, N.C.
*Slocumb, Charles Dewey, Jr. 2 Goldsboro, N.C.
*Sprankle, Kenneth Wayne 6 West Lafayette, Ind.
*Stewart, Everett Wilson 2 Manhattan, Kans.
*Terhune, Chas. Houston, Jr. Indianapolis, Ind.
*Tipton, James Baird 8 University, Ala.
*Tokarz, Clemence Paul Port Richmond, Va.
*Wheeler, Ansel James 2 Genesco, N.Y.
*Wood, Paul Davis Fairmont, W. Va.
*Wood, Samuel Gordon 4 Washington, D.C.

Recapitulation

Section	Reg. Army Officers	Foreign Officers	Flying Cadets	Total
Attack	0	1	44	45
Bomb.	2	0	38	40
Observation	2	2	20	24
Pursuit	0	1	55	56
Total	4	4	157	165

Note:

The underscored numeral following the names of Flying Cadets listed above indicates the branch of the service in which they hold a Reserve commission, according to the following key:

- 1 - First Lieutenant, Infantry Reserve
- 2 - Second Lieutenant, Infantry Reserve
- 3 - First Lieutenant, Cavalry Reserve
- 4 - Second Lieutenant, Cavalry Reserve
- 5 - First Lieutenant, Field Artillery Reserve
- 6 - Second Lieutenant, Field Artillery Reserve
- 7 - Second Lieutenant, Coast Artillery Reserve
- 8 - Second Lieutenant, Corps of Engineers Reserve

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EMERGENCY LEAP INJURES STUDENT OFFICER

Lieut. Edward W. Jacunski, a graduate of the Military Academy in June, 1938, was injured during an emergency parachute jump from a spinning BT-9 airplane, near Randolph Field, Texas, on April 17th. Witnesses declare that Lieut. Jacunski started the spin at about 5,000 feet, finally resorting to his parachute when the spin reached 1,500 feet. Severe leg injuries were received by the student officer, possibly when he was struck by the wing as he attempted to clear the plane.

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Major Clayton L. Bissell, Air Corps, now a student at the Naval War College, Newport, R.I., has been assigned to duty in Washington, D.C., as a member of the War Department General Staff

DELIVERY OF BC-2 BASIC COMBAT AIRPLANE

The Assistant Secretary of War, the Hon. Louis Johnson, announced on April 30th the delivery of the first of three BC-2 Basic Combat airplanes by North American Aviation, Inc., Inglewood, Calif., to the Army Air Corps at Wright Field, Dayton, Ohio.

This is a single-engined low-wing monoplane, powered with a single-row Pratt & Whitney engine, driving a three-bladed propeller. The crew consists of pilot and gunner-observer.

The approximate wing span is 43 feet, length 23 feet. The wings are of all-metal construction, and the fuselage of welded tubular steel, fabric covered. The armament comprises two machine guns, one fixed, firing forward, and one flexible, mounted in the rear cockpit.

The basic combat type is a training plane which has been made necessary by the high performance of modern combat airplanes and is used as a step up between the Basic Trainer which the Flying Cadets use at Randolph Field and the combat planes with which tactical units are provided. A Basic Combat plane is provided with all of the various instruments, controls and other "gadgets" which the pilot is required to use on modern combat planes, and is at the same time small and much cheaper to build and maintain than combat aircraft. In this way a student has an opportunity to receive instruction in proper manipulation and utilization of all of the equipment of a modern airplane while flying one that costs from one-third to one-half as much.

A FLYING FAMILY

According to the News Letter Correspondent of the 120th Observation Squadron, Colorado National Guard, aviation can boast of an unusual family among its adherents.

Announcing that word had been received that Harold Montee, one of the famous Montee flying family and a former member of the 120th Squadron, resigned as aeronautical inspector for the Civil Aeronautics Authority in its Kansas City offices to become branch manager in the Chicago headquarters of Aero Insurance Underwriters, the Correspondent goes on to say that Harold Montee's older brother, Kenneth, was a war-time instructor in flying who, after thousands of hours of hazardous instruction flying and barnstorming after the war, died of scarlet fever in 1926.

In 1919, however, Kenneth had taught his two brothers, Harold (17) and Ralph (18) to fly. Among them the three brothers also taught their father to fly, and at the age of 60 he acquired a private pilot's license which he kept up

until his seventieth birthday, six years ago.

Harold Montee was the first passenger transport pilot in Southern California, flying from Los Angeles to the Imperial Valley in 1921. He and his brothers were early operators of the Mercury Flying Service at Clover Field, Santa Monica, Calif., of which William C. de Mille was President. They did much of the "stunt" flying for motion pictures at that time.

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COLORADO NATIONAL GUARD AIRMEN MAKE "CROSS-COUNTRY" TO BOISE, IDAHO.

During the week-end, April 22-23, the 120th Observation Squadron, Colorado National Guard, performed a successful and interesting cross-country flight to Boise, Idaho, for the primary purpose of inspecting the camp and airport facilities at that city in connection with the summer training of this organization, which will be in camp there from June 10th to 24th.

The flight of four O-47's, with Major F.W. Bonfils, Commanding Officer, leading, comprised among its personnel Brigadier General H.H. Richardson, the Adjutant General of Colorado, and Captain R.L. Qualls, State Quartermaster. The Squadron members consisted of Captain S.W. Gregory, 1st Lieut. Howard M. Williams, Claud Thompson, Robert L. Ainsworth, 2nd Lieut. T.E. Seibert, E.C. Fackerell, Sergeants J. Burnett, R.A. Castetter and M.M. Empey.

Leaving Denver at 12:10 p.m., the flight, upon arrival at Salt Lake City, was met by Captain John K. Nissler, Air Corps Instructor, who had arrived earlier from March Field, California, five planes then proceeded to Boise, Idaho, and was met by Mrs. Ailsie, publisher of the "Idaho State News" who was hostess to the entire outfit during the course of the evening.

On the following morning, a meeting was held with General McConnell, the Adjutant General of Idaho, and Colonel Hummel, Corps of Engineers, also members of General McConnell's staff. An inspection was made of the camp and the new airport under construction. All the members of the flight were very favorably impressed with Boise and the facilities there for a summer encampment, and they are looking forward to the period from June 10th to the 24th.

Leaving Boise in the early afternoon, the return flight to Denver was made in four hours' flying time, with an hour's stop at Salt Lake City for service and for additional weather information.

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Captain Townsend Griffiss, A.C., is assigned to duty in the Office, Chief of the Air Corps, upon completion of instruction at A.C. Tactical School.

V-8061, A.C.

WHY NOT SPECIALIZATION IN THE AIR CORPS?
By Staff Sgt. Oliver E. King, Air Corps.

Ed. Note: Staff Sergeant King's personal views regarding the present maintenance system in the Air Corps and his recommendations on the engineering set-up for an organization are very interesting. His article is published in the Air Corps News Letter not only because of its general interest but also because it is desired to obtain the views of other experienced maintenance and engineering personnel in the Air Corps. It is quite likely that many will share Sergeant King's views, either as a whole or in part, while others may be in total disagreement with them.

The problems of the Air Corps are many and varied, and for many of them no precedent can be found upon which to base a solution. In publishing the Air Corps News Letter it had been hoped all along to feature therein round table discussions on various Air Corps matters, fully realizing that one person's ideas would probably inspire ideas in others, thereby affording some measure of assistance in the practical solution of these problems. Possibly Staff Sergeant King's article may set the wheels of round table discussions in motion, and may lead to the News Letter serving as an open forum for such discussions - something which had been hoped for some time would come to pass.

As a noncommissioned officer of more than eighteen years' service (all of it in the Air Corps) who has at one time or another been a Crew Chief, Flight Chief and Hanger Chief, with varying degrees of success, and who has for the past seven years been Assistant to the Technical Supervisor of the Middletown Air Depot Control Area, in which latter capacity an opportunity was afforded for observing the Air Corps system of maintenance and, more important, for obtaining the individual enlisted man's views (the man who actually maintains the airplane) concerning the maintenance system as now constituted, I should like to be permitted, through the medium of the Air Corps News Letter, to express my views and opinions in connection with the present method of maintenance and to suggest a possible remedy.

After years and years of "Crew Chiefs" it is now believed to be high time for specialization in the Air Corps. Our airplanes, engines, instruments and accessories have now reached the point where it is no longer humanly possible for "One Man" sufficiently to familiarize himself with them - all of them - to be able properly to inspect and maintain them in first class condition and, above all, properly to instruct others assigned as assistants in the proper care and maintenance of them.

Today the majority of our airplanes, especially the later multi-engined types, are equipped with many and varied kinds of instruments and mechanisms with which the individual now known as the "Crew Chief" is supposed to be familiar. But

is he? Your guess is as good as mine. In any case, he certainly has not been given sufficient instruction in any one of the various instruments, mechanisms, gadgets, etc., to insure his being an expert and certainly, therefore, he is not believed capable of training his assistants properly. For the sake of argument let's take the B-18A type of airplane. When these airplanes - then known as the B-18's - were first given to the service, crews were sent to the factory to ferry them to their home stations. The "Crew Chief" was and is, we will say, usually given about ten days at the factory to familiarize himself with an airplane costing the Government in the neighborhood of \$100,000.00, whereas, in reality, if he could thoroughly familiarize himself with half of it in ten months he would be of above average intelligence. Anyone has but to take a casual look at the various gadgets, instruments, mechanisms, etc., on a B-18 airplane to realize the magnitude of the task of becoming thoroughly familiar with it.

Now we come to specialization. For the sake of argument, we will ask: Why is it more necessary that we have specialists in Armament, Radio, photography, etc., than in airplanes, engines, instruments, etc.? Why not let the "Crew Chief" do all of that too? Certainly, if he is capable of absorbing all of a B-18 airplane, a little thing like armament, radio, photography, etc., should be "Duck Soup" for him. On the other hand, if we had specialists in airplanes, engines, instruments, carbure-

tion, etc., in each organization, does it not sound reasonable that such specialists could better inspect and maintain the equipment in less time and, what is more important, better train those assigned as assistants than could one so-called "know it all Crew Chief?"

Then we come to the old argument: Why have all these specialists in an organization when we do not ordinarily make repairs to this equipment, but simply remove it and replace it with serviceable equipment? The answer to that is: How many times has it been observed that the "Crew Chief", "Flight Chief" and "Hangar Chief" and on up and down the line have found it necessary to remove about two-thirds of the accessories from an engine in order to correct some minor trouble that could have been detected by a specialist almost immediately? The amount of time spent in "tinkering" with an airplane or engine by those not thoroughly familiar with it, trying to find out what is wrong with some mechanism or gadget, would be appalling if there were any way of keeping track of it.

An engine specialist, given an assistant, can inspect and maintain an engine in one-third the time it will take a "Crew Chief," and do it more thoroughly, too. The same holds true for the airplane, instruments, etc. In approximately six months the assistant or assistants to the engine, airplane or instrument mechanics would themselves be capable, whereas now who knows when a "Crew Chief's" assistants can be considered capable? It all depends upon how well the "Crew Chief" himself is informed, how adept he is and how willing he is to impart what he knows to his assistants.

My idea of the ideal engineering department "set-up" for an organization - any organization - is this:

- (1) A competent engineering officer and assistant.
- (2) A competent organization inspector with as many assistants as deemed necessary, the inspector to function directly under the organization commander.
- (3) Competent "trouble shooters" for airplanes, engines, instruments, etc. Such men would be invaluable to an organization if they knew their business.
- (4) A competent engineering clerk.
- (5) A competent crew of airplane mechanics with competent foremen.
- (6) A competent crew of engine mechanics with competent foremen.
- (7) At least three competent men on carburetors, ignition and electrical systems.
- (8) At least three competent instrument mechanics.
- (9) A crew of "Cleaners" with a competent foreman, whose sole mission would be to keep airplanes, engines, hangars and hangar equipment clean at all times.
- (10) A sufficient number of flight

mechanics who could be pooled and one or more of whom would be required to accompany, in their turn, each and every flight originating in the organization.

Give an organization such an engineering department set-up and it is believed the results will be astounding. Inspections will be performed in approximately one-half the time now required, many troubles encountered with airplanes and/or engines will be remedied without the indecision, tinkering, etc., now experienced. Equipment will be cleaner and, all in all, a better organization, insofar as engineering is concerned, should and undoubtedly will result.

Where are we going to get such crews for each organization? Well, your guess is as good as mine.

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RUNWAY CONSTRUCTION AT ALBROOK FIELD

Construction on the main runway section at Albrook Field was completed and the runway opened to traffic on the morning of April 17th. At the same time work was commenced on the second phase of the new installation, consisting of a shorter, narrower strip intersecting the main runway diagonally, and a taxi strip connecting a recently completed hangar with the aprons now in use. The main runway, which was commenced in December, 1938, lies in a North-South direction, and is 4700 feet long by 250 feet wide. The intersecting runway will lie in an East-West direction and will be 75 feet wide.

Albrook Field is a gigantic fill of material dredged from the Canal with a clay top surface, and during the prolonged and frequent soakings in the rainy season became badly rutted and at times, dangerous. With the use of the new runways this condition will be entirely eliminated.

Simultaneously with the opening of the runway to traffic came the use of radio control of air traffic entering and leaving the field. The new control tower is situated on top of the hangar occupied by the 74th Attack Squadron and commands a full view of the field and of the line. Clearances for landings and take-offs must now be obtained by radio.

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Colonel Fred H. Coleman, Air Corps, commanding the Panama Air Depot for the past two and a half years, sailed on April 6th on the U. S. Army Transport REPUBLIC for his new station, the Headquarters, 3rd Corps Area, Baltimore, Md. Lieut. Colonel George E. Lovell, Air Corps, assumed command of the Panama Air Depot on April 7, 1939.

"VANITY VERSUS GRAVITY"

By Jerome Lederer

Chief Engineer, Aero Insurance Underwriters

About 500 B.C., Polycrates, tyrant of ancient Greece, bragged to the great philosopher, Pythagoras, that the Gods held him in very great esteem. His luck was so good, he boasted, that if he were to throw his ring into the Aegean Sea, it would be returned to him the next day. And so saying, Polycrates threw his ring into the water. Pythagoras expressed his doubts on the outcome. But true to the tyrant's boast, the ring was found in the belly of a fish served at his table the next day.

This manifestation of luck and power was too much for wise Pythagoras. After warning the tyrant, he hurriedly left the palace fearing that a man who would go tempt the Gods must surely meet a terrible fate. So it was. Before long, Polycrates was crucified. He had tried the patience of the Gods and lost.

Gravity is the God of Aviation. It is omnipresent. It endeavors to destroy those who do not respect it; it never relaxes; it detests carelessness, exhibitionism or any other form of Vanity in the air. Obituary notices are its favorite means of publicity. The great God Gravity is aggressive, alert, quick to punish any lack of reverence.

What constitutes lack of reverence? Gravity answers grimly. Acrobatics at low altitudes, steep climbs or power bumps near the ground, contempt for unfavorable weather, blind flight into squalls and fog or disregard for authority. Last year in private flying, several hundred airplanes were severely damaged and at least 150 people were badly hurt or lost their lives as a direct result of carelessness, bravado or exhibitionism. Over-confident pilots tempted their luck. Vanity in the air.

Here follows a case history. This pilot's life expectancy is long overdue. Gravity may be toying with him.

He has been flying for about three years. He has never had his license revoked or any disciplinary action taken against him by the Government. He is regarded as a risky pilot and we know of numerous incidents such as landing on the strand of a beach and in the backyards of friends. He has been known to fly low in cornfields, low enough to take the tops off the corn stalks to scare his friends. He has had one bad crash and on three other occasions he has cracked or broken propellers while landing or taking off. When a good friend of his was killed two years ago, he said he would not take chances again, but his most serious accident occurred only four months ago. He was flying with a friend around a haystack seeing how close he could come without hitting it. He miss-

ed the haystack all right but struck a tree. He was in a critical condition for several days at the local hospital. Now he is flying again, but continues to loop and bank steeply over the business district."

That report is typical of the over-confident pilot. Heedless of warnings, Vanity continues to grip his controls. Who can doubt the outcome!

Vanity in Aviation is not confined to rash pilots. Some engineers and executives could confess many errors in judgment owing to self-complacency or the desire to outdo a competitor. Such vanity has been evidenced by indifference towards uncertain factors in design like the danger of flutter, or by insufficient attention to details as the improper location of a carburetor drain, creating a fire hazard. Fatal errors have resulted from over-confidence instilled by past successes or by obstinate prejudice against new methods of design and analysis. Examples of this type of Vanity are numerous.

One well-known designer refused to provide adequate balance for the elevators of his new ship contrary to the opinion of his aerodynamics expert, because no previous designs of his had suffered from elevator flutter. Another refused to admit that his mechanics or inspectors were infallible in spite of an expensive forced landing, due to the absence of a bead around an aluminum oil line. In another instance, a high company official wanted to dazzle a nearby competitor with a new design. His normally conservative pilot performed incredible stunts close to the factory of the competitor, at noon, when all could see. Perhaps he had been instructed to show off. We shall never know because he is dead, the victim of that Vanity.

Truly in the world of Aviation the meek shall inherit the earth because the earth will inherit the others. But Aviation is fortunate. The preponderance of engineers, executives and pilots yield to Gravity the respect it always deserves. Modest and humble, the men who are making Aviation the safe industry it is today show their reverence for this great God of Aviation by the utmost care and forethought in everything they plan and do. As a result, our safety record is extraordinarily good; over three million people flew last year, 99.99% of them safely. Records indicate that airline flying is already as safe as travel by automobile. Accidents have been avoided by a ready

(Continued on Page 9).

NEW RANDOLPH CADET BARRACKS OCCUPIED

The first of the two new Flying Cadet barracks at Randolph Field was formally occupied by Company "C" during the afternoon of April 22nd. More than 100 Cadets, assigned to the new barracks, accomplished the move in less than an hour from the time the building was thrown open for occupancy.

Room assignments had been made the previous day, preliminary packing of personal belongings accomplished and, when a preliminary formation, at which last minute instructions were given, was dismissed, the actual transfer took only minutes.

An overcrowded condition that has existed in the living quarters of the Flying Cadet Detachment since the inception of the enlarged classes more than a year ago was thus partly relieved. It will not be until June, when the fourth barracks is completed and opened, that the situation will be completely normal.

In outward appearances, the two new buildings are identical with the two original barracks constructed in 1931. Slight modifications have been made in the interior design, in the paint trim, and in the basement of the barracks, but only a close inspection reveals this.

Prized possessions were moved by the Cadets, but none were handled with more care than the photographs of "The One and Only Girl Friend," which occupies the place of honor in the wall locker of almost every Cadet.

Living quarters for 106 men, two of them occupying each room, is the normal quota of the new barracks. Due, however, to the attrition rate of Company "C" since the start of the present class, the present occupancy is slightly less than this figure.

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PROMOTION OF FIRST LIEUTENANTS, AIR CORPS

Announcement was recently made by the War Department of the promotion of 42 First Lieutenants of the Air Corps to the grade of Captain, with rank from May 2, 1939, as follows:

Edwin R. French	Reginald F. C. Vance
John W. Persons	William L. Lee
William C. Bentley, Jr.	David D. Graves
Sam W. Cheyney	Haywood S. Hansell, Jr.
Max H. Warren	William T. Colman
Edwin L. Tucker	Paul M. Jacobs
Ralph Rhudy	Dudley D. Hale
Isaac W. Ott	Herbert L. Grills
Edward H. Underhill	Benjamin S. Kelsey
Trenholm J. Meyer	Thomas L. Mosley
John J. Keough	Raymond L. Winn
William H. Maverick	Leonard F. Harman
William P. Sloan	Kingston E. Tibbetts
George F. Kinzie	Richard H. Lee
Albert Boyd	Robert W. Stewart
James W. McCauley	Lewis R. Parker
Edward H. Alexander	William M. Morgan

Frank A. Armstrong, Jr.	Richard I. Dugan
William A. Matheny	Edwin M. Day
John P. Kenny	Jack W. Wood
Lambert S. Callaway	James H. Wallace

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ASSIGNMENT OF TACTICAL SCHOOL GRADUATES

In accordance with Special Orders of the War Department, recently issued, the following-named Air Corps officers, now on duty as students at the Air Corps Tactical School, Maxwell Field, Ala., are assigned to duty at the stations indicated, effective upon the completion of their present course of instruction, viz:

- To Chanute Field, Ill.:
 - Major Harvey H. Holland
 - Captain Charles G. Pearcy
 - 1st Lieut. Charles T. Arnett
- To Kelly Field, Texas:
 - Captain Henry R. Baxter
 - Captain Arthur L. Bump, Jr.
 - Captain Robert E. L. Choate
 - Captain Frank J. Coleman
 - Captain John P. Doyle, Jr.
 - 1st Lieut. John W. Persons
- To Langley Field, Va.:
 - Major James C. Cluck
 - Major Clarence B. Lober
 - Major Edward M. Morris
 - Major William B. Souza
 - Captain Walter G. Bryte, Jr.
 - Captain Hugo P. Rush
 - Captain Milton J. Smith
- To Mitchel Field, N.Y.:
 - Captain A. J. Kerwin Malone
- To Moffett Field, Calif.:
 - Major Fred C. Nelson
- To Washington, D.C., for duty in the Office of the Chief of the Air Corps:
 - Lieut. Colonel Otto G. Trunk
 - Major William M. Lanagan
 - Captain Samuel R. Harris, Jr.
 - Captain Glen C. Jamison
 - Captain Walter S. Lee
 - Captain Aubrey L. Moore
- To Randolph Field, Texas:
 - 1st Lieut. Carl R. Storrle
- To Selfridge Field, Mich.:
 - Captain John N. Jones
 - Captain George W. McGregor
 - Captain Allen R. Springer
- To Wichita, Kansas:
 - Major Ray G. Harris, for duty as Air Corps Representative at the plant of the Stearman Aircraft Company
- To Wright Field, Dayton, Ohio:
 - Major Edmund P. Gaines
 - Major James A. Woodruff
 - Captain Carl J. Crane
 - Captain James K. DeArmond
 - Captain Alfred H. Johnson
 - Captain Ernest K. Warburton
 - 1st Lieut. Leonard F. Harman
- To Maxwell Field, Ala.:
 - Captain Maurice F. Daly
- To Hawaiian Department:
 - Major Henry H. Reilly

LOWRY FIELD PASSES FIRST BIRTHDAY

February 28th last represented Lowry Field's first anniversary. In was on February 28, 1938, that a hundred and seventy students, who had been transferred from Chanute Field, began instruction at the Denver Branch of the Air Corps Technical School.

The entire population of the field a year ago was approximately 300 officers and enlisted men, while now it is close to 800. There has been a constant expansion of the field to a point where no more personnel can be accommodated until additional barracks are provided.

Lowry Field has the enviable distinction of being the first Army station privileged to welcome the newly appointed future Chief of Staff, General Marshall. General Arnold and General Marshall visited Lowry Field on April 27th, and an excellent steak dinner was enjoyed at the Buckhorn. Lowry Field regrets that high pressure business conferences by Generals Arnold and Marshall with the officers accompanying them prevented a real despidida honoring our distinguished visitors.

The latest addition to the School at Lowry Field is the Armament Center for training in various phases of armament work. Placed at the east end of the field, it consists of a skeet range, gas chamber, camera obscura, small arms range, machine gun laboratory and storehouse for pyrotechnics. The Denver POST described these activities, as follows:

"The skeet range is operated in accordance with the rules and regulations of the National Skeet Shooting Association. Although this is considered a 'sporting phase' of instruction in the training of armorers, it is designed to teach the value of target practice as it affects aerial gunners.

"The clay pigeon targets of the skeet range represent to the student a hostile airplane which is either attacking or being attacked. The shotgun, with its spray of bird shot, is to him a brace of flexible machine guns spraying .30 caliber bullets at the rate of 300 rounds or more a minute.

"Officers declare this type of shooting is most valuable in teaching gunners to 'lead' their prey.

"In the 'gas chamber,' students are the subjects of slight 'gassing,' though not to any alarming extent, to get a chance to smell various war gases and to identify them by odor.

"Tear gas is used quite often in the chamber, principally because of its harmless qualities. Students are taught to use their masks efficiently and learn the characteristics of the gas.

"Officers say the student who has been careless in inspecting his complete equipment for defects will be impressed to the point of not again overlooking

minor details should he fail to fit his mask correctly to the contour of his face.

"The procedure usually followed is for students to enter the building with their masks off, then for the instructor to light several capsules of tear gas. After sniffing the gas the students put on their masks hurriedly and watch its reactions before leaving the building. If the students have not used their masks satisfactorily, the gas will affect the tear glands of their eyes, causing them to cry profusely.

"The camera obscura laboratory is an enlarged version of an ordinary camera by which bombing activities can be carried on without actual use of bombs.

"Use of the camera obscura for bombing practice provides for each bombing approach a permanent record which can be studied to correct common faults in bombing-flight technique. This method of preliminary training is less costly than actual bombing and at the same time eliminates hazards involved in the handling of the high explosives."

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"Vanity Versus Gravity" (Continued from Page 7)

willingness to recognize the operating limitations of man and airplane; by humility in the presence of uncertainty.

Humility is the antidote for Vanity. Thousands of distressing accidents will occur and hundreds of people will be killed because pilots in an over-confident, cocksure mood, do not pause to reflect that "Pride Goeth Before A Fall."

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CHANGES IN WEATHER OFFICERS ASSIGNMENTS

First Lieuts, Leo P. Dahl, Ivan L. Farman and Donald L. Yates, Air Corps, upon completion of their present course of instruction at the California Institute of Technology, Pasadena, Calif., are assigned, respectively, to Langley, March and Barksdale Fields; Lieut. Dahl to duty with the 2nd Weather Squadron, relieving 1st Lieut. Torgils G. Wold; Lieut. Farman to duty with the 1st Weather Squadron, relieving 1st Lieut. Sam H. Wiseman, and Lieut. Yates to duty with the 3rd Weather Squadron, relieving 1st Lieut. Arthur F. Merewether.

The officers thus relieved from duty with Weather Squadrons will report to the Commanding Officers of the respective stations for assignment to duty.

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CIVIL AERONAUTIC INSPECTORS TAKE TRAINING AT PRIMARY FLYING SCHOOL.

Eight Inspectors of the Civil Aeronautics Authority reported for temporary duty at Randolph Field on May 1st for a special course on the Primary Stage, designed to familiarize them with the Air Corps system of flight training. This group is the second one to make a study of the Primary Stage work, the first group spending a two-week period at the "West Point of the Air" earlier in the year.

The eight inspectors, all of whom are Reserve officers in either the Army, Navy, Marine Corps or Coast Guard, include: Major G.A. Wiggs and Lieut. G.M. Jones, Air Reserve; 1st Lieut. F.H. Longeway, National Guard; Captain F.M. Clarke; Lieuts. (Junior Grade) Arthur C. Burns and J.O. Christian, Navy; Captain Robert E. Bake, Coast Guard, and Lieut. J.R. Cram, Marine Corps.

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TWO RANDOLPH MASTER SERGEANTS HONORED

Master Sergeants Paul Kurtz, 11th Air Base Squadron, and Lester Harrison, OMC, on duty at Randolph Field, Texas, were jointly honored at a dinner in the 11th Air Base Squadron Mess Hall on April 30th. Sergeant Kurtz retired on April 30th, and will make his home in Cleveland, Ohio. Sergeant Harrison is scheduled for retirement on May 31st.

Colonel John B. Brooks, Commanding Officer of Randolph Field; Major E.B. Bayley, Commanding Officer of the 11th Air Base Squadron, and Captain Francis H. Kuhn, Commander of the Quartermaster Detachment at Randolph Field, were the speakers.

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MASTER SERGEANT LEIBY APPOINTED WARRANT OFFICER.

Master Sergeant Charles C. Leiby, of the Administrative Section, Base Headquarters and 1st Air Base Squadron, Langley Field, Va., recently received notification from the War Department of his promotion to the rank of Warrant Officer, which became effective on May 1st.

Warrant Officer Leiby has been with the service in the Virginia locality for quite a number of years, having served with the 4th Coast Artillery Corps Band at Fort Monroe, Va., prior to his transfer to the Air Corps in February, 1920, in the capacity of Photographic Instructor of the Air Corps Technical School, which was then located at Langley Field. This School was transferred on June 30, 1922, to Chanute Field, Ill., and a little over a year ago to Lowry Field, Denver, Colo.

After being transferred to the 22nd

Photographic Section at Kelly Field, Texas, in April, 1925, and later to the Philippine Islands for a period of three years with the 6th Photo Section, Warrant Officer Leiby returned to Langley Field in January, 1935, accepting his present position of Warrant Officer in Charge of the Photographic Department of the Administrative Section.

Born at Derry Church, now a part of Hershey, Pa., Warrant Officer Leiby attended Tech. High School at Harrisburg, Pa., prior to his enlistment for the 104th Coast Artillery Corps, Fort Washington, Md., on October 30, 1908.

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LANGLEY FIELD ENLISTED MEN ENROLLED AT AIR CORPS TECHNICAL SCHOOL.

Eighteen members of various organizations at Langley Field, Va., departed by air on April 24th for Chanute Field, Rantoul, Ill., to pursue courses of instruction at the Air Corps Technical School.

The training of the enlisted men for the specialist courses in car and truck maintenance, instruments, propellers, and electrical maintenance labor, will be for a six weeks' period, while a six month period will be required for the regular subjects covering airplane mechanics, parachute rigging, radio operators and repairers.

Those who departed from Langley Field for the May 1st Class included Staff Sergeant Stuart S. Broucher, Headquarters and Headquarters Squadron, HQ Air Force; Sergeant Arthur R. Loftus and Private William J. Kermes, of the 49th Bombardment Squadron; Sergeant Charles H. Powell and Corporal William C. Goldman, of the 35th Pursuit Squadron; Corporal John Bettinger and Private, Specialist 6th Class, Dermont Leonard, of the 20th Bombardment Squadron; Corporal George W. Loughery, Privates 1st Class Stephen Kotyo and Glenn Hite, Privates Herbert Walker and Charles E. Slingland, all of Base Headquarters and 1st Air Base Squadron; Private, 1st Class, Lawrence M. Stuard, 96th Bombardment Squadron; Private, 1st Class, Nelson C. Howe, Jr., Headquarters and Headquarters Squadron, 2nd Wing; Private Joseph H. Sweeney, of the 36th Pursuit Squadron; and Privates Frank Mason, Joseph R. Buchert and Lawrence D. Lesh, all of the 21st Reconnaissance Squadron.

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Lieut. Colonel Raymond E. O'Neill and Major Perry Wainer, of March Field, Calif.; Majors Edward C. Black and Oliver K. Robbins, of Hamilton Field, Calif., have been relieved from duty at those stations and assigned to duty at the Air Corps Technical School at Chanute Field, Rantoul, Ill.

**"DON'T SIT IN THE CENTER OF THE COCKPIT"
(A Parable from the Primary Flying School)**

Ever since Randolph Field was constituted as the Primary Flying School in 1931, student navigation flights to nearby airports have been a part of the training. These cross-country problems have been carefully selected, every effort being made to start the Flying Cadets on the more simple flights, gradually leading up to navigation missions of 150 to 200 miles.

The first navigation flight for the embryo pilots is to a Civil Aeronautics Authority intermediate field, known as Pawnee, 61 miles from Randolph Field. Check points on this trip are outstanding and frequent. Half way to Pawnee is the town of Floresville, situated on a broad concrete highway. From there to Pawnee it is about 30 miles as the crow flies, with additional checkpoints.

Upon the day of the navigation problem, an instructor is dispatched to the destination about 15 minutes before the first student pilot departs. The instructor first inspects the field, lands, and checks the Cadets in as they arrive. Later he dispatches them at intervals for the homeward journey.

This procedure of dispatching an instructor ahead of the first student was followed recently. These extracts from the ensuing "correspondence" are self-explanatory:

Randolph Field, Texas.
April 21, 1939.

SUBJECT: FAILURE to find Pawnee on Navigation Flight in connection with student training.

TO: 1st Lieut. (An Instructor....) A.C.

You will explain by complete indorsement hereon why you failed to find Pawnee on a recent navigation flight in connection with student training.

JOHN DOE,
Captain, A.C.

2nd Ind.

Randolph Field, Texas, April 24, 1939. -
To: John Doe, Captain, A.C., Randolph Field, Texas.

1. On being assigned to proceed to Pawnee, Texas, by the Flight Commander, to check the arrival of students, I made careful preparation for the flight. I drew the necessary map, received a weather report, and made a flight plan. The wind velocity being rather great, and almost perpendicular to my route, came in for careful attention as I plotted my course. I selected 1300' as the

best altitude, and Floresville as my first check point. I checked the equipment in the baggage compartment and noted that everything required, such as radio extension, X-country envelope, thermos jug, and flight schedule, were ready and loaded. I was assigned to fly BT-9 #222, a plane with which I was thoroughly familiar and whose engine and instruments I knew to be in excellent condition. My passenger was Corporal....., a first class mechanic, in whom I had every confidence.

2. At 12:45 p.m., I carefully warmed the engine, checked the Form 1, and after calling the control tower by radio, I was satisfied that everything was in perfect order. I taxied slowly out on the flying field, being very careful to look around for other airplanes, and scanning the area above and behind me so thoroughly that my neck was fatigued as a result. On seeing that all was clear, I proceeded to take off, noting the time as 12:51 p.m. As I climbed to the desired altitude, I was especially careful to carry sufficient right rudder to counteract for torque, and to sit exactly in the center of the cockpit. At 1300' I changed to high pitch and set my course for Floresville. I arrived over Floresville 15 seconds earlier than I had calculated and noted I was slightly off course. Accordingly I changed my course to the right one quarter of a degree, and made a note of the fact that I was ahead of schedule. Physically, I was very comfortable and mentally serene. During the time I was not occupied with flying my plane or watching my course, I meditated on the method I could pursue to improve my work still further, and become an even greater asset to my flight, and to Basic Stage in particular. The minutes passed very rapidly and pleasantly in this fashion.

3. When, according to my figures, I estimated I was over Pawnee, I cut the throttle and expected to see the airport as I spiraled down. My consternation and distress were a sight worth traveling miles to see when Pawnee appeared to be nowhere in sight. I flew in larger and larger concentric circles, but all I could see were innumerable fields and groves of mesquite trees, with a tantalizing white highway winding through to the southwest. After a few unpleasant minutes of this I bore off to the east, knowing that a railroad ran somewhere in that vicinity. I selected the first town along its track dragged the station and noted the name was Tuleta. I thereupon mentally made rapid calculations and computed my course for Pawnee. I had no difficulty

finding the airport this time, and after carefully circling and dragging the field, I landed. I was warmly greeted by the students who had preceded me and were anxiously awaiting my arrival. I refreshed myself with a drink of warm water from the thermos jug I had brought, and proceeded with the business of checking in the remainder of the students as they arrived.

4. I saw that I had passed squarely over Pawnee, and if my navigation had not been so perfect, or if I had not sat so exactly in the center of the cockpit, or even if I had not been so careful to correct for the torque, I would have passed enough to the right or left of Pawnee to have seen it. I then made a mental note to let a slight error creep into my flying in the future and avoid a repetition of this distressing experience.

(Signed) "An Instructor"
1st Lieut., AC.
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EXPANSION PROGRAM AT LANGLEY FIELD, VA.

The Langley Field Correspondent reports that an extensive two-year expansion program, which will result in the addition of about 1,000 enlisted men and 300 officers to the personnel of the GHQ Air Force at Langley Field, is scheduled to get under way in the near future, according to an official announcement made at the Peninsula Airdrome.

Recruiting for enlisted men to serve as mechanics will begin at the post within a short time, and the first group of between 100 and 300 officers from the Army's training station at Randolph Field, Texas, will arrive at the field in June.

Six new units will be formed from the Second Bombardment squadrons, Eighth Pursuit Group, 21st Reconnaissance Squadron, Base Headquarters and First Air Base Squadron. The exact nature of the new units, their official designations and the dates on which they will be organized will be announced within a short time.

In addition, a great deal of construction work of a temporary nature will begin at the post. Permanent construction may be begun during the latter part of the expansion program.

The program to begin at the airdrome will be a portion of a large-scale Army Expansion Bill, recently approved by Congress and approved by the President.

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Majors Frederick F. Christine and James T. Curry, Jr., Air Corps, have been relieved from further assignment and duty at March Field, Riverside, Calif., and assigned to duty at Scott Field, Belleville, Ill., departing for their new station about August 19, 1939.

JOINT EXERCISES WITH THE NAVY

The Second Bombardment Group, Langley Field, Va., took part in a Joint Army-Navy Exercise, basing at Providence, R. I., on April 20th and 21st. Ten B-17's arrived at the Rhode Island State Airport late in the morning of the 20th. Late in the afternoon of the same day, all ten B-17's headed out to sea, and the maneuvers were on. Long after dark Providence was given its first glimpse of the returning "Flying Fortresses" appearing out of the eastern haze, with all running and passing lights full on. After a late but bountiful supper, Colonel Robert Olds, Commanding Officer of the Group, issued an order alerting the personnel at 4:30 a.m. the next day.

The order "Stations" was issued at about 8:30 a.m. The objective was quickly located and constructively destroyed at sea with a 30-knot tailwind and good navigation expediting matters. Before noon, orders were received advancing by 24 hours evacuation from the home base at Langley Field. The assembling of equipment and supplies was accomplished with such rapidity that Colonel Olds was able to dispatch the planes on the way home within a couple of hours. Thus, on April 21st ended a brief but instructive Joint Army-Navy Exercise.

Each regularly assigned B-17 Airplane Commander in this Group has now met, in full, the blind landing qualification requirements published by the Chief of the Air Corps. This accomplishment, believed to be the first in record for the entire tactical echelon of a Combat Group, required the greater part of five weeks, with the utility B-18's carrying the load.

Flying Fortress Chuckles

After coffee and sandwiches for lunch, upon arrival at Providence, someone piped up: "Who's the Mess Officer? Where the heck's the Mess Officer?" "He took off for the city." "He'd better keep right on going. If he does come back, it had better be with a bodyguard."

In the morning, during the period of anticipation of the attack order, while the Engineer Pilots and Bombardiers were on the line ready to start all four motors upon instant notice, a civilian approached Engineer Pilot Robert A. Ping.

"What do you do on those big planes, Sonny?" he queried.

Pee Wee Ping, for lack of something to say in his usual rush, replied: "I am the bomber."

"You can't kid me, Son," the civilian came back, "you couldn't toss those big bombs out of the plane."

After returning to Providence, Major C. V. Haynes climbed out of B-17 #80 and noticed a civilian looking first at the motor and then going over and scrutinizing the landing gear. The Major watched him for a couple of minutes, looking at him going from one wheel to another. He finally asked the gentleman: "Is there any question you would like to ask?"

The civilian scratched his head and replied: "Yes, I can't for the life of me figure how you get the power from the engines down to the wheels for take-offs."

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RANDOLPH FIELD CORPORAL RECEIVES MEDAL

More than 1,800 Air Corps troops, including the Flying Cadet Battalion, paid homage to Corporal Harry A. Teague, Headquarters Squadron, Randolph Field, on May 6th, when they passed in review before the veteran noncommissioned officer during the ceremony in which he was presented with the Purple Heart with Oak Leaf Cluster, also a Silver Star Medal.

Major General Walter Krueger, Commanding General of the Second Division, made the presentation.

Corporal Teague spent 27 months overseas during the World War, serving with the 26th Infantry. He was awarded the Purple Heart in an announcement by The Adjutant General, in which the Secretary of War directed that a Purple Heart and Oak Leaf Cluster be presented to Corporal Teague for having been gassed in action on June 9, 1918, while serving as a Private, Headquarters Company, 26th Infantry, and later wounded in action on October 4, 1918, while serving as bugler, Company H, 26th Infantry.

Corporal Teague first enlisted in the Army at Tulsa, Oklahoma, on July 3, 1916, and served with Company G, 3rd Infantry, at Del Rio, Texas, until he sailed for France with the First Division on June 14, 1917. During the 27 months overseas service, Corporal Teague participated in five major engagements - St. Mihiel, Soissons, Meuse-Argonne, Cantigny and Anseville.

Colonel John B. Brooks, Commanding Officer of Randolph Field, commanded the troops during the review. Music was furnished by the 23rd Infantry, of Fort Sam Houston, Texas.

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The following-named Air Corps officers have been relieved from duty at their present stations and assigned to duty at Lowry Field, Denver, Colo.; Lieut. Cols. Warner B. Gates, March Field, Calif.; William D. Wheeler, Selfridge Field, Mich.; Majors James W. Hammond, Mitchell Field, N.Y.; Roy W. Camblin, Chanute Field, Ill., and Roscoe C. Wriston, Langley Field, Va.

RANDOLPH FLYING RECORDS AGAIN SHATTERED

More records were set during the month of April at the Air Corps Primary Flying School at Randolph Field, Texas, when 16,299:20 hours of flying time were piled up during the thirty-day period.

This figure constitutes the largest number of hours ever flown by the Spring training classes and is the third largest month in the history of the School. On only two occasions has the 16,300-hour mark been passed in a single month, September, 1938, setting the all-time high of approximately 17,500 hours. According to present indications, even this figure may be surpassed during the present month of May for, according to present plans, training activities on both Primary and Basic Stages will be completed by May 31st.

A further study of the statistics reveals that all but 2,000 hours of the over 16,000-hour figure was spent on student training activities. Basic Stage, with approximately 190 students, flew a total of 7,429:45 hours during the month of April, and the Primary Stage, with an average student class of about 300, flew 6,858:25 hours, all for a total of 14,388:10 hours of student training during the month.

With night flying, and navigation training, both day and night, occupying the major portion of the Basic Stage training during April, many of their BT-9's flew more than 100 hours during the month. Practically all of the War Department Training Directive for the permanent personnel of the station is also done in the BT-9's, thus helping to build up their total time.

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DEMONSTRATION BY 96TH BOMB. SQUADRON

Three B-17's from the 96th Bombardment Squadron, augmented by one B-17 from the 20th Bombardment Squadron, both of Langley Field, Va., took part in the demonstration for the Infantry School and the Air Corps Tactical School on April 13th, last. "There were sufficient hits on and around this target after bombing to justify our raison d'etre," declares the News Letter Correspondent.

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The following-named Air Corps officers have been relieved from duty at their present stations and assigned to duty at the Air Corps Technical School, Chanute Field, Rantoul, Ill.:

Majors Arthur W. Brock, Jr., Wright Field, Ohio; Lewis A. Dayton, Maxwell Field, Alabama, and Alfred Lindeburg, Barksdale Field, La.

GENERAL OFFICERS VISIT KELLY FIELD

Major General Henry H. Arnold, Chief of the Air Corps, was a visitor at Kelly Field on May 1st, and was accompanied by Brigadier General George C. Marshall, Deputy Chief of Staff of the Army; Lieut. Colonel Carl Spaatz, Air Corps; Captain Floyd L. Parks, General Craig's Aide, and 1st Lieut. Eugene H. Beebe, Air Corps, with an enlisted crew consisting of Staff Sergeants Buzenski and Langston and Private Meade.

The Chief's party arrived in a C-41 airplane at 7:50 p.m. from Tucson, Ariz., where they visited General John J. Pershing, after dedicating the Sacramento Air Depot. The Generals were Colonel Lackland's guests during their stay at Kelly Field where, in addition to looking around the airdrome of the Air Corps Advanced Flying School, they inspected the quarters construction project of the new field and observed student training. They also conferred with Major General H.J. Brees, Commanding General of the 8th Corps Area, and Colonel A.W. Robins, Commanding Officer of the Air Corps Training Center, on the following morning before taking off for Bolling Field, D.C., via Nashville, Tenn.

DROUGHT PARTIALLY BROKEN AT RANDOLPH

Randolph Field and vicinity received a much needed rain during the month of April, when .38 inch of precipitation was measured April 27th after a thunderstorm the night before. This area is far behind in its annual average of rainfall, and vegetation here is in great need of a rain. The flying field also has been sending up clouds of dust, making it disagreeable for both pilots and ground workers. Most of the month has been especially favorable for flying, with only a few flights postponed due to weather. Traces of moisture were measured several times during the month, but only on the 27th was any appreciable amount recorded.

Starting out on a program of general improvement for the entire office and the collection of data that will be of much value to the climatological records for this station, the Randolph Field Weather Office has just instituted projects in which every man on duty therein will take part. The program is under the direction of Lieut. T.S. Moorman, assistant weather officer.

Among the topics assigned for research are the construction of diurnal temperature charts, pressure variation charts, the passage of fronts, the number of days the different air masses occupied Randolph Field, isallobaric component of the wind, acceleration diagrams, and others. Such information as will be gained will be of great importance in studying weather peculiar to this area.

One interesting item is the formation of low stratus clouds in the late night and early morning, when this region is occupied by tropical Gulf air. This is one of the things which makes forecasting in Texas particularly tricky.

After many long months of study, fifteen of the weather office at Randolph Field took the examination recently for promotion to the grade of Staff Sergeant. During the examination, which lasted three days, tests in physics and mathematics were given the first day, maps and forecasting the next, and meteorology the last day, with three hours allowed for each subject. Those taking the examination were Sergeants C.F. Miller, J.T. Treat, A.W. Thromorton and Private, 1st Class, H.P. Fredin, all of whom attended the Air Corps Weather School at Patterson Field, Ohio, and Corporal A.J. England who was graduated from the Navy Weather School at Anacostia, D.C. The results of the examination have not yet been announced.

CLARK FIELD ACTIVITIES

Work on enlarging the flying field at Clark Field, Pampanga, P.I., is going on in a big way. A company of Engineers from Fort McKinley took over the job, and it is expected that the same will be completed in a couple of months. Several of the boys from the 28th Bombardment Squadron are piling up the hours, since the organization has to furnish so many tractor drivers.

A flight of Bombardment planes flew out to greet the new Boeing Clipper recently. According to the News Letter Correspondent, the Clipper made the old B-10's look like a flight of "peashooters."

First Lieut. Jack E. Shuck and 1st Lieut. Paul E. Todd, Air Corps, left on March 6th for a Southern Island trip, and were accompanied by Major G. E. Armstrong, Medical Corps; Captain R. L. Lande, 26th Cavalry (P.S.); Captain E.J. Tracy, Medical Corps, Flight Surgeon; Corporal Stanovich and Private, 1st Class, R. Moon, flight mechanics, and Private, 1st Class, J. King, radio operator. Stops were made at Cebu, Zamboanga, Jolo, Davao and Del Monte. The flight returned on March 10th.

The Department Inspector made his annual visit to Clark Field on March 9th.

Majors Rufus B. Davidson, stationed at Barksdale Field, La., and Leo H. Post a student at the Air Corps Tactical School, Maxwell Field, Ala., are under orders for duty at Scott Field, Ill.

AUGMENTED TRAINING OF AIRPLANE PILOTS

The Secretary of War, the Hon. Harry H. Woodring, recently announced that the following civilian flying schools have been selected for the primary flying training of military flying students in connection with the Army Expansion Program:

Spartan School of Aeronautics,
Tulsa Municipal Airport, Tulsa, Okla.
Santa Maria School of Flying,
Hawesock Airport, Santa Maria, Calif.
Dallas Aviation School and Air College,
Love Field, Dallas, Texas.
Ryan School of Aeronautics,
Lindbergh Field, San Diego, Calif.
Alabama Institute of Aeronautics, Inc.,
Municipal Airport, Tuscaloosa, Ala.
Grand Central Flying School,
Grand Central Air Terminal, Glendale,
Calif.
Parks Air College,
Parks Airport, East St. Louis, Ill.
Lincoln Airplane and Flying School,
Union Air Terminal, Lincoln, Nebr.
North Suburban Flying Corporation,
Curtiss Airport, Glenview, Ill.

This is the first time that flying training has been given to Army pilot candidates by other than service schools since the days when the Wright Brothers and Glenn H. Curtiss gave flying instruction.

The purpose of this innovation is to increase the output of graduates of the Air Corps Training Center available for assignment to the flying units of the Army.

The number of graduates will be increased by reducing the length of the present year's training to a nine months' course. The student will spend his first three months at a civilian school undergoing primary training; the next three months at Randolph Field, Texas, engaged in basic training, and the final three months receiving more advanced training at Kelly Field, Texas. Except for specialized training, the nine months' graduates will compare favorably with those trained under the present system. The new student, however, will receive his specialized training in the tactical squadrons.

All the schools selected by the War Department, as listed above, had been previously approved by the Civil Aeronautics Authority as competent to give advanced flying training, and they satisfy all War Department requirements. Each flying instructor will hold a certificate of competency from the Civil Aeronautics Authority, and each will have completed a standardization course at the Air Corps Training Center to insure uniform training. The civilian schools will use primary training planes furnished by the government. One or more Air Corps officers will supervise the ground and flying training.

The first class will enter the civil flying schools on July 1, 1939, followed by a class every six weeks.

Candidates from civil life for appointment as Flying Cadets must be unmarried male citizens of the United States, more than 20 years of age, and must not have reached their 27th birthday. The physical examination is necessarily a very rigid one, particularly with respect to vision and the nervous system.

Along educational lines, candidates must have completed at least two years of college work or the equivalent thereof. If evidence of this cannot be furnished, a comprehensive examination must be taken in nine subjects, including United States history, English, geography, higher algebra, plane and spherical trigonometry and elementary physics. Where satisfactory evidence of completion of the necessary college credits in a recognized college is submitted, no educational examination is required.

The pay of a Flying Cadet is \$75.00 per month. In addition, each Cadet is allowed one dollar per day for rations and is furnished quarters by the government. If no government quarters are available during the period the Cadets are attending the civilian schools listed above, \$22.50 per month in addition will be furnished each student to permit him to rent suitable quarters, making a total of \$52.50 per month, in addition to his base pay of \$75.00. The government also furnishes necessary flying clothing.

Candidates must agree that, upon successful completion of the course of instruction as a Flying Cadet, they will, if their services are desired, serve for three years on active duty with the Regular Army Air Corps as Reserve officers, unless sooner relieved by competent authority.

Upon the completion of the course of instruction at the Air Corps Training Center, a Flying Cadet receives his "Wings" and the rating of Airplane Pilot. Upon graduation he will be called to active duty with tactical units of the Regular Army Air Corps in the grade of Second Lieutenant, Air Reserve, with the same pay and allowances as an officer of this grade in the Regular Army. Upon completion of three years' active duty, he is promoted to First Lieutenant, in which case he may be selected, within the limits of appropriations available, for additional active duty. The graduates of these schools, after having completed one year's service as Flying Cadet and Reserve Officer combined are eligible to compete for the existing vacancies for Second Lieutenant in the Regular

(Continued on Page 16)

SYSTEM OF PROMOTION OF AIR CORPS NONCOMMISSIONED OFFICERS

The Chief of the Air Corps has just recently approved a new system governing the promotion of Air Corps noncommissioned officers to the grades of Master Sergeant and Technical Sergeant. This is being carried out through the promulgation of Circular No. 35-2A, Office of the Chief of the Air Corps, dated May 9, 1939, amending Paragraph 2c, Air Corps Circular 35-2, dated October 12, 1932, as follows:

2c. Seniority on Promotion List: Pending the publication of complete changes in Circular 35-2, Office of the Chief of the Air Corps, effective July 1, 1939, the names of noncommissioned officers on the respective Eligible Lists maintained in the Office of the Chief of the Air Corps for promotion to Master Sergeant and Technical Sergeant, other than the Weather Service, will be arranged so as to give equal credit for service, as of December 31, 1938, as follows:

One point, or fractions thereof, for each year of service in the U.S. Army; one point, or fractions thereof, for each year of service in present grade, or higher rank or grade; one point, or fractions thereof, for each year of service in the U.S. Army Air Corps, or DEML (Air Corps).

In addition, each noncommissioned officer recommended for promotion will be given an efficiency rating by his Commanding Officer, such as "Superior", "Excellent", "Very Satisfactory" or "Satisfactory."

The following additional points will be accorded each noncommissioned officer recommended for promotion to Master Sergeant or Technical Sergeant:

- Superior 20
- Excellent 15
- Very satisfactory 10
- Satisfactory 5

For example:

Technical Sergeant Samuel Mills has had 25 years, 10 months and 3 days Army service; 11 years, 1 month and 15 days in his present grade; 1 year as second lieutenant; 1 year as 1st Sergeant; 18 years in the Air Corps, and is rated as Superior by his Commanding Officer.

To determine his place on the Master Sergeant Eligible List, he will be accorded credit, as follows:

	Credit for Service			Additional credit for Efficiency
	Years	Months	Days	
Total Army Service	25	10	3	
Service in grade, or higher.....	13	1	15	
Service in the Air Corps.....	18	0	0	
Efficiency Rating "Superior".....				20
Total	56	11	18	20
Grand Total.	76	11	18	

Another example:

Staff Sergeant John Wilson has a total of 21 years, 2 months service in the Army; 18 years, 6 months and 10 days service in his present grade; 20 years, 5 months and 5 days service in the Air Corps.

To determine his place on the Technical Sergeant Eligible List, he will be accorded credit, as follows:

	Credit for Service			Additional credit for Efficiency
	Years	Months	Days	
Total Army Service.....	21	2	0	
Service in grade, or higher.....	16	6	10	
Service in the Air Corps...	20	5	5	
Efficiency Rating "Very Satisfactory"				10
Total	58	1	15	10
Grand Total	68	1	15	

In order that the Office, Chief of the Air Corps may have sufficient data available to complete the number of credits for efficiency, station commanders will immediately furnish the Chief of the Air Corps with the proper efficiency rating accorded each noncommissioned officer recommended for promotion on the 1939 promotion lists for Master Sergeant and Technical Sergeant, Air Corps, and will also furnish such efficiency ratings at the proper time for those noncommissioned officers who will be recommended for promotion between November 15, 1939, and December 15, 1939, for the respective 1940 promotion lists.

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Augmented Training of Pilots
(Continued from Page 15).

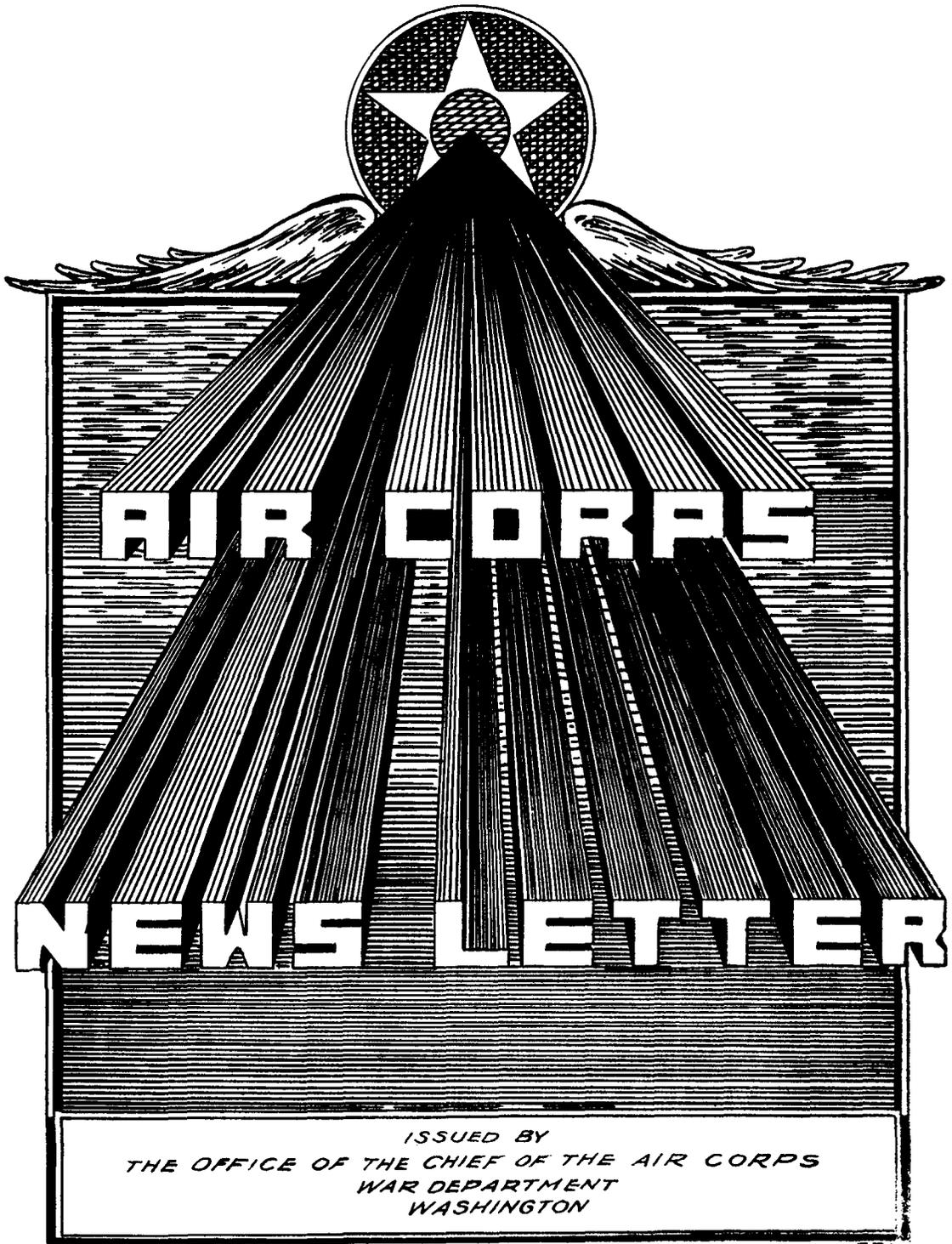
Army Air Corps.

When a Reserve Officer has completed three years' active duty, he receives in addition to his regular pay and allowances, a bonus of \$500., except when he is relieved for the purpose of accepting a commission in the Regular Army.

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The 15th Observation Squadron, stationed at Scott Field, Belleville, Ill., is busy laying plans to move into the field for two weeks at Wisconsin Rapids Wisconsin, to cooperate with the maneuvers to be held there from May 22nd to June 7th.

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Information Division
Air Corps

June 1, 1939

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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TEN-MAN PNEUMATIC LIFE RAFT By the Materiel Division Correspondent

Recently under test at Wright Field, Dayton, Ohio, has been a pneumatic life raft, developed for use with large airplanes of the Bombardment type when engaged in over-water flight. When inflated and placed in the water, the raft is capable of seating ten men, while a life line attached to the raft and extending around it will support ten additional persons.

The supporting structure of this raft consists of a latex rubber bladder with a heavy rubberized duck outer cover. The bottom is of heavy rubberized duck fabric, and contains three pneumatic inflatable seats. The latex tubes are equipped with valves and manifolds for CO₂ inflation. About five pounds of the CO₂ is required for the inflation operation. The cylinders containing the CO₂ are attached to the raft and fed directly into the tubes. The weight of the raft when inflated is approximately 115 pounds. When folded, the raft can be rolled into a bundle approximating three cubic feet of space.

Four two-section metal oars make propelling of the raft possible in the water for a considerable distance. Four army canteens of water, a quantity of emergency rations, emergency signal kit with six red flares, and a pyrotechnic pistol form additional equipment. All of these provisions are encased in water-proof holders.

In order to repair possible punctures while afloat, an emergency pump is provided. With a repair kit, this makes it possible to keep the raft afloat indefinitely. When inflated, the buoyancy is such that the raft is virtually nonsinkable. It will float even if turned upside down on the water, and has been found to be considerably more stable and more easily handled than the smaller sizes.

In the Bombardment airplanes, the rafts will be stowed in a position within easy reach of personnel.

Experimental testing at Wright Field having been completed, an order was placed for a service test quantity.

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FOUR-BLADE PROPELLER INSTALLED ON PURSUIT PLANE

The first 4-blade controllable propeller to be constructed in this country, so far as is known, was recently installed for experimental purposes on the U. S. Army Air Corps P-36 (Curtiss) Pursuit airplane at Wright Field, Dayton, Ohio. This is the same airplane recently used for the installation and experimental testing of dual, oppositely rotating propellers mounted in close tandem.

The special object of these experiments will be to obtain comparative performance data on the airplane when equipped with the two types mentioned above, and also when equipped with the usual constant speed 3-blade type.

For a given propeller diameter, the solidity ratio of a propeller can be increased by adding blades. More efficient operation can thus be obtained for a given power and diameter at high altitudes, especially above 20,000 feet. The four-bladed propeller used has a Curtiss electric, constant speed hub equipped

with dural blades of standard design.

The rapid increase in engine powers for small airplanes, the Pursuit types for example, necessitates an increase of effective propeller area (solidity ratio) without increase in propeller diameter. One solution for future design purposes, therefore, revolves about the use of propellers having four or even a greater number of blades.

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The following-named Air Corps officers, upon the completion of their tour of duty in the Hawaiian Department, are assigned to the following stations:

Major John I. Moore and Captain Robert W. Douglass, Jr., to Mitchel Field, N.Y.
Major Bernard J. Tocher to Langley Field, Va.

First Lieuts. Edward S. Allee and Sory Smith to Chanute Field, Ill.

Captain Frank F. Everest, Jr., to Lowry Field, Denver, Colo.

GRADUATION EXERCISES OF TACTICAL SCHOOL

The tranquility and usual routine of Austin Hall was broken Friday morning, May 12, 1939, due to the graduation exercises of the 1939 Class of the Air Corps Tactical School, Maxwell Field, Ala.

After spending the preceding night at Langley Field, Va., and most of the day at Barksdale Field, La., Major General Henry H. Arnold, Chief of the Air Corps, piloting a Douglas B-18 airplane, landed at Maxwell Field on Thursday afternoon, where he was to be the baccalaureate speaker for the graduation exercises. In the evening, General Arnold attended a reception given in his honor at the Officers' Club, where the commissioned personnel of the post and their wives had the opportunity to meet him or renew their acquaintance.

Graduation exercises began at 10:00 a.m. Colonel Walter R. Weaver, Air Corps, Commanding Officer and School Commandant, who was the presiding officer, introduced General Arnold, who then delivered his address (which appears elsewhere in this issue) and awarded the diplomas to the graduates.

Of the 76 officers who graduated, 60 are from the Air Corps; 5, Coast Artillery Corps; 2, Infantry; 2, Signal Corps; 1, Chemical Warfare Service; 1, Field Artillery; 1, Cavalry, 3, Marine Corps, and 1, U. S. Navy.

The following is a list of the graduates in order of rank:

Lieutenant Colonels

Almond, Edward M., Infantry
Kingman, Allen F., Infantry

Majors

Dutton, Donald L., Coast Artillery
Persons, Wilton B., Signal Corps
Trunk, Otto G., Air Corps
Walker, Ralph B., Air Corps
Lober, Clarence B., Air Corps
Vitzthum, Harry L., Signal Corps
Blessley, Rowland C.W., Air Corps
Holland, Harvey H., Air Corps
Post, Leo F., Air Corps
Gaines, Edmund P., Air Corps
Nelson, Fred C., Air Corps
Morris, Edward M., Air Corps
Souza, William B., Air Corps
Kelly, Oakley G., Air Corps
Mollison, James A., Air Corps
Woodruff, James A., Air Corps
Lynch, Frederick D., Air Corps
Ferrin, Elmer D., Air Corps
Reilly, Henry H., Air Corps
Lanagan, William M., Air Corps
Cluck, James C., Air Corps
Harris, Ray G., Air Corps
Williams, Randolph P., Air Corps

Captains

Shelton, Cyrus Q., Coast Artillery Corps
Gerhard, Frederick W., Chemical Warfare Service
Keifer, Homer W., Field Artillery
Stace, Donald F., Air Corps

Rush, Hugo P., Air Corps
Mudgett, Gilman C., Cavalry
Griffiss, Townsend, Air Corps
Smith, Milton J., Air Corps
Minty, Russell J., Air Corps
White, Walter C., Air Corps
Jamison, Glen C., Air Corps
Pearcy, Charles G., Air Corps
Nicholson, Arthur B., Coast Artillery
Smith, Archibald Y., Air Corps
Martin, Darwin D., Coast Artillery
Bump, Arthur L., Jr., Air Corps
Crane, Carl J., Air Corps
Ritchie, William L., Air Corps
Bryte, Walter G., Air Corps
Cabell, Charles P., Air Corps
McCormick, John H., Air Corps
DeArmond, James K., Air Corps
Johnson, Alfred H., Air Corps
Harris, Samuel R., Jr., Air Corps
Doyle, John P., Jr., Air Corps
Baxter, Henry R., Air Corps
McNaughton, Kenneth P., Air Corps
Burwell, James B., Air Corps
Lee, Walter S., Air Corps
Malone, A. J. Kerwin, Air Corps
McGregor, George W., Air Corps
Daly, Maurice F., Air Corps
Deichelman, Matthew K., Coast Artillery
Jones, John N., Air Corps
Springer, Allen R., Air Corps
Coleman, Frank J., Air Corps
Gibbs, David R., Air Corps
Sams, William C., Air Corps
Warburton, Ernest K., Air Corps
Moore, Aubrey L., Air Corps
Robinson, Stanley K., Air Corps

First Lieutenants

Persons, John W., Air Corps
Harman, Leonard F., Air Corps
Choate, Robert E. L., Air Corps
Arnett, Charles T., Air Corps
Straubel, Austin A., Air Corps
Storrie, Carl R., Air Corps

Navy Officer

Overfield, David B., Lieutenant

Marine Corps Officers

Smith, Joe N., Major
Jerome, Clayton C., Major
Weir, Frank D., Captain

In the past years the School has had a few months' recess before starting a new class, but this year the new class begins on June 5th - three months earlier than before, and as it is going to matriculate approximately 100 students, which is nearly 30 more than before, the School is now working under a force draft preparing material for the new class.

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The following-named Air Corps officers are assigned to duty in the Office of the Chief of the Air Corps, Washington, D. C.:

Lieut. Colonel Robert C. Candee, from the Hawaiian Department.
Colonel Clarence L. Tinker, from the National Guard Bureau, effective not later than June 30, 1939.

GENERAL ARNOLD'S ADDRESS BEFORE TACTICAL SCHOOL GRADUATES

I am happy to be here this morning to extend to you my congratulations upon the successful completion of your course of instruction. To the Staff and Faculty I express my appreciation of their efforts, which have made this graduation possible. To the graduates from other than the Air Corps, may I say that it was a pleasure to have had you with us. Through association with you, we have gained a greater understanding of your problems. Your knowledge of us and our problems assures us of increased understanding by the other Arms - and such mutual understanding is essential to successful teamwork in our national defense.

To you of the Air Corps, this is a true "Commencement." You are entering upon a period that will be of intense interest to you - a period that will be vital to the Air Corps. You will be called upon for abnormal efforts, and the training you have received during the past eight months will be of inestimable value to you and to our Corps.

I will give you a summary of our plans for the Proposed Air Corps Expansion. In two years our airplane strength will expand 140%, from about 2300 to a minimum of 5500. About 3300 of these will be active airplanes and of these about 2000 will be combat types. The task of production is, for the most part, on the shoulders of our aircraft industry. Our major task is to obtain, house, and train the necessary personnel. The magnitude of our training task is apparent when you consider that our officer personnel will be increased about 90% and our enlisted strength by 25,000 - a 140% increase.

Even if we had a sufficient number of qualified Reserve officers available, we could not commission them all in the Regular Army at one time without creating a promotion 'hump'. Our plan spreads this increase over ten years. About 400 will be commissioned this year and about 128, plus attrition, each year thereafter. Reserve officers will fill the remaining vacancies. Thus, early in the program we will have fewer Regulars than Reserves. As time goes on, the number of Regulars will increase and the number of Reserves will decrease, until at the end of ten years we should have, roughly, the proportion of two Regulars to one Reserve. It is during the first two years that the services of experienced officers will be invaluable. During that period new units will be formed and present organizations will be subdivided, some as many as three times. Our experienced Regular Personnel will be spread very thinly, and we will be faced by an

influx of Reserve personnel who will have to receive specialized training and be taught the multitude of other duties that the experienced squadron officer must know.

To provide the required pilot personnel, we will follow this plan: Primary training, 3 months, will be given at selected civilian schools. The ground school training during this period will be about the same as that now being given at Randolph Field. Basic training will be given at Randolph Field and advanced training at Kelly and Brooks Fields. Specialized training will be taken over by the tactical units.

There is a two-fold reason for trying this system of primary training. First, it saves us the expense of enlarging our Training Center to take care of an increased demand that is temporary in nature; second, it gives us a test on a system to which we feel we will have to resort in the event of a major war, when a large number of pilots would be required. We feel that our standard of instruction can be maintained. The civilian schools have been carefully selected; their instructors have undergone an instructors' course at the Training Center, so that the training will be standardized; and at these schools we will have our inspectors - you might well call them "stage Commanders" - who will check on the instruction and pass on all "washouts".

Our enlisted problem is also a major one. In two years we must take in 25,000 men, and of these about two-thirds must be given specialized Air Corps training. We are establishing a branch of the Technical Schools at Scott Field, where the monthly basic course will be given as a preliminary to certain of the courses given at Chanute and Lowry Fields, which will operate on an expanded basis. Also, we plan on using some selected civilian schools to supplement our output of airplane mechanics.

New units will be formed as equipment and personnel become available. At the conclusion of the program, we will have the following tactical organizations:

5 Heavy Bombardment Groups, 6 Medium Bombardment Groups, 2 Attack Bombardment Groups, 5 Single-Engine Pursuit Groups, 2 Interceptor Pursuit Groups, 2 Fighter Pursuit Groups.

More than 40 new squadrons of all types will be organized during the Expansion.

In this program, we have just so much money to spend. We have to buy a certain number of airplanes. A certain number of personnel are required to operate our active airplanes and to

carry on our other activities. Maintenance requires its share. We have to buy bombs. We have to carry on experimental work. To do all this, we have to keep our construction costs as low as possible. Five new bases are to be constructed - one each in Alaska, Northeast United States, Southeast United States, Puerto Rico, and Panama. New stations in the United States will have but five sets of Officers and six sets of non-commissioned officers' quarters. Permanent barracks and quarters will be constructed in Alaska and Panama, but CCC type barracks will be used elsewhere, and tropical type quarters will be constructed in Puerto Rico. Hangars and technical buildings will be held to a minimum.

I have given you a brief outline of the proposed expansion program which is our immediate problem. There are two other current topics of immediate and vital interest to Air Corps officers and, indeed, to all officers in the Army, but more particularly, of course, to those of our branch. The first of these might be termed: "Changing World Conditions Which Have Necessitated Revision of Armaments." The President of the United States ably epitomized this thought when he addressed the Congress of the United States on the state of the nation, January 12, 1939, in these words:

"What needs to be emphasized is the great change which has come over conflicts between nations since the World War ended, and especially during the past 5 or 6 years.

"Therefore, it has become necessary for every American to restudy present defense against the possibilities of present offense against us.

"Military aviation is increasing today at an unprecedented and alarming rate. Increased range, increased speed, increased capacity of airplanes abroad have changed our requirements for defensive aviation."

The foregoing statements by our Commander-in-Chief should be pondered over by every military man.

Even the casual student of world affairs must be cognizant of the tremendous change which air armaments have brought to bear on national policy, international negotiations and current diplomacy. In his message to Congress, the President restated the Monroe Doctrine and what has been commonly called "Hemisphere Defense". Congress is now engaged in a prospective revision of the Neutrality Act. There is ample evidence of the national interest in the military establishment in committee hearings on War Department and Naval appropriations just concluded and on the sizeable increases for the military establishments contained

in the late appropriation acts.

Abroad, there is no longer any attempt to hide or to evade the predominant part which air armaments are playing in international negotiations. To demonstrate conclusively the part which Great Britain feels that air warfare plays in national safety, it is only necessary to point to the fact that her air budget for the coming year will be more than one billion dollars, or more than that for either her Army or Navy and more than twice our own outlay for the air branches of both the Army and Navy.

The second of the prime considerations which I referred to may be called "A Recognition of Air Power and a Restudy of Its Application by Air Forces". There is a probability that next year, for the first time in its history, the course at the Command and General Staff School at Leavenworth will include lectures on Air Power and Air Forces, ever similar in scope and treatment to those which have for some time been taught here in the Air Corps Tactical School. For a long time the terms "Air Power" and "Air Forces" were held by most military men to be large words in the mouths of young Air Corps officers - impracticable, improbable, highly theoretical, - anathema to the old school of military thinkers. It is quite evident now, however, that these terms "Air Power" and "Air Force" have become generally accepted here and abroad.

This raises one serious question which gravely concerns all of us. In our tactical tests and demonstrations, we must make certain that no deficiencies in training belie or discredit the claims we have made for the efficacy of Air Power and the accomplishment of Air Forces. Now that we have sold a new idea in warfare, we must make doubly sure that it is not unsold by the poor performance of our air units. During the next two-year period, our tactical units will become, in effect, training establishments, in order that the increased number of graduates of our schools may receive their specialized training. Many old squadrons will be broken up to form cadres for new units. It will be difficult, therefore, if not impossible, to maintain our efficiency on the present high plane we find in the GHQ Air Force today. To overcome in part this serious situation, I have recommended the formation here at Maxwell Field of three demonstration squadrons, which will be composed of combat crews trained up to the minute, and we shall rely upon these units to give the demonstrations at our special service schools and cooperate with the other arms to the end that our claims for Air Power and Air Force may be borne out

in practice as they have been expounded in theory.

I have been in Army Aviation since 1911 - for over 28 years - and I can say with assurance that military aviation has reached a stature, a prospect and a status far beyond our early dreams or our fairly recent expectations. Whoever thought in the early days that fighting planes would fly at 500 miles per hour, that Bombers would weigh thirty tons and carry five tons of bombs for eight thousand miles; that single engines would develop two thousand horsepower or that aerial cameras could make clear photographs through layers of clouds; or that instruments would be developed mak-

ing possible accurate area bombardment on localities obscured by clouds or fog; that combat crews could ride in planes in the substratosphere, sealed in pressure cabins with the warmth, comfort and oxygen and pressure equivalent of normal earth level atmosphere. Yet all these things, though the nightmarish fantasies of yesterday, are the successful experiments of today and will be the mass production actualities of tomorrow.

Undoubtedly we shall be called upon for great effort during the next two years, but the result will justify your effort. The President's Air Program will be accomplished and we shall have covered the first mile in providing this nation with an adequate Air Defense.

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COOPERATIVE MISSION WITH INFANTRY

The 26th Attack Squadron conducted a very interesting cooperative mission on April 12th with the 2d Battalion of the 35th Infantry, Schofield Barracks, T.H. Major Becker, commanding the 2d Battalion, and Captain G.R. Acheson, commanding the 26th Attack Squadron, personally made the plans for the mission.

The problem was one of attacking, harassing, and delaying the ground troops who had to cover a short distance of open road and cross a gulch before reaching their objective. Only six airplanes were available to the squadron, so they were divided into two flights of three each to simulate complete flights of nine airplanes. The tactics of the attack, including the use of lime water to simulate chemicals, successive low-flying assaults, and feints that caused deployment and delay, were highly successful, according to Major Becker; and probably were very illuminating to all members of the Battalion as to the capabilities of Attack Aviation. Exceptionally instructive to the newer pilots in the 26th Squadron, the problem gave more training in tactics and technique in one hour than could have been gleaned in many hours of study from text books on the subject.

The success of the mission and its high training value was due to the fact that both commanders personally discussed and planned its scope. "It is to be hoped", says the News Letter Correspondent, "that similar problems, which illustrate so clearly to the younger officers the capabilities and limitations of his arm, be conducted at frequent intervals."

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Lieut. Colonel Harrison W. Flickinger, Air Corps, is relieved from assignment and duty in Washington, D.C., and, for the convenience of the Government, proceed to his home to await retirement.

FRANCE FIELD VETERAN NON-COM RETIRES

Master Sergeant George W. Edwards, 7th Reconnaissance Squadron, Air Corps, with more than thirty years of excellent service to his credit, was returned to the United States on the USAT "REPUBLIC" and sailed from the Canal Zone, to be placed on the retired list at the Army Base, Brooklyn, New York, on April 30, 1939. Sergeant Edwards' first service dates back to December 30, 1907, when he enlisted in the 64th Co., Coast Artillery Corps. After three years with this organization, he reenlisted for the 122d Co., Coast Artillery Corps, a similar period. He then reenlisted in the 3d Co., U.S. Disciplinary Barracks, and served from April 11, 1914 to June 23, 1930, when he decided he wanted to be an Air Corps soldier. His career in the Air Corps started with the 20th Photo Section, A.C., then followed the 12th, 14th, and finally the 7th Reconnaissance Squadron, A.C., with which he served up to the present time. A testimonial dinner was given on April 5th by the 7th Squadron, at France Field, in honor of this veteran non-commissioned officer. Sergeant Edwards' service has been excellent all the way. His discharge certificates all bear "Character," **EXCELLENT**. He has been discharged as a noncommissioned officer on each and every enlistment. In the Air Corps he served in grades up to Master Sergeant. Sergeant Edwards now expects to make a World Cruise. He will visit a brother in Australia, and will then return and settle on the West Coast. The record set by this veteran noncommissioned officer is well known by his friends and members of his organization, who have the highest praise for his ability, personality and cooperative leadership. The entire organization is proud to congratulate Sergeant Edwards upon his retirement and wish for him much happiness and easy sailing for the rest of the way.

ACTIVITIES OF THE 18TH PURSUIT GROUP

The work and industry of the Hawaiian honey bee was emulated lately by the 18th Pursuit Group, Wheeler Field. For two weeks during the latter part of April quarterly tests, Department alerts and technical inspections added their demands to those of routine flying, and the heretofore carefree "Peashooters" are looking rather serious.

The annual Technical Inspection was made during the first week of the month by Major Edward V. Harbeck, of the Sacramento Air Depot.

Due to the location of Wheeler Field, pilots have long been handicapped by a lack of practice on radio beam facilities. Fortunately, this field has recently received a new type Link Trainer, and all pilots are undergoing a course of instruction and practice on radio beam flying.

The 18th Pursuit Group recently attended two very educational lectures at Hickam Field on subjects vital to officers on duty in Hawaii, and they were given by qualified officers from the Headquarters of the Hawaiian Department.

At 2340, April 17, 1939, the usual peaceful calm of Wheeler Field was shattered by the sound of "Call to Arms" telephone bells and alarm systems. Sleepy officers and soldiers were informed that they were "on alert" and ordered to report immediately to their post of duty. The entire Hawaiian Department, exclusive of service commands on outlying islands, had been alerted. Shortly after 2400 o'clock, all units were reported present, and the recall order was given.

The fourth quarterly test for the Fiscal Year 1939 was held on April 18th. The 6th and 19th Pursuit Squadrons fired mass gunnery on three 30-foot tow targets flown in formation, and the 26th Attack Squadron bombed and machine-gunned designated water targets. Brigadier General Walter H. Frank, Commanding the 18th Wing, Air Corps, accompanied by Lieut. Colonel William E. Lynd, commanding the 18th Pursuit Group, and his staff, made an inspection of airplanes, pilots and hangars.

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CONSTRUCTION OF CAMP AT MORSE FIELD

The new Control Officer of Outlying Fields, 1st Lieut. Richard T. Coiner, Jr., is constructing 26 tent frames at Morse Field, Hawaii, for future maneuvers. Construction is progressing rapidly.

Six enlisted men, under the command of Corporal Luther Thompson, all of the 17th Air Base Squadron, have been loaned for the construction of the camp. Drawing commutation of rations, the men organized their own mess and are enjoying the time spent away from routine duties.

AERIAL GUNNERY FOR BARKSDALE PURSUITER

For two weeks during the early part of April, the grey Louisiana dawn found the pilots of the 77th Pursuit Squadron of Barksdale Field, La., winging their way to the gunnery range. They were enjoying open season on ground targets.

The News Letter Correspondent declares that the P-36's have proven to be an ideal platform for both the 30's and 50's. Enthusiasm among the pilots is running high in anticipation of duplicating last year's record and keeping the coveted Luke Trophy in their possession for the third consecutive year.

The cancellation of the annual Third Wing Maneuvers permitted the 77th Squadron to set up their aerial gunner camp at Galveston, Texas, on May 11th, and which was scheduled to continue until June 5th, which will be the first period. The second period will extend from July 11th to July 20th.

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GUNNERY DEMONSTRATION BY 79TH SQUADRON

The 79th Pursuit Squadron, 20th Pursuit Group, GHQ Air Force, left Barksdale Field, La., on the morning of April 12th to participate in the Third Wing GHQ Air Force Demonstration the following day at the Infantry School at Fort Benning, Ga.

The Squadron of 18 airplanes demonstrated mass firing attacks against silhouette targets simulating a bombardment flight in javelin formation. The firing formations used were a column of flights in two-plane elements and a squadron mass with flights echeloned down and to the rear.

Six of the nine silhouette targets were destroyed by fire resulting from the use of tracer ammunition. The remaining three targets were riddled by the heavy volume of fire.

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ADVENTURES OF A PARACHUTE

Being loaned to a Cavalry officer at the Base Flight Section at Barksdale Field, Shreveport, La., for a flight to his home station at Fort Bliss, Texas, a parachute, upon arrival at Biggs Field, Texas, was turned over to the Supply Officer on April 5th. While awaiting transportation for its return to Barksdale Field, the parachute was loaned to Radioman, first class, J.A. Dinan, of the U.S. Coast Guard Detachment, for a flight in airplane, Type J2W1 #V-158, and was used in an emergency jump from this craft on April 6th, near Alpine, Texas. After it was retrieved and returned to Biggs Field, it was immediately forwarded to Barksdale Field, with remarks for Parachute (Continued on Page 8)

FIFTH BOMBARDMENT GROUP ACTIVITIES

The accelerated training program in the 5th Bombardment Group, Hickam Field, Hawaii, in effect since the first of the calendar year, is showing considerable progress.

Of the five squadrons in the Group, all but two have completed qualification courses in both gunnery and bombing. The remaining two squadrons will complete their qualification training by June 15th.

During the first four months of this year, approximately five thousand practice bombs have been dropped in conjunction with other training. A course in dead reckoning navigation is now being completed. In addition, courses have been given in Chemical Warfare, Reconnaissance Aviation, Bombardment Aviation and Air Force. The courses have been supplemented by several one or two-hour lectures on subjects of vital importance to officers of the Air Corps.

Training in Combat Gunnery, accompanied by a course in skeet for all members of Combat Crews is now being given attention.

From all indications, the month of May was scheduled to present a full period of activity. In addition to the routine demolition bombing exercise was slated to be conducted by the Group on the 4th, 5th, 8th and 9th, and the annual Hawaiian Department Maneuvers were calculated completely to absorb the energies of the Group from the 15th to the 27th.

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ORGANIZATION IN TWO PLACES AT SAME TIME

When Major N.R. Laughinghouse, Air Corps, departed for his new station, March Field, Calif., on the transport REPUBLIC, 1st Lieut. William A. Schulgen assumed command of the 17th Air Base Squadron. In assuming command, Lieut. Schulgen became a dual squadron commander, as part of the Base Squadron still functions at Old Luke Field as well as at Hickam Field.

"An excellent job is being done by the new squadron commander," is the comment of the News Letter Correspondent. He adds that, although orders come in "ones" they are issued in "twos" - to two fire chiefs, two commanders of the guard, two mess sergeants, etc.

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The following-named Air Corps officers, upon the completion of their tour of duty in the Panama Canal Department, are assigned to stations, as follows:

- Majors Leonidas L. Koontz and Peter E. Skeane to Selfridge Field, Mt. Clemens, Mich.
- Captain Franklin C. Wolfe to Wright Field, Ohio, and 1st Lieut. Thomas L. Bryan Jr., to Chanute Field, Rantoul, Ill.

DURATION RECORD FOR PURSUIT PLANE

Selfridge Field has the privilege of claiming the unofficial world's non-refueling endurance flight for a single place, single engine, standard equipped service Pursuit airplane of 800 horsepower or more. The airplane is a Seversky P-35, and the duration of the flight was seven hours and twenty-three minutes. The plane was piloted by 2nd Lieut. Robert H. Quigley, of the Headquarters and Headquarters Squadron, of the First Pursuit Group, and his flight was remarkable for the fact that he landed with forty gallons of fuel, under the orders of the Group Operations Officer.

"It is calculated," says the News Letter Correspondent, "that Lieut. Quigley could have remained aloft nine hours and thirty minutes with still enough fuel remaining to land safely."

Contending that no two motors are the same or that no two carburetors are adjusted the same, Lieut. Quigley experimented several days with different airplanes in the Headquarters Squadron before selecting his airplane. He then had several hours of experimental flying at different altitudes and with different throttle, carburetor and propeller setting, together with their consequent effect on the engine performance, oil temperature and cylinder temperature. It was also found that convectional air currents made it difficult to maintain constant altitude with a full tank of gas, cruising at 125 miles per hour, with 16 inches of manifold pressure.

It was decided to wait until the wind was from the north across Lake Huron, with the resultant smoother air and lack of convectional air currents. On May 3, 1939, the wind was 22 miles per hour from the north. The following information on this flight may be of interest to other pilots:

The average speed of the flight was 125 m.p.h., and at no time was the airplane flown at stalling speed. The first three hours were flown at 3,000 feet at 16 inches of manifold pressure, and the airplane could climb at 200 feet per minute at 110 miles per hour during this time. The oil temperature never exceeded 67 degrees, and was 65 degrees during the latter part of the flight. The cowlings flaps had to be partially closed to keep a desirable cylinder temperature.

After three hours, as the weight decreased by fuel consumption, the altitude was increased to 6,000 feet. The last half hour of the flight was performed at 13 inches of manifold pressure and air speed of 105 miles per hour. The oil temperature dropped to 64 degrees and the cowlings flaps were closed further. At no time did the motor miss or show signs of malfunction.

ing. Said Lieut. Quigley: "I certainly hated to land with forty gallons of fuel left."

Fuel consumption averaged 21.1 gallons per hour, and during the latter part of the flight, 18 gallons. It is estimated that he flew 950 miles, and could have flown 1200 miles in the full period of nine hours and thirty minutes.

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NOVEL HOME FOR BABY KITTENS

Prior to a flight on April 13th of seven pilots of the 6th Pursuit Squadron, Wheeler Field, to the middle islands of the Hawaiian Group, four new members of the Squadron made their initial appearance and were heartily welcomed by all. When the life rafts were being inspected for the trip, it was found that four baby kittens had established themselves in the air-cushioned bow of one of the rafts. Needless to say, another raft was found, and Technical Sergeant Vielock was appointed Squadron Nurse to Kittens, in addition to his duties as Flight Chief.

The flight was made in P-26B airplanes under the leadership of Captain R. W. Douglass, Air Corps. Fields on Molokai, Maui and Lanai were reconnoitered, each member of the flight leading during part of the trip. No encampment has yet been made on the Island of Maui. The spectacular beauty of the white sand beaches, the surf, the tropical jungles, and the many waterfalls of this island impressed everyone, and the News Letter Correspondent expresses the hope that the organization will camp there sometime in the future.

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ORGANIZATION OF "AIR COMMAND SECTION"

According to the Selfridge Field Correspondent, the "Air Command Section" at that field is believed to be the only "Air Command Section" existing in the Air Corps at the present time. An "Air Command Section" was organized within the headquarters of the 1st Pursuit Group, with the following functions:

- a. Control of the Group while in flight.
- b. Reception and evaluation of information concerning the enemy in operation within the net of the "Aircraft Warning Service."
- c. Direction of the combat units of this Group by telephone and radio to the interception in flight of enemy aircraft operating within the range of aircraft assigned to this Group.

Within the last few months, problems have not been carried out in great numbers, due to inclement weather, although the training in the section was carried out by "mock problems." Practice in theoretical problems is conducted, in-

cluding keeping the time factors to the very second and, assuming that the enemy is close enough to be seen, it is considered a good interception.

When the weather permits good visibility, one squadron will assimilate the enemy, while one of the other squadrons will be used as the friendly force. By this method, each problem is worked out very carefully, and every bit of information and knowledge is taken advantage of during these problems.

Every problem is supervised by Captain James E. Briggs, S-2 Officer, and Major Lawrence P. Hickey, Group Commander.

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GUNNERY CAMP FOR 19TH PURSUIT SQUADRON

Of late, the 19th Pursuit Squadron, Wheeler Field, T.H., was busy preparing for the annual move to the 18th Wing Gunnery Range at Bellows Field, Oahu, T.H.

The Squadron was scheduled to spend about 14 days in the field, moving to Bellows Field on April 27th and returning to Wheeler Field about May 11th. Good scores were anticipated, notwithstanding the fact that it was to be the first time for some of the younger pilots to fire the entire course.

Besides the regular personnel of the Squadron, four attached pilots were to accompany the 19th into the field, namely, Lieut. Colonel Lynd, Captains Ramey, Kaye and Erickson.

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Adventures of Parachute (From Page 5)

Record Card, repacked, and returned to the Base Flight Section to await further adventures.

Says the News Letter Correspondent: "Where it may appear to you as 'just another parachute,' an old parachute man can read plainly written upon its sturdy straps: 'I am located in the heart of the Southern Military Airway, whence come you and whither now?'"

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FIRST PURSUIT GROUP ANNIVERSARY

Friday, May 6, 1939, marked the twenty-first anniversary of the organization of the 1st Pursuit Group, and the occasion was celebrated by banquets given in each organization of the Group. At each separate banquet, the respective squadron commander read the history of the Group, the war history, and the names of the "Aces" of the Group.

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Major Oliver P. Gothlin, Jr., Air Corps, upon completion of his tour of duty in Hawaii, is assigned as Air Corps Representative at the Boeing Aircraft Co., Seattle, Washington.

NOTES CONCERNING THE ADVANCED FLYING SCHOOL

Brigadier General Arnold N. Krogstad, Air Corps, Commander of the Second Wing, HQ Air Force and former Commandant of the Air Corps Advanced Flying School, was a visitor at Kelly Field, Texas, from May 15th to 18th. He arrived from March Field, Calif., where he had been inspecting Air Corps training activities, and was accompanied by Major Caleb V. Haynes, Air Corps, pilot of the B-15 used on the trip, and Commander of the 49th Bombardment Squadron, Langley Field, Va.; Lieut. C.E. LeMay; Lieut. W.L. Curry; Technical Sergeant A. Cattarius; Staff Sergeants D.L. Spicer, W.J. Heldt, H.L. Hines; and Corporal J.E. Sands. While routine inspection was being made on the huge "Flying Fortress," General Krogstad, Major Haynes and Colonel E.A. Lohman, Assistant Commandant of the Air Corps Advanced Flying School, flew to Matagorda Island. General Krogstad and his party took off in their B-15 at 8:00 a.m., May 18th, enroute to Langley Field, via Barksdale and Maxwell Fields.

Majors Harvey W. Prosser, Albert C. Foulk, Walter E. Richards, John V. Hart, Captains Elmer T. Rundquist and Russell E. Randall were recipients recently of orders directing them to proceed to Maxwell Field, Ala., for enrollment as students in the June 1, 1939, class at the Air Corps Tactical School. They will be on a temporary duty status for about three months, instead of for nine months as in the past. Upon completion of the course, they will return to Kelly Field on their original assignments with the Air Corps Advanced Flying School.

Basic combat planes, originally designed for advanced training at Kelly Field, have finally found their way to the Advanced Flying School after first being used by tactical organizations. "To date, six of the planes have been received at Kelly Field," declares the News Letter Correspondent, "and an indefinite number of others are expected before training of the next class starts - we hope!"

Orders were recently received assigning the following named officers to Kelly Field for station and duty with the Air Corps Advanced Flying School, upon completion of their course of instruction as students at the Air Corps Tactical School, Maxwell Field, Ala.: Captains Henry R. Baxter, Arthur L. Bump, Jr., Robert E.L. Choate, Frank J. Coleman, and 1st Lieut. John W. Persons. Kelly Field looks forward to the arrival of these officers, who will relieve the officer personnel situation during the absence of a number of the officers who are now under orders to re-

port to the Air Corps Tactical School.

Colonel E.A. Lohman, Assistant Commandant of the Air Corps Advanced Flying School, has been detailed as Director of Flying Training, during the temporary absence of Major Isaiah Davies, who is now at Wright Field, Dayton, Ohio, as a member of an aircraft evaluation board.

The Commanding Officer of the 63rd School Squadron, Captain Dyer, and the Squadron Engineering Officer, Lieut. Bishop, are giving preference to the older men of the organization who have been trying for many years to attend the Air Corps Technical School. As a result, four Air Mechanics, 1st Class, and one Air Mechanic, 2nd class, are now included in the following list of eight men who are now taking courses at this school, viz:

Sergeant, A.M. 1st Class, Aldei J. Bariteau and Private, 1st Class, Robert B. Kercher, Communications Course. Sergeants, A.M. 1st Class, Dan E. McGibeny and Claude M. Timme; Sergeant, A.M. 2nd Class, John F. Tracey, and Corporal, A.M. 1st Class, Oren Nix, Airplane Mechanics Course. Private, Specialist 3rd Class, Nathaniel A. Pape, Airplane Mechanics Course.

Corporal Anthony B. Sedlock, Air Corps and Technical Supply Clerk Course.

This Squadron has more men qualified for entrance to the courses at the Technical School than all of the other squadrons combined.

The 63rd School Squadron boasts that it has the finest flower gardens in the Army. Every known flower in the book is now growing around the barracks. "We are particularly proud of the various types of roses in the large beds in front of the Squadron," says the News Letter Correspondent. "Such a floral array does much to improve the appearance of these old 'war-time' buildings."

The famous 63rd School Squadron Orchestra, directed by Captain Harvey F. Dyer, has ceased activity for the summer months. The Big Musician and Assistant Director, Sergeant Bariteau, is now pursuing the Communications course at Chanute Field. Ere the winter winds begin howling through the old barracks again, the orchestra will be going strong, building pleasure and morale.

Major George M. Palmer was detailed as Station Administrative Inspector, in addition to his other duties, replacing Capt. John C. Crosthwaite, relieved.

INSPECTION TRIP TO PUERTO RICO

Major General Delos C. Emmons, Commanding General of the GHQ Air Force, returned to Langley Field, Va., at 8:45 o'clock on the night of Monday, May 15th, from Puerto Rico, where he and Brig. General George C. Marshall, recently named as the next Chief of Staff, conducted an inspection.

General Emmons, who used one of the army's famous "Flying Fortresses", left Langley Field on Thursday of the preceding week, with Lieut. Colonel Robert Olds as pilot and Major Harold L. George as co-pilot. The first leg of the 1,000-mile journey carried the flight to Miami, Fla., where the plane was refueled, and from there the trip was resumed to Puerto Rico.

General Emmons expressed satisfaction with the trip and said that conditions were favorable. However, he made no comment regarding the purpose of the inspection.

Others who composed the crew of the "Flying Fortress" were Capt. Frederick E. Glantzberg, navigator; Staff Sergt. Jacob E. McDonald, crew chief; Sergt. James J. Boutty, assistant crew chief; Privates Archie R. Jester, Joseph H. Walsh and Walter G. Wilson, Corporal Albert E. Smith and Private Albert G. Smith accompanied the plane as far as Miami and maintained radio communication during the flight.

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BRITISH AIRMAN VISITS LANGLEY FIELD

Wing Commander David F. Anderson, of the Royal Air Force of Great Britain, who is on a "good will" tour of the United States and is engaged in a study of the progress of aviation, was a guest on May 11th and 12th of Colonel Lawrence S. Churchill, Base Commander at Langley Field, Va. Wing Commander Anderson was conducted on tours of inspection at the Peninsula Airdrome, and on the afternoon of May 11th made a visit to Yorktown, Williamsburg and Jamestown.

He left the Peninsula post on May 13th for Norfolk Naval Base and will also visit various air fields throughout the country before concluding his tour of inspection.

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LANGLEY PLANES MAKE MASS FLIGHT TO NATION'S CAPITAL

Fifty-one Langley Field fighting planes took part in ceremonies at Washington, D.C., on May 5th, serving as an air escort for President Anastasio Somoza, of Nicaragua. The planes left shortly after

10:35 in the morning, made the 40-minute flight to Washington, and returned to the Virginia Air Base immediately after the conclusion of the ceremonies.

Making the flight were 42 P-36A single-seater planes of the Eighth Pursuit Group, under the command of Lieut. Col. William E. Kepner, and nine "Flying Fortresses" Boeing Bombers, of the Second Bombardment Group, under the command of Lieut. Colonel Robert Olds.

The planes engaged in brief maneuver over Washington, in honor of the Nicaraguan Chief Executive.

The Pursuit planes were from Headquarters Squadron, 33d, 35th and 36th Pursuit Squadrons. The Flight Commanders were Majors Russell L. Maughan, Neil Schramm; Captains John E. Bodle, Glenn Barcus, Clyde Richard and 1st Lieut. Francis Griswold.

Pilots for the bombers were Colonel Olds, Captains Robert B. Williams, William D. Old and 1st Lieut. Curtis E. Lemay, of the 49th Squadron; Major Harold L. George; Captains Carl B. McDonald and Darr H. Alkire, of the 96th Squadron; and Captains Alva Harvey and Neil B. Harding, of the 20th Squadron.

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KELLY FIELD BOWLER MOWS 'EM DOWN

Feeling the urge for a little exercise early one morning recently, Private Ben Prine, of the Quartermaster Corps Detachment and star Kelly Field bowler, sauntered over to the field's bowling alley for a practice session. It was a lucky urge for Prine. After a couple of practice balls when he registered strikes, he came through with twelve more to join San Antonio's exclusive group of "300" bowlers. All the hits were New Yorkers, with the exception of two, which were perfect Brooklyn strikes. Privates Boyd Patterson and Donald Duckett, of the Headquarters and Headquarters Squadron, Air Corps Advanced Flying School, witnessed the feat.

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PURSUITERS ON LONG NAVIGATION FLIGHT

Eight officers of Selfridge Field, Mich., under the command of Major Willis R. Taylor, of the 27th Pursuit Squadron, recently returned from an extended cross country flight which took them as far east as Hartford, Conn., and as far south as Dallas, Texas. The trip was made with little difficulty.

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Upon the completion of his tour of duty in the Panama Canal Department, Major George W. Polk, Air Corps, is assigned as Assistant Air Corps District Representative, Western Procurement District, with station at Inglewood, Calif.

V-8074, A.C.

ARMY DAY AT THE MIDDLETOWN AIR DEPOT

By the News Letter Correspondent

April 6, 1939, was celebrated at the Middletown, Pa., Air Depot by holding an open house, and it proved to be the most successful event ever held in the community. A heavy downpour of rain did not dampen the enthusiasm of the public on military aviation, as over 18,000 people of all ages attended. Neighboring Preparatory and High Schools declared holidays in order that their students might attend and see how military airplanes are repaired and recommissioned for use in the military service. Young America really attended in force, and some remained until the curfew rang.

The publicity for Army Day was very adequately handled by Major Cressy. Newspapers and radio for a radius of 50 miles cooperated fully, as attested by a large turnout with such miserable weather.

A very neat souvenir program was prepared and given away free. This program contained the order of displays, together with a description of how civilians might obtain employment at the Depot, a brief description of the new proposed Apprentice System, "How to Become an Airplane Pilot," Recruiting in Regular Army, and Recruiting in Regular Army Reserve.

The main feature of the exhibition was the complete showing of how a wrecked airplane was taken through various steps from the wrecking trailer through disassembly to final assembly and flight test, including a demonstration of radio flight control. The Depot Supply Exhibits included samples of flying clothing and all Flying Equipment accessories— even a sample Air Transport load of supplies for loading in an Air Transport plane.

Tea was served local citizens of prominence by the Depot Engineering Officer, Major Dunn, and his staff assistants.

During the day, many favorable comments by the public were heard on the quality of work essential to maintenance of equipment, and it is believed the time spent in showing the public how their tax money is spent by the Army Air Corps was used to good advantage in educating the public in general. In addition, many letters of appreciation were received by Colonel Wuest, Post Commander, from prominent public officials, manufacturing concerns, Rotarians, Kiwanis, etc., for courtesies extended them.

Parking and police on the post was handled by Major Drumm and members of the 2nd Transport Squadron. Due to the heavy rain, the parking of cars was quite an ordeal, but it was handled with dispatch and courtesy throughout the day. The members of this organization should be congratulated.

FREAK STORM FATAL TO FLYING CADET

Two Randolph Field Flying Cadets, returning to their airdrome on a night navigation flight on May 18th, were trapped by a freak storm, 50 miles short of their goal, forcing both to take to their parachutes. Flying Cadet Donald E. Roberts, 23, of Bessemer, Alabama, was killed—possibly as the result of striking a tree after the descent in a miniature twister which suddenly swept across the course. Flying Cadet Malvern H. W. Brown, who also leaped from his BT-9 training plane at the height of the storm, is in the Fort Sam Houston Hospital with a broken leg.

Fifteen Flying Cadets departed from Corpus Christi, Texas, at five-minute intervals on their last navigation problem of the present Basic class. The first thirteen of them completed their mission with no untoward incident.

Cadets Roberts and Brown were the last two to depart from Corpus Christi, and when in the vicinity of Falls City, Texas, are believed to have encountered the "twister," which residents in the vicinity of the twin crash declared swept across a small area. Two instructors, also returning from Corpus Christi, passed through the same area within ten minutes after the accidents, and reported nothing unusual in the way of weather.

A thunderstorm was stationary about 20 miles off the course during the evening, and a meteorological officer was patrolling the area at the time as an added precaution against just such an occurrence.

"It is believed," says the News Letter Correspondent, "that the twister suddenly developed from the main storm area, dashed across the course followed by the Cadets, and shortly after dissipated. Residents in the vicinity of Falls City reported considerable damage to houses and barns."

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SECOND OF NEW CADET BARRACKS COMPLETED

The second of the two new Flying Cadet barracks, under construction since last fall, was formally turned over to the Flying Cadet Detachment, and Company "D" will move into their new quarters as soon as furniture, beds, etc., can be installed. Thus, the four companies of the Cadet Battalion each have their own barracks, relieving the temporary congestion which arose when the size of the student classes was increased one hundred percent in March, 1938. The south half of the basement of this building will be used as the Flying Cadet Supply Room, and the north half will serve as the Flying Cadet Carpenter Shop, also as a storage room for the Post Quartermaster.

END OF THE FLIGHT

By Frank Welsh

Hqrs. Squadron, 7th Bombardment Group
Hamilton Field, Calif.

Dedicated to, and in memory of, the officers
and men who crashed in a B-18 Bombing Plane,
piloted by 1st Lieut. James D. Underhill,
U. S. Army Air Corps, on the afternoon of
December 23, 1938, at Uniontown, Alabama.

Grey dawn streaked the Marin hills
With long, shining arrows of light;
Twin motors roared on the apron,
Warming up for the flight.

Then, the great silver ship, in the dawning,
Like a monster bird of prey,
Roaring a challenge of power,
Scared out over the bay.

Pilot and crew on duty,
Brave and dauntless men,
Sailing away in the morning,
Never to come again.

They flew the ship on its mission,
Still at their posts when it fell,
To perish in awful disaster,
In a flaming, fiery hell!

Died as soldiers do, bravely,
Those gallant, fearless men,
Serving the flag of their country,
Faithful until the end.

On the twenty third day of December,
That splendid ship came down,
Taking toll of our finest,
In the crash at Uniontown.

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WINGS OVER AMERICA

Hats off! to our defenders of the sky,
Hats off! to the men who dare to fly.
From shore to shore their praises sing,
Around the world let its echo ring,
That all humanity may hear and know
That our Air Defenders will conquer the foe.
Salute those immortals who gave their all
That the Stars and Stripes may never fall.
May the whir of your wings, the Spirit of
the Air,
Be heard 'round the world where bombs burst
and flare.
Onward to glory, hold your banners high,
That America may forever dominate the sky.
Oh, Defenders of the Air, to Liberty be true,
Write victory in the sky, your will to do
or die,
For America and the Red, White and Blue.

- By Laura Meda McDowell Fisher,
1030 Leroy Avenue,
Ferndale, Detroit, Mich.

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NOW FLYING CADETS... FORMERLY ???

Apprentice embalmers and aircraft designers - practicing attorneys and animal husbandrymen - sailors before the mast and radio research engineers - these are some of the varied professions followed by the Flying Cadets of Randolph Field before the whining roar of airplane engines beckoned them to a career in military aviation.

Flying Cadet R.A. Nowotny was an apprentice lineman, working on "the high tension stuff carrying up to 48,000 volts." Cadet E.F. Porter was a seaman on a private yacht on the Great Lakes before entering Randolph Field in the March, 1939, class. Cadet R.K. Brock spent five months in the Lockheed factory, working on the XP-38, which they were constructing, while Cadets E.M. Sheldon worked as apprentice embalmers; J.S. Pirruccello practiced law and P. Harkley followed the profession of animal husbandry.

Flying Cadet J.N. King was a radio engineer at experimental station WOXAD, engaged in research on locating tropical hurricanes by means of cathode ray tubes.

Other professions listed by this one class at the Primary Flying School include chromium plater, electric sign repairman, brokerage clerk, bituminous chemist, rancher, commercial pilot, forestry, surveyor, "beef rassler," draftsman, fertilizer salesman, medical student, meteorologist, ambulance driver, Naval Academy student, and motion picture projectionist.

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RANDOLPH FIELD WEATHER OFFICE NOTES

Under the direction of Lieut. T.S. Moorman, Assistant Weather Officer at Randolph Field, Texas, all personnel, except graduates of the Weather School at Patterson Field, Ohio, are taking classes in meteorology on Mondays, Tuesdays, Thursdays and Fridays in preparation for the air mechanics examination which will take place on June 5th, as well as for the observers' examination on June 15th. Any A.M. rating now held by the weather personnel and issued by the various fields, but beginning July 1, 1939, the Weather Squadrons will issue the ratings.

The classes are being conducted by Sergeants A.W. Throgmorton and J.T. Treat.

Lieut. D.Z. Zimmerman, Weather Officer at Randolph Field, has speeded up work on a meteorology text book he is writing, in order that it may be completed in time for use in the civilian Primary Flying Schools. The book will have many illustrations, which Privates J.H. Spikes and W.W. Bair are drawing. Lieut. T.S. Moorman is assisting with the book.

PLAN FOR ARMY AIR CORPS MECHANICS TRAINING

In an announcement by the War Department on June 1, 1939, which is designed to inform the eligible young men of the nation of the opportunity they may have after July 1, 1939, to procure a well balanced technical education in the operation, repair and maintenance of modern aircraft and its accessories, the Hon. Harry H. Woodring, Secretary of War, stated that under present plans, which are dependent on Congressional appropriations, the authorized enlisted strength of the Army Air Corps will be increased by 23,644 during the year July 1, 1939, to June 30, 1940. All of the men necessary for this increase will not be enlisted at once but will be composed of monthly increments, as follows:

During the months of July, August, September and October, 1939, 1200 men will be enlisted each month; for the months of November and December, 1939, and January and February, 1940, 1500 each month; and for the months of March, April, May and June, 1940, 3211 each month, making a total of 23,644.

Of this number, the Army plans to train 17,149 as specialists in all the technical subjects relating to the maintenance and operation of aircraft and its accessories.

The remainder of 6,495 will be used to fill existing vacancies in Air Corps organizations, both in the United States and in foreign possessions.

The number to be trained will be divided among selected Civilian Schools; Chanute Field, Rantoul, Illinois, and Lowry Field, Denver, Colorado, as follows:

At Selected Civilian Schools

<u>Subject</u>	<u>No. of Students</u>
Airplane Mechanics	1,000
<u>At Chanute Field, Rantoul, Illinois</u>	
Airplane Mechanics	6,980
Aircraft Machinists	323
Aircraft Welders	271
Aircraft Metal Workers	590
Parachute Riggers	414
Carburetor Specialists	240
Instrument Specialists	616
Electrical Specialists	498
Propeller Specialists	336
Radio Repair and Operation	2,934
Link Trainer Specialists	96

At Lowry Field, Denver, Colorado

Aircraft Armors, etc.	1,872
Photography (air and ground)	600
Glens (Administrative, Supply, Engineering and Operations)	2,400

In order that all applicants for enlistment may have no false impressions concerning this Army training, the following regulations and procedure will apply:

Only regularly enlisted men of the

Army will be given this training, and no one will be trained as a civilian. The term of enlistment is three years. Anyone who desires to enlist should apply to the nearest Army Recruiting Office. Suitably qualified men, citizens of the United States, between the ages of 18 and 35 years, are eligible, but applicants under 21 years of age are required to have the written consent of their parents or guardian.

Upon acceptance by the Recruiting Officer, each man then becomes a private in the Regular Army and is paid \$21.00 per month, plus board, uniforms and other clothing (except civilian clothes). He is then assigned to an Air Corps station where he is given basic training in the duties of a soldier. During this training the soldier makes application to attend school in any of the foregoing selected subjects. He is then given tests to insure that he has the ability to pursue the course which he has selected. Such tests consist of a mental alertness test and a mathematical examination which covers the subjects of arithmetic and algebra.

If, upon completion of these tests, the applicant is selected to attend the mechanic school and receive training in one of these courses, he is then placed upon the school eligibility list and will be transferred to one of the above schools for training as vacancies occur. The present capacity of these schools is being rapidly expanded to accommodate the additional personnel which must be trained. It will be some time, however, before most of the soldiers who now enlist will have an opportunity to attend the schools, but he may expect to attend any course in one of the schools sometime during this three-year enlistment.

Upon completion of his technical training, he is then eligible for promotion within the Army, but if he does not care to remain in the Service he can be discharged at the end of the 3-year period and return to civil life as a competent technician in his chosen line of work.

The Civilian Schools referred to, providing for the training of 1,000 Army Air Corps enlisted men, are:

Curtiss-Wright Technical Institute of Aeronautics, Grand Central Air Terminal, Glendale, Calif.

The Aeronautical University, Inc., 1330 South Michigan Avenue, Chicago, Ill. Roosevelt Field, Inc., Aviation School Division, Roosevelt Field, No. 1, Mineola, L. I., New York.

Spartan School of Aeronautics, Apache Boulevard & Chamberlain Drive, Tulsa, Oklahoma.

Casey Jones School of Aeronautics, Inc., 534 Broad Street, Newark, N. J. V-8074, A. C.

New England Aircraft School, 126 Newbury Street, Boston, Mass.

Parks Air College, Inc., Parks Airport, East St. Louis, Ill.

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SONS OF AIR CORPS OFFICERS ASSIGNED TO ACTIVE DUTY.

Under Special Orders of the War Department, recently issued, two newly commissioned Air Reserve Officers, 2nd Lieut. Bailey Cavanaugh Cook and Tarleton Harvin Watkins, who graduated from the Air Corps Advanced Flying School, Kelly Field, Texas, May 25, 1939, were assigned to extended active duty - Lieut. Cook to Mitchel Field, L.I., New York, and Lieut. Watkins to the Hawaiian Department.

Lieut. Cook, son of the late Lieut. Colonel Seth W. Cook, Air Corps, U.S. Army, attended the U.S. Military Academy at West Point, N.Y., for two years. He then attended George Washington University, Washington, D.C., and Purdue University, West Lafayette, Indiana, each for a period of two years. While undergoing flying training at the Air Corps Training Center, he specialized in Attack Aviation.

Lieut. Cook's father died at Chanute Field, Ill., February 10, 1929, at which time he was in command of that station. He entered the military service during the Spanish-American War, enlisting in the Cavalry on June 1, 1898. Appointed from the ranks, he was commissioned a second lieutenant of Cavalry on February 2, 1901. After seeing service with the Punitive Expedition in Mexico, under General Pershing, he was detailed to the Aviation Section, Signal Corps; took flying training at the Aviation School at San Diego, Calif., and was rated a Junior Military Aviator on June 15, 1917.

While with the Air Corps, Colonel Cook served successively at Columbus, New Mexico, with the 1st Aero Squadron; at Kelly Field, Texas; Gerstner Field, Lake Charles, La.; Scott Field, Ill.; Ellington Field, Houston, Texas; and Taylor Field, Montgomery, Ala. While at Ellington Field, he organized and commanded the Second Provisional Wing.

Prior to the reorganization of the aviation branch of the service in 1920, Colonel Cook returned to the Cavalry, and after serving a brief period with the 1st Regiment at Douglas, Arizona, he was permanently commissioned in the Air Corps and served at Kelly Field, Texas, and as Air Officer of the 5th Corps Area at Columbus, Ohio, prior to his being assigned on June 30, 1928, as Commanding Officer of Chanute Field.

Lieut. Watkins, the son of Captain W.W. Watkins, Air Corps, U.S. Army, stationed at Aberdeen Proving Ground, Md., also specialized in Attack Aviation at the

Air Corps Training Center. Prior to his appointment as a Flying Cadet he attended three different institutions of learning - the University of Maryland, the University of Dayton and Texas A. & M. College.

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NEW PLANES FOR 27TH PURSUIT SQUADRON.

The 27th Pursuit Squadron of the 1st Pursuit Group, Selfridge Field, Mt. Clemens, Mich., is now equipped with its full complement of 29 P-36C airplanes and one C-40A.

The twelve newly assigned pilots of this Squadron who are recent graduates of the Air Corps Training Center will climax their training flight period with a navigation flight over a distance of 1400 miles, to be completed during one day. These pilots have been under the supervision of the Flight Commander, Captain Paul B. Wurtsmith, 17th Pursuit Squadron, for three months for the participation in combat flight assignments, beginning July 1st. The proposed navigation flight, originating at Selfridge Field, will follow routes to Langley Field, Va.; Bowman Field, Ky., and return to Selfridge Field. Such an itinerary is beyond comparison with the memories of these young officers of their training days at the Air Corps Training Center, when the "Round the Horn" flight in P-12's absorbed three days for approximately the same distance.

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OPENING OF FLOTATION GEAR NECESSITATES EMERGENCY PARACHUTE JUMP.

Second Lieut. Conrad F. Neerason, Air Corps, of the 3rd Pursuit Squadron, Nichols Field, Rizal, P.I., made a successful parachute jump from a P-26A airplane over Laguna De Bay, Rizal, Luzon, P.I., on the morning of April 20th. The accident occurred while he was making a routine reconnaissance flight.

The News Letter Correspondent states that the cause of the accident is believed to have been the opening of the Pursuit plane's flotation gear. While making a climb to an elevation of 5,000 feet, the gear opened and Lieut. Neerason lost control of the plane, which dived toward Laguna De Bay. He attempted to right the plane and remained in it until it had reached an altitude of about 2,000 feet. The craft was falling at the rate of about 250 miles per hour, and the pilot had to "bail out" as a last resort. He landed near the Fort William McKinley Reservation, about five miles from Nichols Field, and sustained a slight injury to his ankle.

The Nichols Field Aircraft Accident Board was considering the advisability of attempting to salvage the airplane.

AWARD FOR ATTACK-BOMBER AIRPLANES

The Acting Secretary of War, the Honorable Louis Johnson, announced on May 20th an award to the Douglas Aircraft Company, of Santa Monica, California, in the amount of approximately \$15,000,000 for the production of a new design of Attack Bomber.

The price includes spares, but not the cost of engines, propellers, armament, radio equipment, etc., furnished by the government.

This is an all-metal monoplane, powered with the large Wright "Cyclone" engine with supercharger. Some of these planes are equipped with Hamilton Standard propellers and some with Curtiss Electric propellers. It is equipped with flaps or air brakes, retractable landing gear, radio and all the modern aids to safety and efficient flying.

The Douglas Company's designation for this plane is DB-7. The Army Air Corps designation has not yet been assigned.

The present Attack Bomber is the result of intensive studies made of the aircraft used in operations in both Spain and China. By taking advantage of the lessons learned in these conflicts, it has been possible to combine in a single plane the good features of the Attack plane, which has been developed primarily by the United States, and of a light fast Bomber. In recommending the purchase of this Attack Bomber, Major General Henry H. Arnold, Chief of the Air Corps, advised the Acting Secretary of War that "this plane has a better performance than any comparative airplane in production or in service anywhere in the world today."

The Acting Secretary of War also announced awards to the Glenn L. Martin Company, Baltimore, Md., and the Stearman Aircraft Company, Wichita, Kansas, for the production of their Attack Bombers in the amount of approximately half a million dollars each.

The planes to be procured under the award to the Martin and Stearman Companies are essentially the same as the planes which were entered at Dayton, Ohio, in the Attack Bomber competition, circular proposals for which were opened on March 17th. The improvements found to be desirable as the result of extensive tests will be incorporated into the planes to be produced as the result of this award to the two companies.

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All tactical transportation of the 1st Pursuit Group, Selfridge Field, Mich., was inspected by the Group Commander on May 20th. With Group Hqs. and Hqs. Squadron operating under a reduced strength, the Squadron had to call on combat squadrons for personnel to operate the transportation.

72ND BOMBARDMENT SQUADRON COMPLETES AERIAL GUNNERY.

Commanded by Major Oliver P. Gothlin, Jr., Air Corps, the 72nd Bombardment Squadron, Hickam Field, T.H., completed on March 25th their aerial gunnery phase of the Training Year 1938-1939, as required by paragraph 20, Training Regulations 440-40 (Tentative).

On an open water range, roughly 20 miles off the west shore of Oahu, the Squadron, in spite of range restrictions and much interference by fishing sampans and other craft, nevertheless set an enviable record with an average score of 509 per man.

All the forty-two gun positions allocated to the Squadron are now filled with qualified expert aerial gunners (12, less 3 who returned to the mainland prior to completion of the course, were filled by previously qualified gunners). In all, six officers and thirty-two enlisted men qualified as expert gunners during the course. As three officers had previously qualified, 100% of the officer personnel (including two attached) are now qualified expert aerial gunners.

To Corporal Lloyd D. DeFreece went the honor of having the highest individual score - 776 out of a possible 800. First Lieut. Jack W. Hickman turned in the second highest individual score, with a total of 704 hits. Third place went to Second Lieut. Lewis L. Mundell, who obtained a score of 692.

By the use of ammunition which had the bullet noses painted with distinctive colors, several men were permitted to fire into the same target, and thus reduce the time required to return to their base to drop the target after each event. No difficulty was experienced in identifying hits.

Second Lieut. Conrad H. Diehl was Range Officer during the conduct of the phase.

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BRITISH AIRMAN VISITS MITCHEL FIELD

Wing Commander D.F. Anderson, of the British Royal Air Force, who just recently arrived in this country, was a visitor at Mitchel Field, L.I., New York, on May 4th. Commander Anderson is on duty with the Air Ministry in London, and is in the United States for the purpose of inspecting American air fields, manufacturing plants and various technical facilities in connection with aviation. Mitchel Field was his first stop on an itinerary scheduled to take him to the Pacific Coast and return. He expects to be in the United States about one month.

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WAR DEPARTMENT SPECIAL ORDERS
Changes of Station

To Brooks Field, Texas: Captain Clarence D. Wheeler, from the Panama Canal Department, for duty with the 22nd Observation Squadron.

To Barksdale Field, La.: 1st Lieut. Harold Q. Huglin, from March Field, Calif.

To Bolling Field, D.C.: Major William M. Lanagan, from Office of the Chief of the Air Corps, Washington, D.C.

To Chamite Field, Ill.: Major Edward C. Black, from Hamilton Field, Calif. He is assigned to duty as student at the Air Corps Tactical School, Maxwell Field, Ala., for a period of three months, and will then report to the Air Corps Technical School.

To Fort Benning, Ga.: 1st Lieut. Harry N. Burkhalter, from the Philippines, for duty with Flight B, 16th Observation Squadron.

To Fort Leavenworth, Kansas: Captain Wm. L. Ritchie, from duty as student at Air Corps Tactical School, Maxwell Field, Ala., reporting not later than September 8, 1939, for duty as student at the Command and General Staff School. In the intervening period he will be placed on temporary duty in the Office of the Chief of the Air Corps, Washington, D.C. Previous orders in his case revoked.

To Fort Lewis, Washington: 1st Lieut. Kenneth R. Crosher, for duty with 91st Observation Squadron, upon expiration of tour of duty in Panama Canal Department.

To Fort Sill, Okla.: 1st Lieut. George D. Campbell, Jr., from Panama Canal Department, for duty with Flight C, 12th Obs. Squadron.

To Fort Lewis, Wash.: 1st Lieut. Talma W. Imlay, from the Philippines, for duty with the 91st Observation Squadron.

To Hamilton Field, Calif.: 1st Lieut. David N. Motherwell, from the Philippine Department; 1st Lieut. Kenneth B. Hobson, from Panama Canal Department (Previous orders in his case revoked).

To Houston, Texas: Captain Charles W. Lawrence, upon completion of his present course of instruction at the Command and General Staff School at Fort Leavenworth, Texas, for duty as Instructor, Air Corps, Texas National Guard.

To Kelly Field, Texas: Captain Edward H. Underhill, from Panama Canal Department.

To Langley Field, Va.: Lieut. Colonel Willis H. Hale and 1st Lieut. William T. Hudnell, from Panama Canal Department; 1st Lieuts. Wendell W. Bowman and Frederick E. Calhoun, from the Philippine Department, the latter for duty with the 3rd Observation Squadron.

To March Field, Calif.: Captain Gilbert M. Wittkop, from Langley Field, Va.; 1st Lieut. Birrel Walsh, from Panama Canal Department.

To Mitchel Field, N.Y.: 1st Lieut. Millard Lewis, from Panama Canal Department; also 1st Lieut. Felix L. Vidal.

To Moffett Field, Calif.: Lieut. Colonel George L. Usher, from Office of the Chief of the Air Corps, Washington, D.C. Previous orders in his case revoked; Captain Fred O. Tally, from the Philippine Department.

To New York City: 2nd Lieut. Victor R. Haugen, from 1st Observation Squadron, Marshall

Field, Fort Riley, Kansas, for duty as student at Daniel Guggenheim School of Aeronautics, New York University.

To Randolph Field, Texas: 1st Lieut. Norma B. Olsen, from Panama Canal Department.

To San Juan, Puerto Rico: Colonel Follett Bradley, from Moffett Field, Calif., reporting to the Commanding General, Puerto Rican Department, for assignment to duty with the Air Corps.

To Scott Field, Ill.: 1st Lieut. Charles Winkle, from Panama Canal Department.

To Washington, D.C.: Captain Lawrence S. Kuter, from duty as member of Staff and Faculty, Air Corps Tactical School, Maxwell Field, Ala., to duty in the Office of the Chief of Staff.

To Wright Field, Dayton, Ohio: 1st Lieut. Donald L. Hardy, from Brooks Field, Texas; Captain Ralph O. Brownfield, from the Philippine Department; Captain Howard H. Couch and 1st Lieut. R. H. Lynn from the Panama Canal Department.

Promotions (Temporary)

To Lieut. Colonel: Major Gilbert T. Collier from May 20, 1939.

To Colonel: Lieut. Colonel Clinton W. Russell (Air Corps) General Staff Corps, from May 1, 1939.

To Major: Captain Thomas D. White, from May 20, 1939.

Promotions (Permanent)

To Lieut. Colonel: Lieut. Colonel Laurence F. Stone, from May 1, 1939.

To Major: Major Ulysses G. Jones, from May 1, 1939.

Extended active duty for Air Reserve Officers:

1st Lieut. Richard Charles Kugel, Rhineland, Wis., continued on active duty at Mitchel Field, N.Y., to June 16, 1940.

1st Lieut. Arthur Yeaton Snell, Brockton, Mass., continued on active duty at Mitchel Field to June 15, 1940.

2nd Lieut. Ralph James Moore, Sacramento, Calif., to active duty at Sacramento Air Depot to May 31, 1940.

1st Lieut. John Harold Turner, Corning, Iowa, continued on active duty at March Field, Calif., until June 15, 1940.

1st Lieut. Paul Waterman, Washington, D.C., continued on active duty at Mitchel Field, N.Y., to July 1, 1940.

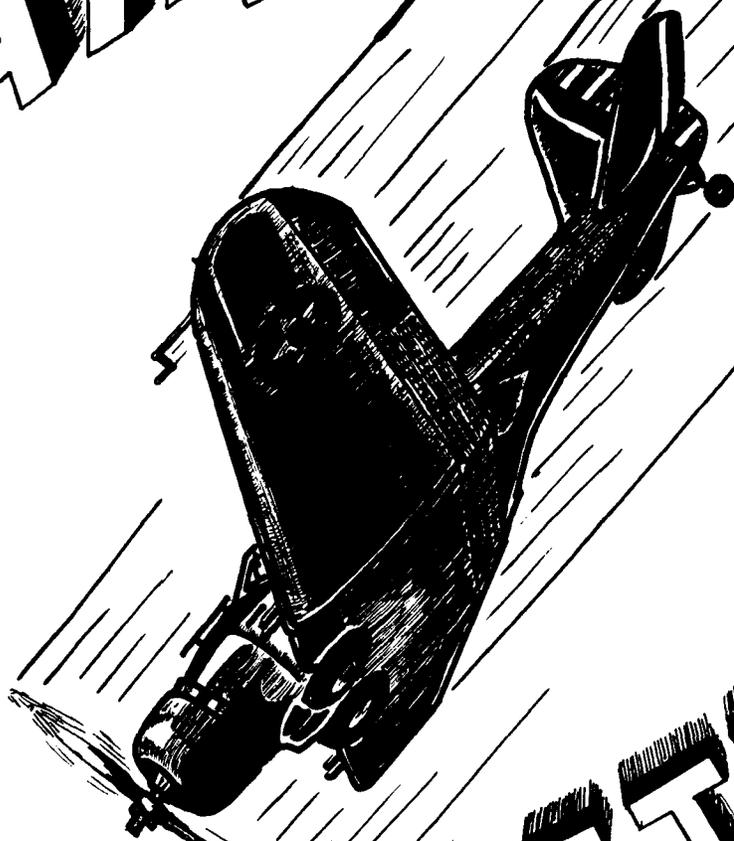
1st Lieut. Gilbert Minnis, Hadley, Pa., continued on active duty at Langley Field, Va., until June 15, 1940.

Assignment of Major Rufus B. Davidson, from Barksdale Field, La., to Scott Field, Illinois, revoked.

Major David G. Lingle is relieved from duty in the Office of the Chief of the Air Corps, Washington, D.C., and assigned as a member of the Aeronautical Board, Washington, D.C.

Lieut. Colonel Thomas J. Hanley, Air Corps, stationed at Mitchel Field, N.Y., has been detailed as a member of the General Staff Corps and assigned to duty in the Puerto Rican Department, arriving at San Juan by June 28, '39

AIR CORPS



J. HORN

NEWS LETTER

ISSUED BY OFFICE OF CHIEF OF THE AIR CORPS. WAR DEPARTMENT. WASHINGTON, D.C.

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NO. 12

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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THE PUERTO RICAN INSPECTION FLIGHT

(Narrated by Capt. F.E. Glantzberg, Navigator)

For the purpose of flying Major General Delos C. Emmons, commanding the GHQ Air Force, to Puerto Rico to inspect proposed landing field sites, Colonel Robert Olds, commanding the 2nd Bombardment Group, departed from Langley Field, Va., at 10:00 o'clock on the morning of May 10th for Bolling Field, D.C., in a B-17 Bombardment plane. Comprising the crew were Major Harold L. George, Captain F.E. Glantzberg, Staff Sergeants J.E. McDonald, J.J. Boutty, Corporal A.R. Jester, Privates 1st Class J.H. Walsh and W.G. Wilson.

We met General Emmons at Bolling Field at noon and took off for Miami, Fla. The General desired to look over the proposed site for the South East Air Base at Tampa, Fla., so we laid our course direct for Tampa, and at 4:30 p.m. circled over that city. Leaving Tampa for Miami, we encountered a cold front about 60 miles out of Tampa, and for the last 30 minutes into Miami were constantly changing course, getting around and through the excessive turbulence.

Lieuts. Torgils G. Wold, as Weather Officer, and James S. Sutton, as Communications Officer, had preceded the flight to Miami to make advance arrangements with Pan American Airways for utilizing their facilities to the best advantage. That evening, after an excellent fish dinner at Reid's, Lieut. Wold went over his forecast for the next day and listed the Pan American stations from which weather reports could be obtained enroute. All reports were to be coordinated through the Miami office and relayed to the plane through the Army radio station at Chapman Field. The cold front we had passed through getting into Miami was forecast to be in the vicinity of Antilla, Cuba, at the time we would be there the next day. Except for that, however, the weather would be generally clear over the sea areas, although there would be cumulus clouds and thunder storms over the islands.

At 8:10 the next morning, we took off for San Juan. Permission had not been obtained to fly over any foreign countries enroute, so that we could not fly the direct course. Instead, we laid a course for Guillermo Key, a point mid-

way on the north coast of Cuba. From there the course followed the north of Cuba and Haiti, keeping well outside the three-mile limit. The navigation involved on the 1150-mile flight from Miami to San Juan presented no particular problem, inasmuch as the longest we were out of sight of land was only an hour and a half on the 250-mile jump from Miami to Cuba.

Seventy-five miles out of Miami, while we were still climbing for altitude, we ran into a local thunderstorm area which necessitated detouring 50 miles to the southwest. Beyond this thunderstorm area, however, the sky cleared and the sea was a brilliant blue setting for the lighter amethyst patches of shallow water, sparkling in the sunlight around white coral reefs.

In the vicinity of Antilla, Cuba, as predicted, we encountered the cold front, but had no difficulty in topping it at 17,000 feet. We saw little of the coasts of Cuba and Haiti. Both were thickly covered with cumulus clouds and thunderstorms that obscured all but occasional glimpses.

Excellent radio communication was maintained direct with the Chapman Field relay station throughout the entire flight. As Haiti was left behind, we began losing altitude, and a few minutes before two o'clock - 5½ hours out of Miami - we flew low over Point Borinquen, a bluff about 250 feet high overlooking the water, on the northwest tip of Puerto Rico. After several circles over Point Borinquen, Colonel Olds headed the plane east along the coast toward San Juan.

Puerto Rico is an island roughly oval in shape, about 100 miles long by 25 miles in width. The center is quite rugged, the mountains rising abruptly to 4,000 feet from the coastal plain that surrounds the island, except for its western tip. This coastal plain is bordered by an almost continuous gently-shelving, sandy beach. As we approached San Juan, we could see the imposing walls of the historic Spanish fortress, El Moro, guarding the entrance to the harbor of San Juan. The single narrow runway at Isla Grande Airport remained

to be tested for its adequacy, but the wind was blowing 10 miles an hour at a 45 degree angle across the field, and Colonel Olds set the big ship down easily, barely using up a thousand feet.

With the group waiting to greet General Emmons were Colonel John W. Wright, Commanding Officer of the 65th Infantry, at San Juan, and Lieut. Jack Stanley, Aide to Governor Winship.

From the airport, we went direct to the Palace to call on Governor Winship, who was kind enough to invite us to stay with him as his guests while we were in Puerto Rico. Later in the afternoon, we made a sightseeing tour of the Army post and some parts of San Juan. I was particularly impressed with the similarity of the place with the Philippines, except that Puerto Rico's climate is far more temperate. During our four-day stay on the island, the sun's declination was the same as the latitude of San Juan, but even with the sun directly overhead at noon, we were never uncomfortably warm. The prevailing easterly trade wind blowing steadily off the water keeps the temperature down to an average of 76 degrees throughout the year, and it would be difficult to find a more pleasing locality - California and Hawaii enthusiasts notwithstanding.

Friday morning, May 12th, after breakfast, we started out on a two-day, 400-mile automobile tour of the Island to inspect proposed Air Base sites. On this tour of the Island, I was even more impressed with its similarity to the Philippines by seeing an occasional carabao, or water buffalo, and many Burma cattle both in the fields and pulling two-wheeled carts. In the outlying districts, bamboo frame and palm-thatched huts are the predominant architectural style. Like the Philippines, Puerto Rico is principally an agricultural country, its main products being sugar, tobacco and coconuts, though, of course, it raises sufficient tropical fruits and vegetables for local consumption.

After this interesting two-day automobile tour, Puerto Rico proved that it could entertain most hospitably. On Saturday night we were guests at the Officers' Club of the Post of San Juan and at the Casa de Espana, the Spanish Club.

Sunday morning, the U. S. S. NASHVILLE arrived at San Juan, bringing General Marshall on his way to Brazil. General Marshall with his staff went up in the B-17 and personally inspected all the proposed sites from the air. He was particularly impressed with the desirability of the sites selected for the main installation, as well as with the potentialities of the Island as a whole from the standpoint of available sites for auxiliary airdromes should the situation demand reinforcement by Bombard-

ment units from the States.

Monday morning, the 15th, we left San Juan at 8:05 o'clock, and started back for Miami, Fla. We retraced our course down as far as the eastern tip of Cuba, then the last 500 miles shot direct for Miami, passing Andros Island twenty miles on our right. The trip back was uneventful, and we landed at Miami at 2:30 in the afternoon. It still being early, General Emmons decided to stop for lunch and go on through to Langley Field the same day. Servicing was completed by 3:30 and, taking off at 3:45, we were back at Langley Field at 8:40 that evening.

Several hundred years ago, the Spaniards built a fortress at San Juan to control the Caribbean area, and now again the importance of Puerto Rico is realized as distances shrink by leaps and bounds and Puerto Rico comes within six hours of Florida and eight hours of Virginia - for it is only fifteen hundred miles direct from San Juan to Langley Field.

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LONG RANGE COMMUNICATION BY THE SECOND BOMBARDMENT GROUP.

Unusual radio communication between planes of the 2nd Bombardment Group, Langley Field, Va., and PL-2, its ground station, is becoming routine. On one occasion a B-18, sitting on the ground at Orlando, Fla., contacted Langley Field at the first press of the key on prearranged schedule for the weather. On another occasion similar results were achieved with a plane sitting on the ground at Chanute Field, Ill.

Station PL-2 has consistently worked B-17's and B-18's in the air as far as Denver, Colo., without any trouble at all, both day and night. This has proved of inestimable value in maintaining both control of airplanes in the air and in receiving forecasts for destinations, not always available from Department of Commerce Stations.

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The 5th Squadron, Mitchel Field, N.Y., during the month of May, carried out its program to qualify every combat crew member as an expert aerial gunner. The results have been remarkably good, with every man who was run through the course qualifying. The Squadron has also concentrated on having a number of expert bombardiers among the officer personnel as well as among the enlisted men.

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Major John P. Richter, Air Corps, who has been holding a temporary commission in that grade, was promoted to the permanent grade of Major, June 1st.

V-8096, A. C. 10

THE SCHOOL OF AVIATION MEDICINE EXHIBIT

An exhibit of the activities of the School of Aviation Medicine, Randolph Field, Texas, was shown at the International Congress of Military Medicine and Pharmacy, recently held at the Willard Hotel in Washington, D.C. This Congress was convened between the dates of May 7th to the 19th, inclusive. The exhibit was opened to accommodate the delegates during the registration, which began on May 7th.

Medical representatives of 37 different nations were present at the Congress. Many of these representatives were the highest ranking officers of the medical services of their respective countries, including General A. Waldman, Surgeon General of the German Army, the only four-star medical officer in the world.

The display consisted of four panels of pictures, serial action apparatus, Phorometer, Projectoscope, Depth Perception Apparatus, Crash Kit, Medical Attendance Kit, Portable Examining Unit, Ishi-Hara Color Charts, School Texts used in the Correspondence Course, copies of Flight Surgeon Topics, and numerous charts and diagrams of the activities of the School of Aviation Medicine. The picture panels mentioned above consisted, roughly, of 85 pictures, divided about equally between the activities of the School of Aviation Medicine and those of the Air Corps Training Center. The Crash Kit and the Medical Attendance Kit are recent developments at the School of Aviation Medicine. A miniature Battalion Aid Set, sent from Carlisle Barracks, was also included in the exhibit space.

The exhibit was well attended, both by service people and laymen. The foreign delegates were especially interested, and some of them spent hours discussing the pictures, charts and apparatus. This discussion was often carried on through interpreters. It was the pleasure of the exhibitors to discuss our work with some very notable medical officers of the world. A partial list of these include:

- General A. Savornin, Surgeon General of the French Army;
- General Iliescu, Surgeon General of the Rumanian Army;
- Major General Hippke, Director of the Medical Division of the German Air Force;
- Surgeon Vice Admiral P.T. Nicholls, Surgeon General of the British Navy;
- Rear Admiral Fikentscher, Surgeon General of the German Navy;
- Air Commodore H.E. Whittingham, Surgeon General of the British Royal Air Force; and
- Senator Count Aldo Castelloni di Chisinalo, of Italy, recently in charge of medical activities of the Ethiopian

campaign. The British medical services were well represented. Officers from the Canadian, Australian and Indian medical services, as well as the Royal Army Medical Corps, were shown through the exhibits. Officers from countries as far away as Siam were also noted as being present. Practically every delegation from the South American and Central American countries attended the exhibit at one time or another.

The greatest amount of interest was shown in the pictures, charts, serial action apparatus and projectoscope. Copies of our literature were distributed to every delegate in attendance. This literature describes the School of Aviation Medicine, its history, operation and functions.

The exhibit was conducted by two officers on duty at the School of Aviation Medicine - Captains Charles L. Leedham and Norman W. White, Medical Corps, U.S. Army.

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DEMONSTRATION OF AIRCRAFT EFFECTIVENESS

In order to acquaint the commissioned personnel of other branches of the service with the powers and limitations of the aircraft in the Panama Canal Zone, the 16th Pursuit Group, based at Albrook Field, staged a demonstration of aerial attacks on surface targets on the afternoon of May 19th. Targets, in the form of aluminum "slicks," were laid on the surface of Panama Bay, just off the entrance to the Canal, and near the islands just off-shore, where a large group of officers of the Pacific Sector and guests of the Commanding Officer of the Group were gathered.

The 24th and 29th Pursuit Squadrons demonstrated combined, simultaneous attacks with machine gun fire, followed by the 74th Attack Squadron dropping time-fused bombs. The 44th Reconnaissance Squadron, acting as bombardment for the purposes of the demonstration, concluded the show with high altitude bombing. The effectiveness of the demonstration was evident from the enthusiasm of the spectators.

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The following-named Air Corps officers, upon the completion of their tour of duty in the Panama Canal Department, are assigned to stations, as follows:

- Captain Thurston H. Baxter and 1st Lieut. Kenneth B. Hobson to Chanute Field, Ill.
- Captains Charles G. Goodrich, Robert F. Tate and 1st Lieut. John J. O'Hara, Jr. to March Field, Riverside, Calif.
- Captain Donald B. Smith to Lowry Field, Denver, Colo.

NOTES ON THE BARKSDALE FIELD PURSUITERS

The 79th Pursuit Squadron, 20th Pursuit Group, has been operating from 5:00 a.m. to 7:00 p.m. during week days, during the month of May in an effort to complete the ground gunnery course prescribed.

The smooth air found in the early morning and late afternoon has helped to raise the average individual score. Normal day operations have been confined to completion of individual training which was greatly hampered by the shortage of airplanes for the first half of the fiscal year.

Events II and VII of the Pursuit Aerial Gunnery Course is to be fired at Galveston, Texas, using the Galveston Municipal Airport as a base of operations. The new runways at this field are much more desirable for the operations of P-36A and B-10 airplanes than the grass field at Fort Crockett.

55th Pursuit Squadron

Every pilot an expert! That was our goal on April 15th when we left Barksdale Field for Galveston, Texas. On May 6th we returned to our home station, a squadron of experts - well, almost anyway! The weather was fine during the stay of the squadron there. Individual unit and high altitude gunnery were all completed during the three weeks' encampment. The enlisted personnel showed the old 55th spirit in maintaining the airplanes and keeping a maximum number in the air. But all was not work! For those hale and hearty men, the ocean offered its cold waves as a form of recreation. For those who craved more gentle sport, fishing, golf, tennis, horse-shoes and siestas held the spotlight. Mess Sergeant Greco is still our pride and joy - the food was fine, Sergeant.

May 1st brought us a new addition but an old pilot - 2nd Lieut. A.B. Walker, Air Reserve. For the last eight years he has been manager of the airport and flying school at Miami, Oklahoma. Lieut. Walker's home is in Oklahoma.

Oh, unhappy day! Our Squadron Commander, Captain M.R. Nelson, left us June 1st, to be away for three months, in order to attend the Air Corps Tactical School at Maxwell Field, Ala. We wish him the best of luck, and we find consolation in the man who is to take command during his absence - Captain Homer L. "Tex" Sanders. Operations will be under the guidance of 2nd Lieut. Young, Air Reserve.

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Effective about September 1, 1939, Capt. James G. Pratt, Air Corps, is relieved from duty at Maxwell Field, Ala., and assigned to duty in the Office of the Chief of the Air Corps, Washington, D.C.

WORK STARTS AGAIN AT TACTICAL SCHOOL

The first of the 1939-40 classes of the Air Corps Tactical School, Maxwell Field, Alabama, began on Monday morning, June 5th, with 99 students present and one not yet reported.

Colonel Walter R. Weaver, Air Corps, Commandant of the School, delivered the opening exercise address.

Colonel Millard F. Harmon and the other directors gave an outline of work to be carried out during the school term, and then Major F.G. Epling, Coast Artillery, conducted the first class, this being in map reading.

On June 6th, the students were scheduled to get down to their regular work of three classes during the day.

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COMPLETION OF COURSES AT RANDOLPH FIELD

Aided by an almost uninterrupted stretch of cloudless skies, both the Primary and Basic Stages at Randolph Field, Texas, completed their course of training on May 24th. Only eleven weeks of actual flying training were needed by Class 40-A, now finishing up Primary Stage, to complete their course of 65 hours' flying time. One flying day was lost as the result of a muggy field, and training was discontinued for less than an hour on another occasion when a sudden wave of moist Gulf air swept across the airdrome. The ceiling lowered from unlimited to 400 feet in a few minutes, but as rapidly cleared.

The Class on Basic Stage, 39-C, rapidly wound up their training program with only a few hours more of formation and acrobatics needed to complete their 103 hours of flying time.

Eight members of the Flying Department of the Civil Aeronautics Authority, all of whom hold Reserve commissions in some branch of the military or naval service, completed the Instructors' course on the Primary Stage on May 12th, preparatory to acting as Supervisors for the new Civil Aeronautics Authority college training program.

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Captain Uzal G. Ent, Air Corps, has been relieved from duty with the 18th Reconnaissance Squadron at Mitchell Field, N.Y., and assigned to duty as Military Attache and Military Attache for Air, American Embassy, Lima, Peru.

Captain Frederick E. Glantzberg, Air Corps, has been relieved from assignment and duty at Langley Field, Va., and assigned to duty as a member of the United States Military Mission to Bogota, Colombia.

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FIFTH BOMBARDMENT GROUP PARTICIPATES IN "BLACKOUT."

By the News Letter Correspondent

On the evening of May 18, 1939, the 5th Bombardment Group, Hickam Field, T.H., with all available airplane and crews participated in a "Blackout" drill which involved the entire Island of Oahu. The Group, acting as an enemy air force, made a simulated night attack against important installations on Oahu. In order to thwart this effort, the cooperation of all civilians to aid in the "Blackout" was requested and obtained.

One of the most characteristic features of the Island, as it appears to pilots flying at night, is the myriad of lights, centering at the city of Honolulu. Stretching away from this brightly illuminated area is the sprinkling of lights which indicate the smaller towns and the villages of the sugar and pineapple plantations. The main roads are clearly indicated by lines of light, which remind one of the heavy traffic surrounding any large city on the mainland. Here and there, scattered lights of automobiles can be seen as they move over the surrounding country on roads that are lightly traveled. Surrounding this entire light-infested area is the almost unvarying blackness of the Pacific, broken only now and then by occasional marine traffic.

The problem involved in this "Blackout" was to make the Island of Oahu so dark that its blackness would blend into the blackness of the sea, thus giving to pilots of the "enemy" airplanes the illusion that the Island had vanished and that nothing lay ahead except the vastness of the Pacific. Clearly, the opportunities presented here for obtaining a complete and effective "Blackout" are unique. No lines of automobile traffic outside blackout areas would point the way to cities, harbors and Army posts. Complete darkness would prevail.

As a result of extensive publicity and careful organization by military and civil authorities, plans were made for the "Blackout" to be accomplished effectively in a short period of time. Every effort for cooperation was made by the civilians. The main power switch was cut, extinguishing all street lights. Police cars, with dim blue headlights patrolled the streets, stopping all traffic and enforcing blackout restrictions. Boy Scouts aided the police in obtaining total darkness.

The blackout signals, given by sirens, radio and blinking street lights, were effected while the airplanes were at sea and approaching the Island. Immediately the "Blackout" plans went into effect. The estimated time for the notice to reach all persons was six minutes, but within one minute after the initial signal was given over KGMB and KGU, the lo-

cal radio stations, hardly a light could be seen in any direction. The city of Honolulu was especially effective in this exercise, with all lights in the city, including automobile headlights, being extinguished immediately after the signals were given. The Island of Oahu then appeared to be almost uninhabited. Pilots of the airplanes reported that the very few remaining lights, such as buoy markers and a very few obstruction lights, gave little aid in determining the position of the Island. They were certainly of no aid in locating objectives.

After circling the Island for a period of approximately fifteen minutes, all airplanes dropped two flares each over several prearranged positions along the shore of the Island. Immediately after release of the flares, a clear outline of the Island was visible to pilots and bombardiers. This advantage was short lived, however, as the anti-aircraft searchlights immediately came into play. It was a spectacular sight to see dozens of flares floating high over the Island and the beams of powerful searchlights searching the sky for airplanes. While little effort was actually made to detect the positions of all airplanes by searchlight beams, the problem as it was executed presented a realistic illustration of the part that must be played by military and civilian personnel alike in the event of an actual air raid. One of the local radio stations followed and broadcast the entire procedure carefully. It was not hard to visualize that the searchlights, the flares and the unseen planes, which could be heard so plainly above, might be a sort of dress rehearsal for less friendly warfare.

This "Blackout" problem was the first ever conducted in the Hawaiian Department. The enthusiasm and thoroughness with which the civilian population carried out their part of the program clearly indicated their interest and dependability in this all important means of air defense. Among the lessons learned by this exercise were that the civilian population can be completely relied upon to carry out their part in this passive defense measure and that there is no question about the effectiveness of a "Blackout" as a protective means against air raids.

A PURSUITER'S VIEW OF OAHU'S "BLACKOUT"

Someone had snuffed out the moon when we taxied out to take off individually from Bellows Field, so we were thankful for the emergency lighting system being

in operation - we could at least see our hands in front of our faces.

Once off, though, and up a few thousand feet, it was easy to see where one was going, especially with the mammoth Christmas tree that is Honolulu, glowing and twinkling in all its blue, green, red, yellow and white splendor against the background of mountains. Added to that were smaller clusters of sparkling yellow facets of the many little towns and villages; the red and yellow outline of Wheeler Field looking for all the world like a fat sunfish gorged to the gills and glaring back with its baleful green eyes; the lights of boats and houses encircling the island's shore; the cars on the busy highways and streets looking like comets with full spreading tails but traveling in reverse slow motion along their undulating paths; and finally the whirling dervishes or revolving navigation beacons. All of this under the luscious tropical moon glitters and sparkles in a setting of mottled shades of gray. But tonight - no moon! So the island shone forth as precious gems in a bed of deep black velvet.

Gee! This is grand! Nice comfortable formation, too. And see how the flight leader's plane is dimly silhouetted by the quivering tongues of blue flame sticking out of the cherry red maws of the exhaust stacks! Wonder if my plane similarly is silhouetted? Seems as though we're stationary in space.

Wow! What happened? Surely, I'm not flying upside down? If I am, then every one else is too, because I'm still flying "left wing" position in the "V." Must be dreaming. Ouch! Nope, I'm not dreaming. Just a minute ago, though, I was dreamily contemplating the vast splendor displayed for my pleasure. Now it's vanished and there is nothing except stygian darkness. That's what you'd call a blackout in every sense of the word.

And that, my friend, speaks volumes for the efficiency of Oahu's defense forces and for this whole-hearted cooperation of its civilian population.

Dropping our simulated bombs now will be "by guess and by gosh." Unless we aim them at those half dozen scattered specks of light resembling fireflies. If they aren't fireflies they must be light from habitation of some sort, and they're certainly something more definite to shoot at than that vast expanse of black. I came over here to drop bombs and drop them I will!

In case of a real enemy instead of our simulating him, that is undoubtedly what would happen - if his neighbors didn't shoot him first in behalf of their own safety for refusing to douse his lights.

There go the flares! Lots of them. But all that light helps the searchlight batteries, too, in spotting their targets - the attacking planes. Which is

the signal for me to high-tail it for Wheeler Field before I have to start dodging antiaircraft shells.

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SERGEANT CLARK AGAIN PROVES EQUAL TO THE EMERGENCY.

Sergeant Gilman H. Clark, of the Base Range Office, Post Operations Section, Langley Field, Va., was recently credited with his second rescue of a child from drowning.

Late in the afternoon of June 1st, Sergeant Clark, who is married and lives at Buckroe Beach, Va., was playing on the shore with a small child when he chanced to glance up and saw a small form being tossed about by the waves, a short distance from shore.

Sensing that the bather might be in trouble, Sergeant Clark hurried out and brought the youngster to shore. He proved to be Jean Gilman, III, four years old, of Richmond, who was visiting with his grandfather, Jean Gilman, of Hampton Institute. Here is one of those coincidences of similarity in names under rather dramatic circumstances. When brought to shore the boy was unconscious, but he was quickly revived.

Apparently the little fellow had waded out beyond his depth and had been caught up by a wave. In all probability he would have lost his life had Sergeant Clark not been on hand.

Several years ago, Sergeant Clark saved from drowning a child who fell off a pier at Marblehead, Mass. On that occasion the rescue was more dramatic, Sergeant Clark leaping from the pier to bring the child to safety.

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MASTER OF ARTS DEGREE FOR LT. BOWYER

First Lieut. William G. Bower, Air Corps, stationed at Kelly Field, Texas, received his degree of Master of Arts from St. Mary's University on June 2, 1939. The following appeared in the St. Mary's University official publication:

"William G. Bower, M.A. Lieutenant in United States Air Corps and stationed at Kelly Field. Received bachelor of science degree from West Point in 1929 and bachelor of arts degree from St. Mary's in 1930. Will be promoted to captaincy in June. Major for master's degree in history. Thesis, written on 'Reminiscences from West Point,' taken from the over 400 letters he wrote his mother while attending the United States Military Academy. A practical joker, humorous, very brilliant. Well read on current events and well versed in classical literature. Uncle Sam needs more of this type. The News Letter Correspondent adds: 'We think so, too!'"

HALF A MILLION FLYING HOURS
By the Randolph Field Correspondent

The flying done by rated Air Corps pilots at Randolph Field, Texas, during the course of a year's operations, when reduced to a time total, assumed the proportions of an astronomical figure.

This flying represents the most strenuous type of airwork that the Air Corps pilot can be called on to perform. It includes daily individual hours of painstaking, precise demonstration and instruction in such maneuvers as acrobatics, spins and spin recoveries, instrument flying, night flying, precision accuracy work in simulated forced landings, and routine accuracy work incident to the flight training curriculum. It includes the flying required by the War Department Training Directive. It includes instruction in hooded instrument approaches and instrument landings.

The great bulk of this flying represents a stupendous total of individual flying hours devoted to producing a daily and hourly masterpiece of flight technique. It represents a daily and hourly striving for faultless flying.

It is the Air Corps pilots' Master Tournament, which must be played today, tomorrow, and the day after, in an unending succession of performances, with perfection taking the place of par on the score sheet and on the official record of the school. There is a mental strain, a continuously keyed nervous alertness, nervous fatigue. There is constant watchfulness.

The cost in public treasure for the accomplishment of our mission here at Randolph Field is truly enormous, but the cost to the individual pilot engaged on this duty can only be read between the lines of the reports kept on file in our Flight Surgeon's Office.

It is wearing work.

Let us consider the annual pilot effort attendant on our last year's operations. At the present writing, the rated pilot personnel of this station have flown during the Fiscal Year a total of 58,149 hours. This figure of more than 58,000 pilot hours is a small one compared with the total pilot time for this Field, including student pilots. The grand total of all pilot hours for the first eleven months reaches the stupendous figure of 139,351 hours.

It would require an individual pilot, flying eight hours every day 365 days each year, a total of 20 years to equal the flight time accumulated by rated pilots of this station during the past eleven months. And then he would have to fly an additional 64 days actually to equal the rated pilot time figure.

Here is another slant on the wealth of flight experience employed in carrying out the student training activities at this station. Fifty-four of the 175

pilots assigned to duty here have flown a total of 205,362 hours up to last month. The average total pilot time of each of these officers is 3,802 hours. Including observer's time, each of these pilots has spent an average of more than 4,000 hours in the air gaining the experience they use daily in student flight training at Randolph Field.

Here is one for the book: The total pilot time of all Air Corps pilots on duty at Randolph Field amounts to the neat total of 492,078 hours. Considering observer's time and pilot time in this grand aggregate of flight experience, we find the impressive total of more than five hundred thousand hours of flight experience as the principle essence of the atmosphere in which the present Air Corps flight student grows and develops into the Air Corps pilot.

A half million flying hours! A neat, round figure; a pretty sound foundation of experience upon which to operate the best flying school in the world.

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METEOROLOGY TEXT NEARS COMPLETION

Incorporating nearly three years' work, Lieut. D. Z. Zimmerman, aided by Lieut. T. S. Moorman, Post Weather Officers at Randolph Field, Texas, almost completed their textbook on Meteorology, which will be used to instruct Flying Cadets.

Lieuts. A. J. Frolich and A. C. Dapprich also contributed to the book, as did the personnel of the Weather Office and Academic Department at Randolph Field. More than 300 pages in length and containing about 200 illustrations and cloud pictures, the book will contain much of several previous texts which Lieut. Zimmerman, as Instructor of Meteorology at the Ground School at Randolph Field, has written before. The text is written especially for the pilot. It gives a practical explanation of the theory of Meteorology and stresses the importance and use of the study of weather to the pilot. The Post Print Shop is printing the book.

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Under recent orders of the War Department, three Air Corps officers, stationed at Wright Field, Ohio, were detailed to duty as students to pursue a course of instruction in aeronautical engineering at educational institutions, viz: Captain Alfred R. Maxwell at the Massachusetts Institute of Technology, Cambridge, Mass.; 1st Lieut. Frank N. Moyers at the California Institute of Technology, Pasadena, Calif.; and 1st Lieut. Edward J. Hale at the University of Michigan, Ann Arbor, Mich.

CIVILIAN INSTRUCTORS TAKE COURSE OF INSTRUCTION AT PRIMARY FLYING SCHOOL

Seventy-two civilian instructors from the nine flying schools throughout the country, which have been tentatively selected to participate in the expanded Air Corps pilot training program, reported at Randolph Field, Texas, on June 1st for a two-weeks' course of instruction in the Primary Stage Instructors School, prior to the inauguration of the plan on July 1st.

Meanwhile, twenty-three Randolph Field officers, tentatively scheduled to supervise the training at the civilian schools, are standing by with their suitcases packed, awaiting final orders assigning them to the new duty.

An additional detachment of civilian instructors, approximately the same size, will report to Randolph Field on June 15th for the second of the two courses of the Instructors' School. The Spartan School of Aeronautics, of Tulsa, Okla., one of the schools tentatively selected for the Flying Cadet training, sent seventeen instructors for the two-weeks' course.

Other flying schools, and the number of instructors now in training, include:

- Alabama Institute of Aeronautics, Tuscaloosa, Alabama, 6;
- Chicago School of Aeronautics, 5;
- Dallas Aviation School, 14;
- Grand Central Flying School, Los Angeles, Calif., 3;
- Lincoln Airplane and Flying School, Lincoln, Neb., 8;
- Parks Air College, East St. Louis, Ill., 7;
- Ryan School of Aeronautics, San Diego, Calif., 8; and
- Santa Maria School of Flying, Santa Maria, Calif., 8.

According to the present plans, at least two Air Corps officers experienced in Primary Stage work will be assigned to each of the nine civilian flying schools and, in addition, at least four enlisted men will be assigned to duty at each of the schools.

The flight training will be carried on by the civilian instructors, but under the supervision of Air Corps personnel. The Air Corps detachment will be in charge of the military training of the Flying Cadets and the general administrative work in connection with the operation of the school from a military standpoint.

Primary training planes will be ferried to the various schools by the civilian instructors upon conclusion of the training period at Randolph Field. It is believed that at least one Air Corps officer will accompany each flight.

Upon the completion of his tour of service in the Philippines, Lieut. Colonel Ralph Royce is assigned to Hamilton Field, California.

NOTES ON THE FIRST PURSUIT GROUP

Major Willis R. Taylor, Commanding Officer of the 27th Pursuit Squadron, Selfridge Field, Mich.; Captain James E. Briggs and 1st Lieut. John N. Stone, 1st Pursuit Group Headquarters, Captain Paul B. Wurtsmith and 1st Lieut. Clayton E. Hughes, of the 17th Pursuit Squadron, and Captain John F. Jones, 94th Pursuit Squadron, have been assigned to Maxwell Field, Ala., for duty for three months as students at the Air Corps Tactical School.

The Group Transportation is doing a great deal of reconstruction and painting of their garage and work shop. All cars and trucks are being repainted and complete overhauling is under way so as to put the transportation section in tip-top condition.

The 27th Pursuit Squadron has undergone reorganization. The training flight has been broken up and the new pilots assigned as members of the combat flights. A new training flight is organized in anticipation of ten new pilots, due to arrive on or about June 15th.

At this writing, 32 Reserve officers are taking the final examinations for commissions in the Regular Army.

Since May 10th, ten enlisted men of the 94th Pursuit Squadron have been at camp Skeel, Oscoda, Michigan, to assist the permanent detachment there during aerial gunnery training. The officers participating in gunnery training were most fortunate, as weather conditions have been favorable. The result has been that all pilots who participated made "Expert" on ground targets. The Squadron Adjutant, 2nd Lieut. Charles W. Stark, Jr., made special mention of, and highly complimented, the men of the Armament Section on their good work.

Captain John F. Jones is the present Group Adjutant, Group Chemical Officer and Commanding Officer of Headquarters Squadron, replacing the former Adjutant, 1st Lieut. John N. Stone, and Captain James E. Briggs. Captain John R. Hawkins is the Group Communications Officer, relieving 1st Lieut. Clarence F. Hegy. Captain Hawkins is also Group School Officer and Group Operations Officer.

Upon the termination of their tour of duty in the Hawaiian Department, Major Ames S. Albro is assigned to Maroon Field, Calif.; Major William J. Ellison to Wright Field, O.; Captain James A. Ellison to Kelly Field, Texas; and 1st Lt. Chas. E. Wheatley, Jr., to Mitchel Fld.

ADDRESS OF COLONEL HERBERT A. WHITE, U. S. ARMY, RETIRED,
Before Graduating Class (39-B), Kelly Field, May 25, 1939.

Young gentlemen of the graduating class, you have today reached a portal beyond whose curtains your imagination has heretofore drawn fanciful pictures. You have turned the kaleidoscope of youth and hope upon the future and you have been delighted with the myriad changes and the riot of color you have seen reflected. Let us hope it will be many years before the rainbow tints of promise change to the dull gray of the commonplace, or lose their bright hues in disappointments.

On behalf of the friends and relatives here today and also those others not here, it now becomes my duty and my pleasure to congratulate you on your graduation. And this I do - not so much on having reached this day but on reaching it with so much credit to yourselves.

This I can say with more earnestness than if I were speaking to a graduating class of the ordinary school. You have just completed a year of more grueling work than can probably be found in any other institution except the sister school of the Navy at Pensacola. Speaking from experience, I can state that no mental or physical weakling can finish the course at either of the old academies - West Point or Annapolis. But in each of those institutions the course is longer and there is not crowded into one brief year so many complex elements as in the course you have completed today. It is not too much to say that in winning your wings you have demonstrated an ability considerably above the average, showing no mental or physical weakness. We find in you a capacity "to take it." My congratulations are given not only with the idea of patting you on the backs - much as you deserve it - but to emphasize the fact that now you have demonstrated your worth; hereafter the government will expect the maximum from you. And you may rest assured that "it won't be long now" before you will be given work in which it will become speedily apparent whether or not the Government's expectations are to be realized.

I have been asked by your Commanding Officer to speak to you on this occasion - a request so flattering that I feel a deep sense of pleasure and self-satisfaction. Yet I realize that youth listens with dull ears to the advice of age. So my remarks will be brief. But if I say but little, what I do say should the longer remain with you. And I am conceited enough to state that if from my few remarks you get nothing that will be of use to you, it will not be on account of deficiency in presentation but rather because of stupidity of reception.

Should you come to me individually and ask me what I might have to say to you at such a time, I should enumerate cer-

tain traits or character, certain human virtues, if I may so call them, that you must possess or attain if you are to be successful men. And this I shall do, speaking to you collectively; which you can take individually.

The first necessary trait, the one most people would mention, would be honesty. But it is so palpable that honesty should be above all other qualities that I shall assume you are honest. If your experience has not already demonstrated that honesty is the best policy, if you come from homes where you were not taught to be honest, what I could say would be no use to you. So we will assume honesty.

The first characteristic to which I shall direct your attention, therefore, is that of accuracy. Carelessness is the prime cause of failure in life. I will repeat this. Your work will never be of value to anyone else if it cannot be depended upon; and if of no value to others, it can be of no value to yourselves. Life is too short to be continually correcting mistakes. We have in my office a red-headed girl as head bookkeeper, who has been with us for twelve years. Once every quarter-year our books and accounts are gone over, checked and audited by a certified public accountant. For seven years we had the same accountant. One day he came to me and said, "For seven years I have been trying to catch your head bookkeeper in a mistake. The other day I found one and took it to her in great glee. She said, 'Wait a moment. Let's look at that.' In a few seconds I found I was wrong. She is the most fatally correct woman I ever saw." What do you think are the chances of that young woman losing her job. You could not pry her loose from our office, with our consent, with a crowbar. Years ago - about 30 - I ran up to St. Joe, Missouri, to see Lieut. Foulcis and Lieut. Lahm take off in our first dirigible. It was a horrible makeshift affair. I said to them, "Well, I hope you won't make any mistakes." One of them replied, and that was the first time I ever heard the expression so well known in the Air Corps, "Captain, we are in a business where we are not allowed even one mistake." Make it the first rule of your life to be accurate. Never be careless.

In the second place I shall ask you to be industrious. We are living in a fast age, a two-second world as it were. He who tarrys will soon find himself outdistanced; he will never be able to catch up. There is no place in this modern world for the lazy man, for him who says "Wait a minute," for him who

who puts off till tomorrow what he can do today. In the rapidly changing world of today you men in the Air Corps occupy a front position. You can keep this position only by such industry as responds to a generous ambition.

As to the third factor of success, I shall mention self-reliance. As you become older you will find that men whose opinions are valuable are those who have their own opinions. Inasmuch as you have been in the Army for a year and have gained some conception of that the term discipline means, you may think I hardly know what I am talking about when I tell a man who has a Commanding Officer to have his own opinions. Now, of course, the Army is only a team, and teamwork is the only kind of work that can win. But what I mean is this: in the determination of a play, the estimate of the situation, opinions as to a course of action will vary. And from the varied opinions, choice must be made of the best. Until the choice is made, if your opinion is requested, give it boldly. After the decision is made, then individual opinion is dropped and everyone puts his shoulder to the wheel. Such is the proper conception of discipline and one that you will find as you grow older is the only one that controls in any successful human endeavor. * * *

While material success is not all there is to life, yet it is very necessary to other and higher ideals; without it those other finer things are most likely to be starved to death. I certainly am not going to tell you to run and jump on the "almighty dollar" as the root of all evil. On the contrary, my advice to you is to take a run and jump on it and hold on to it and copper as many as you can. If you feel you do not care for the "long green," you can pretty safely gamble that you will never have enough to make your back ache in carrying it around. Nobody is going to force it on you, and if yours is the general experience you will find it pretty hard to rake up. So do not be ashamed to take your salary, and do not be a fool and lose it through want of frugality.

All of this, of course, means: do not go into debt. And yet when I say that I must immediately make an exception. Such are the conditions in this modern world that no sooner than you reach your station you will find that efficiency requires the ownership of an automobile. At most posts a car is a necessity. But in purchasing an automobile, a second lieutenant does not require a Cadillac or a Rolls Royce. The possession of high-priced cars by second lieutenants is likely to lead to adverse comment - that he is living beyond his means, or that he must have married money. Reliable banks will arrange for payments on moderately priced cars, well within a reasonable disposition of your budgetary

(Continued next column)

CONTRACTS FOR OBSERVATION AIRPLANES

The Hon. Louis Johnson, Assistant Secretary of War, announced on June 15th that an award had been made for observation planes, as follows:

- To the Stinson Aircraft Division of the Aviation Manufacturing Corp., Wayne, Mich., approximately \$1,500,000.
- To the Bellanca Aircraft Corporation, New Castle, Del., approximately \$50,000.
- To the Ryan Aeronautical Co., San Diego, Calif., approximately \$50,000.

This airplane is a short range observation type, particularly adapted for contact in infantry liaison, and is suitable primarily for the work of the Division of Aviation.

The tendency in Corps and Observation planes has been toward larger size and greater speed. Such planes are unable to use the small fields usually found in the Division areas, and for other reasons the present Corps and Army planes has proven not essentially adapted to the work of the Infantry Division. The planes covered by this award are especially designed to supply the needs of the Infantry Division and to provide for aerial adjustment for the Artillery.

It is a two-place, single-engine monoplane and has full radio equipment. It is equipped with flaps, steerable tail wheel, and other devices tending to improve its maneuverability and performance.

allowance. And one more thought along economic lines. Take care of yourself and your family against rainy days. The safest and best investment for a young man is life insurance. As the economic world stands today, I recommend to each of you life insurance with an old reliable company up to at least \$20,000. We are in a period of 3% interest. Almost any investment that will bring a greater yield is in the field of speculation not in the field of investment. When you have carried your \$20,000 life insurance successfully, and want further investment, then you can enter the investment field. But enter this field with caution. Enter it as investors, not as speculators - and certainly not as gamblers. Men with more time than you have to watch the stock market have been trying to beat it these hundred years. You have heard of the man who broke the bank at Monte Carlo, but you have heard of it only in song. You never saw such a man because there never was one, and there never will be one. Invest your money carefully and do not play the stock market until you have the leisure of retired age - and then only when you have money to lose. Now I have mentioned only a few of the major virtues and I shall call your attention to only one of the minor ones.

and that is cheerfulness. This spirit of cheerfulness is not amiss in military life, though I realize that some commanding officers, from lowest to highest rank, are so singularly lacking in this element that their soberness degenerates finally into discourtesy that verges on insult. It was not necessary for one very high ranking general of Civil War fame to grow in his later days into such a condition that one could hardly enter his office without being insulted. The Lord Almighty hates a grouch, and in this particular I am glad he fashioned man in his own image. "So weave the spirit of cheerfulness into your lives like the minor chords of an opera which, subdued here and there as some grand symphony swells forth, yet run with their sweet undertones through the whole score." Knowing that life is brief, you should find the sunshine best - youth and outdoors, not the cloister and old age. And you should key your heart-strings to that concert pitch that vibrates to the happier side of things. That man best performs his duty here on earth who adds to the sum of human happiness. That man best answers the reason of his being, of whom it may be said "the world is happier, consequently better, for his having lived."

So gather up the sunbeams lying all along your path and refract them undiminished through the medium of your own good nature, for the benefit of others round about you. Carry the smile of cheerfulness throughout your daily lives, particularly in your homes and personal contacts. And so, smiling, pass on through life so that when your final tailspin does come, you may still be smiling as you join those gone before, upon those loftier far reaching heights where bloom the lilies of eternal peace and where shine mid-summer suns on grassy slopes and green."

Accuracy, industry, self-reliance, sobriety, frugality and cheerfulness. May good luck attend each one of you. May the brightest days of your past be the darkest days of your future.

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AVIATION EXHIBIT AT NEW YORK WORLD'S FAIR

By the Mitchel Field Correspondent

When you go to the New York World's Fair this summer, don't forget to drop around to inspect the Air Corps Exhibit as part of the National Defense Display in the Aviation Building. This Exhibit consists of three airplanes and other items, such as models of Army aircraft, pictures, and items of aeronautical and military dress and equipment. Major Albert W. Stevens, Air Corps, of aerial photographic and Stratosphere Flight fame, is in charge of the Air Corps display, which was made under arrangements with the U.S. Aviation Exhibit, Inc.

The Air Base at Mitchel Field has contributed a total of six enlisted men as guide-attendants to be on duty for the purpose of explaining exhibits, answering questions, and to disseminate information. These men were chosen by Major Stevens, five being selected from the 97th Observation Squadron (Corps and Army), and one from the 2nd Air Base Squadron. They are: Master Sergeant Joseph M. Cates, Technical Sergeant Myron Roeske, Staff Sergeant William J. McDonald, Sergeant Charles R. Yoder, and Corporals Robert G. Hall and Andrew Yancy, Jr.

Authority for the detail emanated from The Adjutant General's Office, and subsequent indorsements directed that personnel recommended for the detail "be particularly high type men, capable of answering questions on mechanical subjects, and of the appearance, education and general politeness as to make them suitable for civilian contact." It was pointed out that the Navy Department had a similar exhibit in the same building, and had provided six men of "exceptionally good appearance, education, and of comparatively high rank."

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FIELD TRAINING BY 31ST BOMB. SQUADRON

The 31st Bombardment Squadron recently completed its annual two weeks' field training, the entire time being devoted to gunnery. The first echelon, ground, departed from Hickam Field for Bellows Field, Waimanalo, T.H., at 0600 on April 10th. Sixty enlisted men and one officer comprised this unit. The remainder of the Squadron, 7 officers and 59 enlisted men, went by air in three B-18 airplanes. Three trips were required to complete the movement. Due to some staff misunderstanding with Jupiter Pluvius, the air contingent was delayed to a considerable extent, and the last airplane did not arrive at Bellows Field until 1405. What little portion of the mat at Hickam Field that could be seen at scheduled time of take-off resembled a lake of no mean dimension.

The movement was completed, and J. Pluvius decided he might as well cooperate, which he did in admirable style, as the elements caused no more trouble.

The second day of the two weeks' period found all guns going full tilt. Preliminary TR 440-40 Gunnery, ground machine gunnery on the 1000-inch range, as well as pistol practice, caused considerable earache, as well as poor fishing. All officers and men assigned completed firing of the pistol during the first week of the period. Movement to Hickam Field started at 0700, April 22nd, and the last contingent arrived there at 1005, ready to resume the usual garrison duties.

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WHY NOT SPECIALIZATION IN THE AIR CORPS?

There was published in the May 15, 1939, issue of the Air Corps News Letter an article by Staff Sergeant Oliver E. King, Air Corps, setting forth his personal views regarding the present maintenance system of the Air Corps and his recommendations on the engineering set-up for an organization.

In response to the invitation of the News Letter for the views of other experienced maintenance and engineering personnel of the Air Corps on the subject matter under discussion, Staff Sergeant Erik W. Lindhe, Air Corps, of Hamilton Field, Calif., submitted the following:

"Since 1927, I have been an Organization Group, and Base Technical Inspector at various Air Corps stations, prior to which I was a crew chief, dating back to 1923. Before then I had some experience with civilian aviation.

So much for my experience and the authenticity of the information upon which I base my views.

I do not believe in specialization to a degree quite as high as mentioned by Sergeant King. According to Sergeant King, there should be specialized Instrument, Carburetion, Ignition, Airplane and Engine Mechanics in each organization. This is, for quite obvious reasons, not feasible.

All of these men could not accompany an airplane during an extended cross-country flight, and in case of malfunctioning of any part or assembly serious enough to cause a forced landing, the crew would not be able to remedy the defect and continue the flight. This would, of course, be due to the 'specialization' at the home station. Lack of training to become an all-around mechanic would then certainly be evident.

Sure, modern aircraft is more 'Gadgetized' than were the Jennies and DH's of bygone days, but we still have an internal combustion engine and an arrangement of wings, fuselage, empennage, and landing gear. Further, we have a much more efficient system of conveying instructions to the mechanic than we ever have had in the Air Corps.

As an example, see Technical Order 01-400-2. Definite procedures are laid down on how to disassemble, inspect and reassemble each major assembly of the B-18 aircraft. Other handbooks of instruction on Engines, Engine Accessories, Instruments, and other major items are also conveniently located in 'G' and 'H' files where anyone able to read and with some experience as an aircraft mechanic can gather sufficient knowledge to avoid specialization and its obvious hazard to Aircraft maintenance.

Sergeant King points out that we already have some degree of specialization

in the case of photography, Armament and radio. Certainly! But, take this equipment and its component parts out of an airplane and we still have, aerodynamically, a complete airplane. But remove or render useless a carburetor and see what happens. I agree with Sergeant King on his description of Flight, Hangar, or Crew Chiefs running themselves 'ragged' up and down the line in quest of supplies. But I believe that this, even with its many inconveniences, is a better system than for a 'Specialist' to tear into a Magneto, Generator, or any other engine or aircraft part only to find it damaged beyond repair or requiring unobtainable parts. 'Let the depot do it' is a good slogan in this case.

As to Sergeant King's idea of a 'set-up' for an engineering department I would like to quote, then analyze each paragraph:

'(1) A competent Engineering Officer and assistant.' (Excellent).

'(2) A competent Organization Inspector with as many assistants as is deemed necessary, the inspector to function directly under the organization commander.

(One inspector should suffice, and he should be responsible directly to the Engineering Officer instead of to the organization commander, inasmuch as the organization commanding officers are at the present time older officers with varying degrees of engineering experience, but the majority with no experience in the case of modern aircraft).

'(3) Competent "trouble shooters" for airplanes, engines, instruments, etc. Such men would be invaluable to an organization if they knew their business.'

(The 'trouble shooting' should be done by the crew chief and his assistants as a method of routine training).

'(4) A competent engineering clerk.' (Yes, very much so!).

'(5) A competent crew of airplane mechanics with competent foremen.'

'(6) A competent crew of engine mechanics with competent foremen.'

'(7) At least three competent men on carburetors, ignition, and electrical systems.'

(These three groups should be combined and form the regular aircraft crews).

'(8) At least three competent instrument mechanics.'

(No. One instrument mechanic should suffice, but is not even necessary. All Instrument Maintenance should be done by the Base Instrument Section, directly under the Base Engineering Officer.

The equipment necessary to maintain such instruments as A-2 Pilots, other Gyro Instruments, and Bomb sights are far too elaborate to be included in squadron equipment).

(9) A crew of "Cleaners" with a competent foreman, whose sole mission would be to keep airplanes, engines, hangars, and hangar equipment clean at all times.

(I believe this crew would clash with the regular aircraft crews).

(10) A sufficient number of flight mechanics who could be pooled and one or more of whom would be required to accompany, in their turn, each and every flight originating in the organization.

(This group should constitute the regular aircraft crews).

In my opinion, a regular Maintenance Section should be organized in each squadron. This would prevent a weary crew from, after coming in from a long flight in the afternoon, turning to a 40 or 80-hour inspection that night in order to have the aircraft on the line for an early schedule the next day. This practice does not tend to increase either morale or efficiency.

This Maintenance Section should accomplish all inspections, engine changes, and Technical Order compliance.

The first phase would be to thoroughly clean the entire airplane, after which all breakage and malfunctioning equipment should be removed for replacement or repair. While waiting for these parts, the regular inspections should be accomplished.

Upon completion, the airplane should be thoroughly checked by the organization inspector, at which time the Forms 60A and B, 61 and 41 should also be checked against the condition of the airplane.

This crew should be rotated in such a manner as to include all the Engineering personnel, less, of course, the clerks.

In size it should be commensurate with the type and number of aircraft ordinarily used in the organization.

In conclusion, I would like to state that, in my opinion, Sergeant King deserves a lot of credit for starting this 'Round Table' discussion on a subject of such great interest to us, who are involved in it every day of our lives."

Ed. Note:

Appreciation is expressed to Staff Sergeant Lindhe for setting forth his ideas on a subject which, to quote his words, is "of such great interest to us, who are involved in it every day of our lives," and for starting the ball a rolling on a round table discussion thereon. Other experienced maintenance and engineering personnel in the Air Corps who may have anything to add to the views already expressed are invited to forward comments.

FLYING STUDENTS MAROONED IN COVERALLS

Twenty-four student officers and Flying Cadets of Randolph Field, Texas, were marooned at Corpus Christi, Texas, recently when weather forced a postponement of their return flight to the home airdrome. They made a striking picture at the Nueces Hotel (where they spent two nights) garbed in coveralls. For amusement, when the weather turned hopeless for the second night, the majority rode on the ferris wheel and the snap-the-whip at North Beach Concession Park. They reached the conclusion that the concessions were quite tame. The importance of such small articles as handkerchiefs, combs, razors, and other necessities was rather forcibly impressed upon the group, especially since financial preparation had been neglected. However, quite a number returned with \$1.95 golf suits to keep as mementos (after the first washing) of the Corpus Christi trip.

Anent the Corpus Christi trip, one member of the Detachment was quite disgraced when, after having lost his course, he buzzed a sign to orient himself, only to read this inscription: "Eat Farina Oats."

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RETIREMENTS AND PROMOTIONS OF AIR CORPS NONCOMMISSIONED OFFICERS.

Effective May 31, 1939, the following noncommissioned officers of the Air Corps were retired from active service:

Master Sergeant James C. Arnold, Maxwell Field, Ala.
Master Sergeant George W. Riffel, March Field, Calif.
Master Sergeant John Tassock, Barkdale Field, La.
Master Sergeant Don W. Whiteside, March Field, Calif.
Technical Sergeant Lyle Ball, March Field, Calif.

The following Technical Sergeants of the Air Corps were promoted to the grade of Master Sergeant, Air Corps, on the dates indicated:

George S. Lane, Selfridge Field, Mich.
John L. Giles, Hamilton Field, Calif.
Cecil F. Renno, Hawaiian Department.
June 1, 1939

John E. Fox, Langley Field, Va., on June 3, 1939.

The following Staff Sergeants of the Air Corps were promoted to the grade of Technical Sergeant, Air Corps, the first four on June 1st and the last named on June 3rd, 1939:

Albert Maslach and Jesse W. Wade, Hawaiian Department.
Wm. R. Tanner, Randolph Field, Texas
Wm. C. Neff, Kelly Field, Texas.
James J. Murphy, Panama Canal Dep't.

18TH PURSUIT GROUP PARTICIPATES IN ISLAND BLACKOUT
By the Wheeler Field Correspondent

The 18th Pursuit Group, under the command of Lieut. Colonel William E. Lynd, Air Corps, participated in an interesting day of this Spring's Hawaiian Department Maneuvers. Departing at 0600 from Wheeler Field, the Group landed at Bellows Field, one of the auxiliary landing fields on Oahu, and prepared to act as enemy aviation, simulating attacks on the installations on the island.

During the day, missions were run off attacking the anti-aircraft artillery positions by dive bombing. These attacks were made difficult of accomplishment because of the excellent camouflage adopted by the anti-aircraft artillery.

The 18th Air Base Squadron was given the mission of installing field lighting equipment on Bellows Field in preparation for the night take-off to be made by the Group in its participation in the "Blackout" of Oahu. Portable field lights were used to illuminate the runway, and four coal oil smoke pots were used to illuminate the far end of the runway. It was found that this lighting was ample to illuminate the field, both for taxiing and take-off.

Starting at 2001, the Group took off individually, averaging an interval of 25 seconds between airplanes. This time could have been cut down without detracting from safe operating principles. Rendezvousing southeast of Diamond Head at 8,000 feet, the Group was off Honolulu when the signal was given for the blackout. The lights of Fort Kamehameha were the first to go out. Judging by the speed with which the area was darkened, it appeared as though someone had pulled the big switch. This is probably due to the realization on the part of our Coast Artillery brethren of the seriousness of indicating bombardment targets by outlining them with lights. Shortly the power supply was lowered, which was the signal for the "Blackout," and lights started going out over the entire lee side of the island. Looking up the corridor between the Koolau and Waianae Mountain Ranges, it appeared as though a giant curtain was suddenly lowered, plunging the entire valley into pitch-black darkness. Within a minute and a half, I should judge, the entire area was in complete darkness, with only a very few lights showing, and these in distant, remote places.

So complete was the "Blackout," that it was only with difficulty that one could orient himself, and then with very little accuracy. This was caused in part by the weather, which was poor, with low ceiling and a drizzling rain falling the while.

At a given time flares were simultaneously released at points around the

Island, and all anti-aircraft searchlights went into action. This luminous display lighted up the entire island both above, in and below the overcast, causing the scene to be instantly changed from one of total darkness to one of the eeriest kind imaginable. The area was illuminated so brilliantly that a newspaper could have been read without difficulty. Impressed on everyone was the great number of anti-aircraft searchlights employed in the defense of Oahu. These lights were dispersed in their tactical locations around the island and shot their pencils of light against the clouds, causing the attacking airplanes to stand out in a startling manner.

The dropping of flares was the signal for the termination of the "Blackout," so the Group peeled off and landed at Wheeler Field. Everyone was mighty glad to get back on the ground again, as typically Hawaiian liquid sunshine, or maybe it should be moonshine, had started to come down in the form of rain.

Great credit is due the civic organizations for putting this "Blackout" across, for there is no doubt that it was a complete success. This was evidenced by the vigilance shown by one Japanese boy scout in Wahiawa, that thriving suburb of Schofield Barracks. His particular job was to check on the lights on his street. Seeing a light in the temple, he rushed in and confronted the aged priest. The priest informed him that the light was an eternal one which burned in the temple continuously. The scout insisted that all lights must go out for the duration of the "Blackout," and out it went.

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SECOND BOMBARDMENT GROUP OFFICERS GO TO AIR CORPS TACTICAL SCHOOL.

The following officers of the Second Bombardment Group, Langley Field, Va., were detailed for a course of instruction at the Air Corps Tactical School, Maxwell Field, Ala., effective June 1, 1939:

Major David R. Stinson, Hq. and Hq. Squadron, Group S-1.

Major Cornelius E. O'Connor, Hq. and Hq. Squadron, Group S-4.

Captain Darr H. Alkire, 96th Squadron, Airplane Commander B-17 #61.

Captain Ford J. Lauer, 20th Squadron, Airplane Commander B-17 #50.

Captain Ralph E. Koon, 20th Squadron, Squadron S-3.

Captain Edwin L. Tucker, 49th Squadron, Navigator, B-17 #81.

(Continued on Page 18).

CLASS 39-C REPORTS AT ADVANCED FLYING SCHOOL

Class 39-C reported at the Air Corps Advanced Flying School, Kelly Field, Texas, on June 1, 1939. The class consists of 76 Regular Army officers (3 from the Corps of Engineers; 4, Signal Corps; 9, Cavalry; 16, Field Artillery; 12, Coast Artillery; 32, Infantry); 3 National Guard officers (one from the Arkansas National Guard and two from the Washington National Guard); and 106 Flying Cadets, Air Corps. It is by far the largest class to report for training at Kelly Field in the history of the Air Corps Training Center.

Forty-one Flying Cadets hold Reserve commissions in other arms of the service.

Class 39-C is the first class to report at Kelly Field since specialized training in Attack, Bombardment, Observation and Pursuit has been abolished.

The 185 students comprising this Class are enumerated below, as follows:

REGULAR ARMY OFFICERS
Corps of Engineers

Breitwieser, Robert Allen	Colo.
Preuss, Paul Theodore	Seymour, Ind.
Kieffer, William Brett	Jackson Hts., L.I., N.Y.

Signal Corps

Bosch, George Arthur	Mission Beach, Calif.
Sights, Albert Peterson, Jr.	Clinton, Okla.
Tarver, Benjamin M., Jr.	Lookout Mtn., Tenn.
Snider, Robert Lee	Texas

Cavalry

Packard, Ashley Burdett	Douglas, Ariz.
Bayer, Merrick	Washington, D.C.
Brett, William Peek	Statesboro, Ga.
Sherburne, Charles Winfield	Evanston, Ill.
Knox, Omar Ellsworth	Lyons, Kans.
Rulkoetter, Robert William	St. Louis, Mo.
Lemon, Maurice Raymond	Carrizozo, N.M.
Chavasse, Nicholas Horace	Henderson, N.C.
Kincaid, William Keith	Middleport, Ohio

Field Artillery

Scaer, William Kenneth	Colo.
Zaiser, Robert Alan	Burlington, Iowa
Ryan, John Dale	Cherokee, Iowa
Huglin, Henry Charles	Fairfield, Iowa
McBride, Robert Carleton	Wichita, Kans.
Cairnes, William Denton	Md.
Blanchard, William Hugh	Chelsea, Mass.
Sturdivant, Frank Fheasants	Minter City, Miss.
Saunders, Donald Ward	Athens, N.Y.
Hopson, John Robert	N.Y.
Krug, Leland Oscar	Rochester, N.Y.
Wernberg, Laurence E.	Sea Cliff, L.I., N.Y.
Coorman, John Dean	Idabel, Okla.
Coira, Louis Edward	Lock Haven, Pa.
Polhamus, Douglas Clinton	Berryville, Va.
Taber, Morris Frederick	Seattle, Wash.

Coast Artillery Corps

Hawes, Philip Robert	Los Angeles, Calif.
Spangler, John Herbert	Briggsdale, Colo.
Herboth, John Bennet, Jr.	Glen Ellyn, Ill.
Zoller, Virgil Lee	Marion, Ill.
Morrison, Harry Cornelius	Ridgefield Park, N.J.
Duncan, Carter Eugene	Bloomington, Ill.

Barnard, Harvey P., Jr.
Spicer, Prescott Miner
Buckland, Sherwood Ernest
Johnson, Lloyd Earl, Jr.
Perkins, Nicholas Tate
Anderson, Glenn Preston, Jr.

Infantry

Reddoch, Joseph Claude, Jr.
Miles, Vincent Morgan, Jr.
Young, Charles Mathes
Brabson, Joe Reese, Jr.
Kenzie, Howard Doan
Hardison, Felix Moses
Sisco, Gibson Emerson, Jr.
Crowder, Robert Thomas
Holisington, Gregory, Jr.
Fardus, Littleton James
Russell, Gabriel Caldwell
Conner, Castex Paul
Palmer, Shelby Young, Jr.
Coleman, John Boddie
Macomber, Clifford Field
Frederick, Wm. Henry, Jr.
Rhymes, James Willis
Ford, Wallace Stafford
Harrison, Bertram Cowgill
York, Edward Joseph
Lister, Ralph Brown
Pendleton, Alexander Bruce
Rogner, Harris Edward
Luper, James Rhea
Lipps, Milton Edward
DeHart, Edward George
Neff, William Folwell
Dean, Fred Murray
Isbell, James Horace
Wallace, Hugh Douglas
Wells, Joseph Breece
Bruton, Robert John

Note: All of the above-named students are second lieutenants who graduated from the United States Military Academy, West Point, New York, on June 14, 1938.

NATIONAL GUARD OFFICERS

England, Shelby
Page, Thomas Jennings
Saxon, Edward Bernt

FLYING CADETS

Wilson, William Driver-3
Caton, Curtis Eugene-4
Cook, Earl Brown-3a
Bowen, Ferrall Lamar-3
Ainsworth, Woodrow L.
Leidy, Charles Allison, Jr.
Tedder, Irby Velle
Batchelor, Jack Franklyn
Thompson, Joe Clyde
Rains, Lawrence Fossitt
Seeburger, Francis F.-5
Close, Winton Ralph-3a
Ehret, Roland Christopher
Cofield, Curtis Heath
Merritt, Ralph L., Jr.-6
Albin, George Louis
Ruggles, John Howard

Buffalo, N.Y.
Poughkeepsie, N.Y.
Woodhams, N.Y.
Roverford, Pa.
Marion, Va.
Luzerne, Pa.
Fort Smith, Ark.
Helena, Ark.
Washington, D.C.
Boise, Idaho
Fort Wayne, Ind.
Hopkinsville, Ky.
Louisville, Ky.
Jennings, La.
Shreveport, La.
Fall River, Mass.
Minneapolis, Minn.
Macon, Miss.
Pass Christian, Miss.
Mount Holly, N.C.
Batavia, N.Y.
Buffalo, N.Y.
Reidsville, N.C.
Massury, Ohio
Portland, Ore.
Salem, Ore.
Erie, Pa.
Knoxville, Tenn.
Union City, Tenn.
Fort Worth, Tex.
Greenville, Va.
Racine, Wis.

Hall, Floyd D.
 McCorkle, John
 Dittrich, Robert Ivan
 Pratt, Ogden Nelson-1a
 Wood, George Alexander-1a
 Newton, Preston Carnall
 Renshaw, Claude Downer-3a
 Anderson, Geo. Fred'k-7
 Strong, William Dupont
 Chitty, Charles Deen, Jr.
 Moore, Malcolm Arnot
 Sapp, Russell Hale Vincent
 Oviatt, Karl Eugene
 Robinson, Charles Gordon
 Nowak, Albert C.
 Sullivan, Frank Edward
 Woltanski, Thaddeus Lewis-6
 Lang, William Howard-4a
 Stevenson, Roger Armstrong
 Roberts, Albert Jay, Jr.
 Postlewaite, Robert Dean-4a
 Shea, James Howard
 Haines, Horace Albert
 Ford, John Willard
 Warren, Clarence Negley, Jr.
 Bassett, Charles Edward-3a
 Schaefer, Paul Constantine-1
 Wray, Robert Stephen
 Jeffingwell, Charles Edwin-1a
 Myers, Edward Payson-5a
 Sommkalb, Charles David
 Crow, Roger McKee-4a
 Fairfield, Loran Redford-1a
 Moore, Alvan Neavitt-1a
 Evans, John R., Jr.-1a
 Jensen, Walter Armstrong
 Meffat, William Hugh
 Stanton, Robert Louis-1a
 Strathern, William Ellis
 Lee, James Lyle
 Barnes, James Harrison-1
 Martin, Bertram Claude
 Watkins, Howard Elroy
 Neal, Robert
 Ellis, Herbert Sargent
 Lindberg, Allen
 Selby, David Collins-1a
 Lynnton, Keith Xavier
 Wilson, Keith Streeter-5a
 Bennink, Donald Thomas
 Mullen, Marcus Alfred-3
 Harsh, Forrest Rutherford-1a
 Stenglein, Joseph Arthur
 Walmsley, William Williams
 Passage, John Thompson
 Wheeler, Warren Sanford
 Hoffman, Frederic Grant
 Woolery, Edward Raymond
 Fomeroy, Don Allen, Jr.-6
 Hawley, John Robert
 Hendrix, James Murry
 Kidd, John Leslie
 Hoffman, Ward Gerald
 Burms, John Leonard-1a
 Hubbard, Edward Francis-3a
 Fortex, Stuart Moss
 Jay, Clyde Ase-2
 Bennett, Donald K.-1a
 Johnson, Vernon Christian
 Evans, Robert Warren
 Piser, William Alfred

Boulder, Colo.
 Pueblo, Colo.
 Bridgeport, Conn.
 Hartford, Conn.
 Wallingford, Conn.
 Washington, D.C.
 Gainesville, Fla.
 Sarasota, Fla.
 Blakely, Ga.
 Fort Gaines, Ga.
 Kolos, Kauai, T.H.
 Nampa, Idaho
 Preston, Idaho
 Champaign, Ill.
 Chicago, Ill.
 Chicago, Ill.
 Chicago, Ill.
 Galesburg, Ill.
 Lebanon, Ill.
 Ottawa, Ill.
 Palestine, Ill.
 Springfield, Ill.
 Armington, Ill.
 Indianapolis, Ind.
 Indianapolis, Ind.
 Laporte, Ind.
 Fort Wayne, Ind.
 Cedar Rapids, Iowa
 Iowa City, Iowa
 North Liberty, Iowa
 Postville, Iowa
 Fredonia, Kans.
 South Portland, Me.
 Queen Anne, Md.
 Newton Center, Mass.
 Birmingham, Mich.
 Leonard, Mich.
 St. Joseph, Mich.
 Gilbert, Minn.
 Carlton, Minn.
 Boonville, Mo.
 Harlowton, Mont.
 Grant, Neb.
 Rochester, N.H.
 Elizabeth, N.J.
 Westfield, N.J.
 Anthony, N.M.
 Central, N.M.
 Bolivar, N.Y.
 Chautauqua, N.Y.
 New Rochelle, N.Y.
 New York, N.Y.
 Seneca Falls, N.Y.
 New York, N.Y.
 Charlotte, N.C.
 Hickory, N.C.
 Alliance, Ohio
 Columbus, Ohio
 Lakewood, Ohio
 Toledo, Ohio
 Trotwood, Ohio
 Bristow, Okla.
 Claremore, Okla.
 Eufaula, Okla.
 Frederick, Okla.
 Muskegee, Okla.
 Nowata, Okla.
 Corvallis, Ore.
 Lapine, Ore.
 Kingston, Pa.
 Pa.

Reed, James Franklin State College, Pa.
 Ola, George Joseph Windber, Pa.
 Piollet, Victor Emile Wysox, Pa.
 Carragher, Francis Dean-1a Providence, R.I.
 Clinkscales, Theodore Ross Greenville, S.C.
 Vereen, Lindsey Hartford-1a, Little River, S.C.
 Lien, James Orin-3a Platte, S.D.
 McConnell, Landon Edward Bristol, Tenn.
 Stone, Rolle Edward, Jr. Etowah, Tenn.
 Kinnard, Claiborne H., Jr. Franklin, Tenn.
 Davis, Richard Archer, Jr. Springfield, Tenn.
 Sanders, Richard Condie-3a, Salt Lake City, Utah
 Wertenbaker, Geo. L., Jr. Charlottesville, Va.
 Lackey, John Herbert, Jr.-5a Norfolk, Va.
 McElroy, Stephen Davenport-4 Upperville, Va.
 Herbes, Edward Milwaukee, Wis.
 Richardson, John L.-3a Eau Claire, Wis.
 Wood, Frank Lee, Jr.-1a Laramie, Wyo.

- Key:
- 1 - 1st Lieut., Infantry Reserve
 - 1a- 2nd Lieut., Infantry Reserve
 - 2 - 2nd Lieut., Cavalry Reserve
 - 3 - 1st Lieut., Field Artillery Reserve
 - 3a- 2nd Lieut., Field Artillery Reserve
 - 4 - 1st Lieut., Coast Artillery Reserve
 - 4a- 2nd Lieut., Coast Artillery Reserve
 - 5 - 1st Lt., Corps Engineers Reserve
 - 5a - 2nd Lt., Corps of Engineers Reserve
 - 6 - 1st Lieut., Signal Corps Reserve
 - 6a- 2nd Lieut., Signal Corps Reserve
 - 7 - 2nd Lieut., Chemical Warfare Reserve
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PLANE CRASH FATAL TO KELLY FIELD INSTRUCTOR

Second Lieut. James Marion Jones, 26, flying instructor at the Advanced Flying School, Kelly Field, Texas, met instant death on May 21st, when his P-12 Pursuit plane, which was believed to have been in a spin, crashed in the vicinity of the American Legion Memorial Highway, about eight miles north of San Antonio.

Lieut. Jones had been putting in some time in the plane, preparatory to its being flown by students. At the time of the crash he had been in the air about 45 minutes, and it was previously flown by another instructor for an hour and a half.

According to civilians witnessing the crash, the plane appeared to have been in a spin prior to the crash.

Funeral services were conducted on May 22nd at the Charles Hanovan Funeral Home by Chaplain John W. Westerman, of Randolph Field, the Commandant, Staff, and members of the Faculty being in attendance. Following the services, the remains of Lieut. Jones were escorted to Temple, Texas, by 2nd Lieut. Roy W. Osborn, a fellow instructor, where Lieut. Jones' father - Mr. C.H. Jones - resides.

Lieut. Jones was graduated from Texas A. & M. College in 1935, and the following year graduated from Kelly Field. He was then assigned to duty at Mitchel Field, L.I., New York, and subsequently to Langley Field, Va. On November 16, 1938, he was transferred to Kelly Field. He was a native of Bastrop, Texas.

The deep sympathy of the Air Corps is extended to the bereaved relatives of the deceased young officer.

PURCHASE OF PRIMARY TRAINING PLANES

Under date of June 14, 1939, the Hon. Louis Johnson, Assistant Secretary of War, announced the purchase of primary training planes for the Army Air Corps from the St. Louis Aircraft Corporation, St. Louis, Mo., at a total cost of \$139,419.00.

The airplanes being procured under this contract are to be given the Army designation YPT-15 and are the same as the St. Louis Aircraft Corporation PT-1W. They are powered with the Wright Aero-nautical Engine (Army designation R-760) of 225 horsepower, which in turn is equipped with a Hamilton standard one piece, fixed blade, fixed pitch propeller. These single-engined, two-place biplanes of metal construction and fabric covered, are equipped with steerable tail wheels and fixed cantilever type landing gear. They are capable of attaining a speed of approximately 125 miles per hour at sea level. The cockpits are arranged in tandem, with complete sets of controls and instruments in each cockpit, in order that both instructor and student may have full control in either cockpit. As this is a student training plane, it is not equipped with radio or armament.

This plane is identical with the commercial type manufactured by this company, and in making purchases of this type the War Department thus is able to make savings both in time and money. In addition, such procedure aids in developing a greater source of supply in time of emergency.

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CLOSING OF AIR CORPS SONG CONTEST

According to an announcement by Major General Henry H. Arnold, Chief of the Air Corps, June 15, 1939, was set as the closing date for the Air Corps Song Contest. Sponsored by LIBERTY MAGAZINE, this contest has been in force for the past year, during which period the Air Corps received approximately 400 entries, all of which have been carefully reviewed by the Air Corps Advisory Song Committee. From the number received, four songs have been selected, and these will again be reviewed in an effort to find one which may be found suitable for adoption as the official Army Air Corps Song.

All entries which have not been considered suitable are being returned to the composers with a notification to that effect. In the event that a song is chosen for the award, it is hoped to make the announcement by October 1, 1939.

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Lieut. Colonel George E. Lovell, Jr., Air Corps, was promoted to the grade of Colonel (temporary) as of June 1, 1939.

1ST OBSERVATION SQDN. IN FIELD MANEUVERS

The 1st Observation Squadron spent the period from May 24th to June 5th on field maneuvers with the 14th Brigade (reinforced) of the 7th Corps Area at Camp McCoy, Wisconsin. The present landing field at Camp McCoy being too small for the operation of the O-47A's, the Squadron based at the Pfaafflin Airport at LaCrosse, Wis.

Nine officers and sixty enlisted men from Marshall Field, Fort Riley, Kansas participated in the maneuvers. Seven Reserve officers were left at home to struggle with their examinations for Regular commissions. Lack of ground transportation necessitated transporting over half of the personnel by air. This was accomplished in two air echelons, the ground echelon completing the movement.

In the last four days of the period, a free maneuver was held with the troops of the 6th Corps Area against the troops of the 7th Corps Area. The 15th Observation Squadron from Scott Field, Ill., based at Wisconsin Rapids, Wis., furnished Observation Aviation for the 6th Corps Area troops.

The autogyro, piloted by 2nd Lieuts. V.R. Haugen and G.H. Snyder, Air Corps, was used extensively throughout the maneuver. Its greatest use was for command reconnaissance missions, especially locating and reporting the action and disposition of friendly troops that had lost contact with the Command Post.

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2nd Bomb. Group Officers to Tact. Schoo (Continued from Page 15)

1st Lieut. Curtis E. LeMay, 49th Squadron, Navigator B-17 #80.
1st Lieut. Richard S. Freeman, 49th Squadron, Navigator B-15 #89.
1st Lieut. Eugene P. Mussett, Hqrs. and Hqrs. Squadron, Group Adjutant.

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TRANSITION TRAINING ON B-17 AIRPLANES

The News Letter Correspondent of the 2nd Bombardment Group, Langley Field, Va., reports that new B-17's will soon be off the assembly line in the Boeing Factory, and that the following pilots and co-pilots have just completed or are receiving transition training on the B-17:

Pilots: Majors H.A. Halverson, F.D. Hackett, E.L. Eubank, Captains W.O. Eareckson, R.A. Wilson, and Lieut. T.R. Lynch, of March Field, Calif.; Majors D.H. Dunton, Capt. J.M. Fitzmaurice, H.K. Baisley and D.F. Henry, of Langley Field, and Major S.M. Connell, of Mitchel Field. Co-Pilots: Lieuts. W.B. David, S.P. Triffy and H.M. McKay, of Langley Field.