

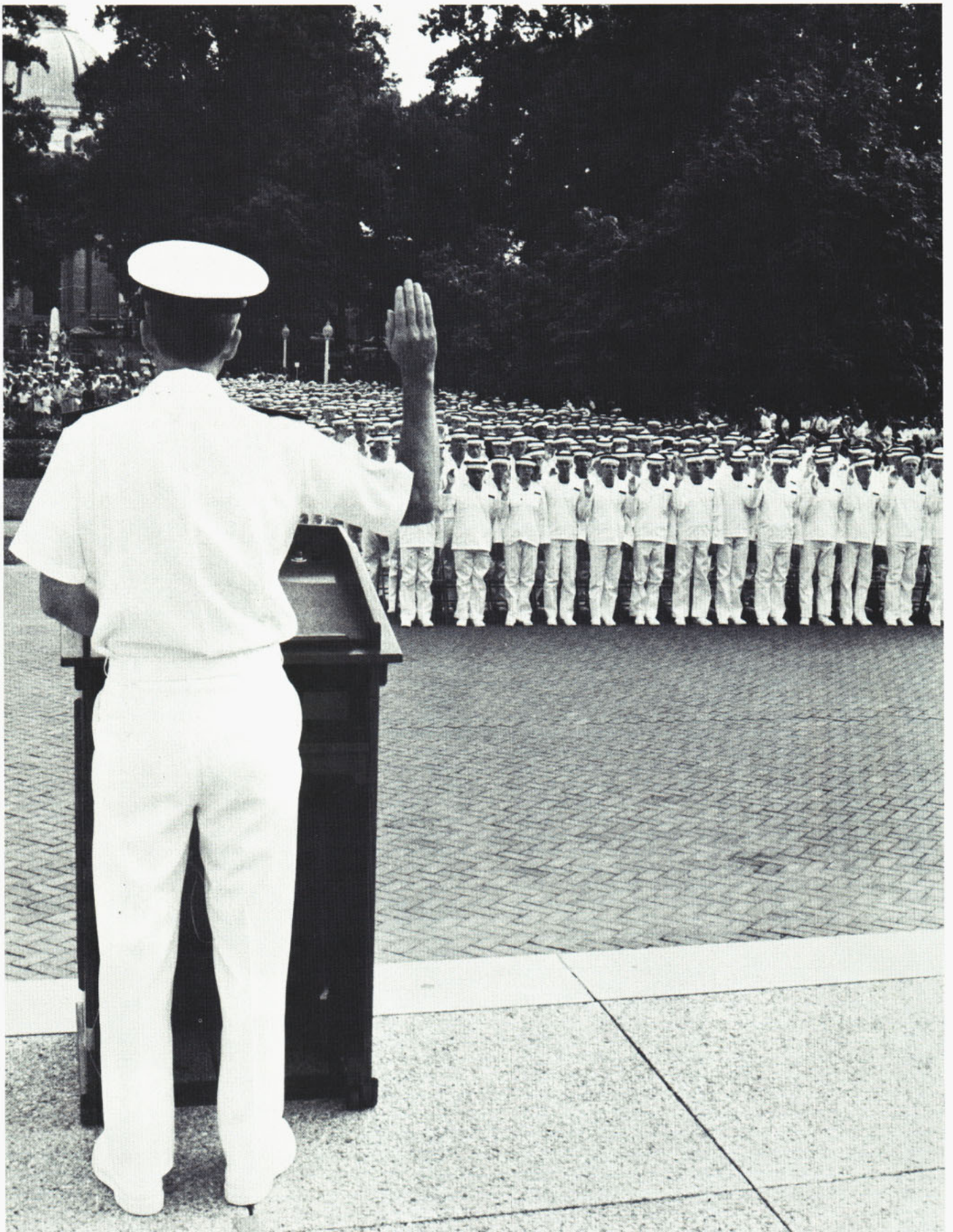
# ALL HANDS

SEPTEMBER 1984

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- NAS Memphis
  - Naval Observatory
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*Commodore Leslie N. Palmer, Commandant of Midshipmen at the U.S. Naval Academy, administers the oath of office to plebes of the class of '88 during recent induction ceremonies. Photo by JOC(SW) Fred J. Klinkenberger Jr.*



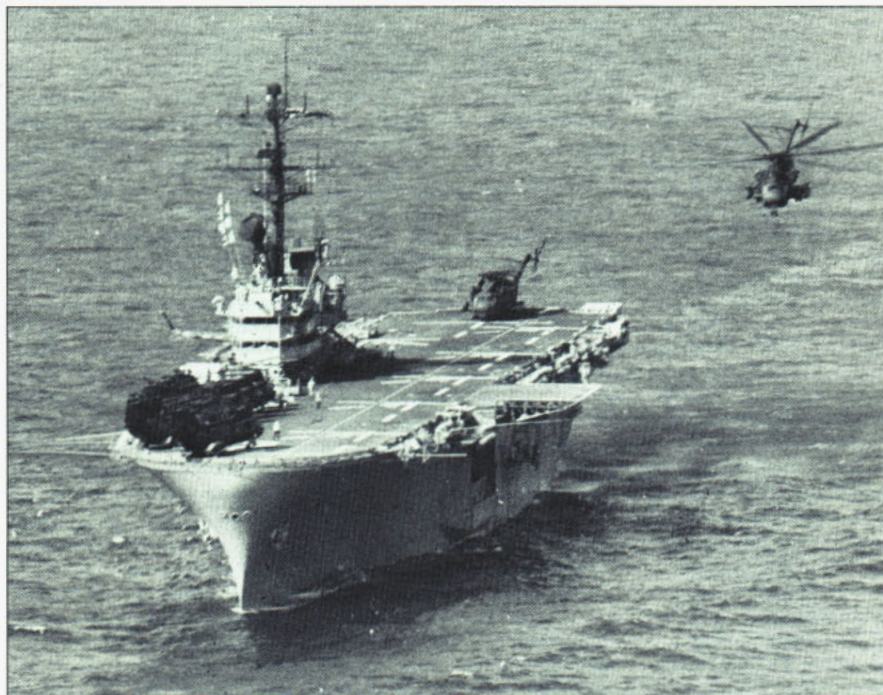
# ALL HANDS

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61st YEAR OF PUBLICATION

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## Covers:

**Front:** A student at Aircraft Firefighting and Rescue School, NATTC Memphis, learns by experience how to battle a blaze. Photo by JO1 Melanie Morrell, NAS Memphis.

**Back:** Ocean Venture '84 provided an opportunity for airdrop training. Photo courtesy USAF.

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## Place Of Good Abode

Story by JOCM Phyllis Good, NR NavInfo East 102 and  
JO1 Melanie Morrell, CNTT, NAS Memphis

Photos by PH1 Richard Grant, NAF Kadena, Japan, and JO1 Morrell

You're in line for shore rotation and your orders read, "Instructor duty at Memphis." You're looking forward to working independently and passing on the valuable expertise you've acquired in the Navy. You're eager to start your tour so that you can watch your students absorb knowledge, become proficient at skills, and develop positive attitudes—all very satisfying thoughts. You know, too, that when your workday in Memphis is done, you'll be where, as the song goes, "the livin' is easy." So you can just relax. But if that's not your style, Memphis also offers an exciting upbeat life.

Memphis—halfway between St. Louis and New Orleans—is a hub for air, rail, highway and water transportation. Memphis, which sits high on the bluffs overlooking the Mississippi, is one of the nation's richest agricultural areas and is known as the "Capital of the Mid-South."

The name Memphis means "place of good abode." It was the first city to win the "Nation's Cleanest City" title three times.

As a Navy instructor, you'll report aboard the Naval Air Technical Training Center, the largest single command at the Naval Air Station Memphis. This is when

you'll discover that the air station is not really in Memphis, but in Millington, a small town in the heart of cotton farmland some 20 minutes north of the city.

You'll join a team of some 2,000 instructors and support personnel who provide technical training in many phases of naval aviation for more than 30,000 students a year.

Working hours are fairly regular for instructors, and according to some, shorter than in many other Navy jobs. With the free time, you'll be able to enjoy the excellent recreational facilities on 3,400-acre NAS Memphis: gym, bowling lanes, 18-hole golf course, handball and racquetball courts, indoor and outdoor pools, tennis courts, lake and picnic areas, and riding stables. NAS Memphis enjoys a reputation for having one of the finest recreation programs in the Navy.

Weekends you'll find a variety of interesting things to do off base. A good place to start is at the parks: Memphis boasts 197 beautiful city parks that cover 6,300 acres. Swimming, hiking, concerts, festivals, ice skating—you name it and it's going on somewhere in the parks. Memphis' biggest park, Overton Park, also houses the Zoological Garden and Aquar-



*Opposite page: The graceful, old paddle-wheeler, Memphis Queen, is one of Memphis' more picturesque attractions. Left: Marines and Navy men learn how to load aircraft weapons at Aviation Ordnanceman School.*



# NAS Memphis

ium, where animal habitats have been painstakingly and beautifully modeled.

The best park, however, is just down the road from the Navy base. Meeman-Shelby State Park is 13,000 acres of woodland along the Mississippi River where people enjoy everything from hiking to catfishing.

Mud Island is another place you have to go. Memphis' new attraction doesn't care if its name is "mud" because it is already one of the most popular fun spots in the city. Located right at the riverside, Mud Island's River museum, shops, restaurants, picnic areas, monorail and 5,000-seat amphitheater offer a full day of fun.

One weekend may find you driving out to see Graceland Mansion, home of Elvis Presley. Thousands of tourists annually make the pilgrimage to Graceland to view Elvis' sumptuously decorated home and his gravesite—which is still always covered with wreaths.

Another Memphis must is a ride on the



Memphis Queen, a Mississippi riverboat that brings back the romantic steamboat era. Libertyland is a real family favorite; the huge amusement park has enough chills and thrills to last a whole day.

Whether your interest in music leans toward popular or classical, soloists and groups known nationally and internationally entertain in Memphis, one of the na-

tion's leading centers of music. But, as the saying goes, "Blues are Best" here. Memphis is the birthplace of the blues—it happened on Beale Street, in an old part of town by the river. Today, the entire riverfront area is undergoing major restoration. Old Memphis is being brought back in the form of fine shops, restaurants and places of interest—all evoking the mood of the old river days when cotton was king, and the Blues were telling the story in music.

Several annual events add even more excitement. Start off the year watching the National Indoor Tennis Championships. In May, Memphians make merry during the Cotton Carnival—a 10-day festival similar to New Orleans' Mardi Gras. Colorful costume parades, parties and concerts all pay tribute to the cotton boll.

During May, special performances,

*Handmade quilts and other arts and crafts command the attention of young and old alike.*





concerts, fairs, and ethnic celebrations make "Memphis in May" a true folk festival.

Summer brings the Danny Thomas Memphis Gold Classic and Kools Jazz Festival; the Music Heritage Festival and the Mid-South Fair hold sway in September. The Liberty Bowl Football Classic kicks off the last big event of the year.

Duty and life in Memphis can be busy

and glamorous, but folks who like their fun casual enjoy the area, too, because Memphis is a town in the country. Once outside the city limits, the pace slows. The recreation is "country" too: gospel music, barbecues, and catfish suppers are big. There's good fishing and hunting to be had all around Tennessee, Arkansas and Mississippi. Naturalists flock to the area for another reason: eagle-watching. The

great American bald eagles regularly migrate to Reelfoot Lake in western Tennessee.

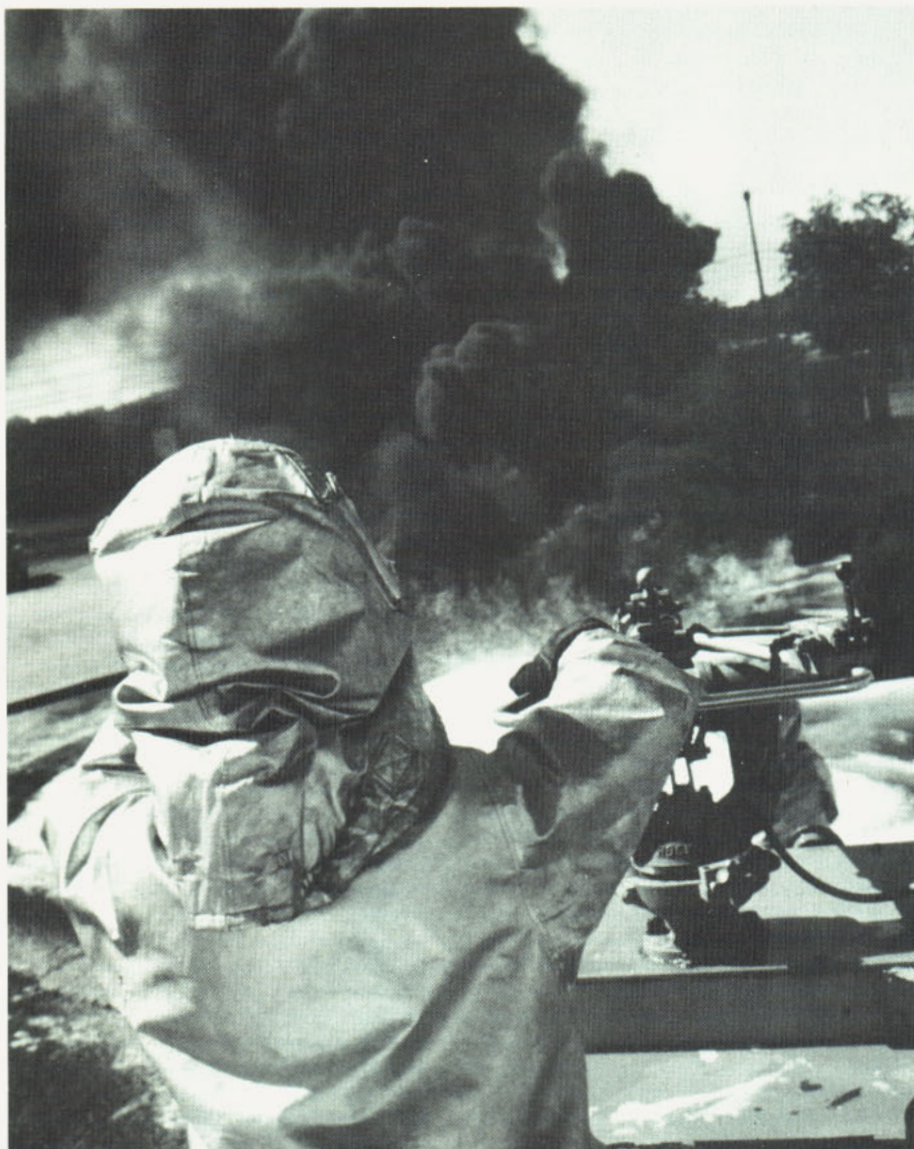
Memphis is a popular place with military people. Many of them choose to retire here because they like the slow pace of life and the country style of living.

You'd like it, too—in Memphis, life is low-key, and the leisure is how you make it. □

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# Fly Navy (via Memphis)

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**Story and photos by JO1 Melanie Morrell, CNTT, NAS Memphis**

You've seen them in old movies and air shows—the dashing aviators who climb into the cockpits of their planes with waves and smiles. The glamorous image lives on, even in the real-life Navy.

But for every Navy pilot who jets off into the clouds, there are more than 30 people who make that flight possible. Naval aviators take to the skies from Pensacola, Fla.; for the people who help keep the flyers aloft, the flight plan begins in Memphis, Tenn.

Naval Air Station Memphis, located in the town of Millington, sits in the middle of cotton-farming country; white-flecked fields border the airstrip. The largest inland Navy base in the country, NAS Memphis is the home of the Naval Air Technical Training Center. Established in 1942 to train aviation technicians during World War II, NATTC is the Navy's biggest training facility for airdales. Thirty thousand Navy and Marine students pass through NATTC's 61 courses in 14 aviation ratings each year.

"If he turns a tool on an aircraft, he's here," said NATTC command master chief AWCM Kendall Ickes, describing the wide range of students and courses at the facility. "The aviation field has become broader and more complex as the role of

*Crash fire and rescue techniques are taught at Naval Air Technical Training Center.*



# NAS Memphis

the aircraft has increased. And NATTC supplies the people for those squadrons on the carrier."

NATTC airmen also could be sent to naval air stations around the world.

If an airman's rating concerns electronics, that airman will be part of the avionics department, where training for seven aviation electronics ratings takes place. The biggest segment of NATTC, avionics contains half of the student population.

The main avionics building resembles a futuristic fortress with slit windows and massive cement walls. Inside its fluorescent-lit chambers there's a definite chill. "It needs to be cool to keep the electronic equipment up," explained Gunnery Sergeant C.J. Hutchinson, avionics instructor. "Hands-on experience with the electronic gear in the labs enhances the avionics student's grasp of the theories: transistor theory, current flow, special circuits and so on.

"We expect hard study in this school,"

said Hutchinson. "And the students need to retain what they learn because we're dealing with formulas and theories that'll be needed later on." In such ratings as aviation fire control technician or aviation anti-submarine warfare technician, the theories will be applied to the specific aircraft systems: radar, weapons control, navigation or communication.

The air traffic control school is considered to be the most glamorous member of the NATTC community. The school was in the limelight during the 1981 air traffic controller strike. During that time the student load increased 35 percent to help fill the civilian air controller gap.

Although an exodus of military controllers was expected after the strike, it never occurred, and the rating is thriving. It's a popular rating—and a proud one. ACs regard themselves as the "elite of the fleet."

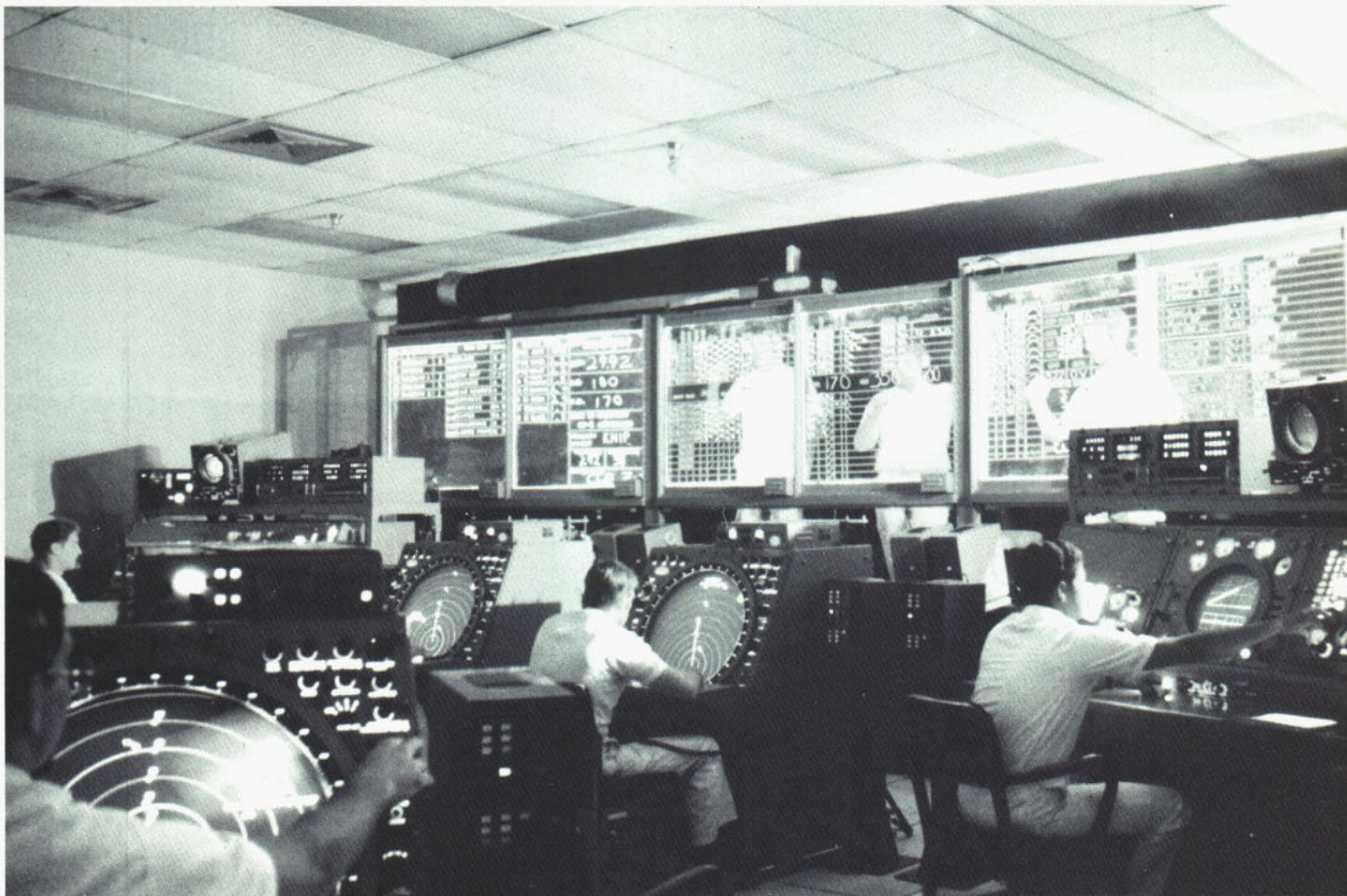
"We air controllers are confident; we're aggressive and proud," said Air Traffic

Controller First Class Dave Ferguson, an instructor. "You need that kind of spirit and conviction to do the job we do—you have to be geared up all the time. When you start your workday, you have to be 100 percent—you can't wake up over a cup of coffee.

"I know it looks like a glamorous job," he continued, "but it's hard work—demanding and stressful."

Ferguson said the AC students studying control procedures, concepts, aviation weather and radar control techniques are subjected to high pressure right from the start. "If they can't hack it here, they never will on the outside," he said. "It's tough here, but it's out in the fleet that ACs really earn their paychecks."

"Mechs" make up the third NATTC department: the mechanical ratings such as aviation structural mechanic and aviation support equipment technician. "We deal with everything on the basic aircraft—minus the avionics systems," said





Master Chief Aircraft Maintenceman Larry Purviance, the mech department's leading chief petty officer. "That includes engine, structure, landing gear, ordnance and maintenance equipment."

Mech courses range from "yellow gear" (support equipment) maintenance to fire-fighting, where Navymen and Marines learn crash fire and rescue techniques. Mech students are most often found in the

shops and aircraft hangars climbing on, under and in the planes. The work is hard and grimy. But more than anything, it's dangerous.

"Most of these kids will be working on the flight decks of aircraft carriers," Purviance said. "It's the most dangerous place to be, full of hazards like fuel fires and plane crashes. Jet blast can blow a person over the side, or snapping cables can whip your legs off . . . an aircraft carrier is a destructive force that's out of this world. I want the students to realize that."

The fourth component of NATTC is management training, where the courses range from aviation maintenance management for officers to barracks management for senior enlisted personnel.

In addition to the aviation schools, a number of other commands call NAS Memphis home: the Naval Air Maintenance Training Group and the Naval Hospital plus a number of Navy and Marine reserve outfits as well. The Human Resource Management School is there, as well as the headquarters of the Chief of

Naval Technical Training, Rear Admiral R.C. Austin (NATTC is one of the 58 training activities under his command). But aviation is the pervading theme at NAS Memphis, and the tenant commands somewhat resemble business offices located at an airport.

"If you're into aviation, NAS Memphis is a good place to be," said Ickes. It's a good place for Navy pilots to be assigned, even if their jobs don't include flying. They enjoy the association with aviation training, and they develop a real appreciation for something they may have taken for granted. A flyer stationed here gets to see all the training, the long hours, and the work that goes into getting a plane ready so the pilot can just climb into it and take off."

But pilots make their own contribution in recruiting airdales. According to Ickes "Lots of these kids have chosen aviation because they've always had their hearts in the sky. Sometimes it's because they saw the Blue Angels perform and wanted to be pilots. Maybe they always had a thing about planes. Or maybe they just lucked out."

"Fly Navy" becomes a way of life for new airmen at NAS Memphis, the place where airdales look past the cotton fields and set their sights on the sky. □



*The luminescent world of the carrier air traffic control center (opposite page) is duplicated at NATTC for air traffic controller students as hands-on "yellow gear" experience (left) for aviation support equipment students. Cotton plants line the NAS Memphis runway.*





# The ARMY'S Navy

Story and photos by JO1 Ruth Lawrence, ComNavFor, Japan

The U.S. Army's "navy" steamed silently into Yokosuka Naval Base amid stares from seasoned sailors.

Inching its way alongside a pier that normally receives warships, the Army's beach discharge lighter *Lt. Col. John U.D. Page*, named for a Korean War hero, came to a stop after a 20-day non-stop voyage from its home port, Pearl Harbor, Hawaii. For many of the 45 enlisted men and women and eight warrant officers, it was the longest cruise they had ever made.

It wasn't so much that they were not used to being away from home port. On the contrary, assigned to the 5th Transportation Company of the 45th Support Group at Fort Shafter, Hawaii, *Page* normally spends from 15 to 20 days each month under way carrying tanks, trucks, engineering and other heavy equipment between the islands of Oahu and Hawaii. "They put us under some pretty rough commitments," said Sergeant First Class Robert Thompson, platoon sergeant for the enlisted crew members. "But," he added, "we generally pull into port at the end of each day and a half."

Since the 26-year-old transport ship's arrival in Japan for much-needed repairs at Yokosuka's ship repair facility, many questions have come up. Most of them are reflected only in puzzled expressions as passersby first digest the name and then the fact that the ship is in the Army.

According to Chief Warrant Officer Kenneth E. Gilman, *Page*'s first mate and

second in command, there is a good reason for the Army to have a "navy." The Army Transportation Corps is responsible for a certain amount of water transportation, moving supplies and equipment over unimproved beaches or through improved harbors.

"Back in World War II," said Gilman, "the Army Transport Service had hundreds of ships manned by civilians much like the Navy's Military Sealift Command today." He explained that over the years the Army had phased out most of the ships, leaving just *Page* and two other oceangoing ships, homeported at the U.S. Army Transportation Center, Fort Eustis, Va., along with several oceangoing tugs and other service craft. According to Gilman, Navy people aren't the only ones scratching their heads over *Page*. "Most people in the Army don't even realize we have ships," he said.

One of the main objects of curiosity is *Page*'s unique propulsion system which allows the ship to enter and exit port unassisted. *Page* is powered by two 1,200-horsepower diesel engines, but uses no rudder and no propellers. Two vertical axis variable pitch propulsion units can move the ship forward, backward and sideways, making it easy for the vessel to slide in and out of the tightest berths. "With an average speed of nine knots, *Page* may not be the fastest ship," said Gilman, "but what it lacks in speed, it makes up for in maneuverability."

Although the differences between Army and Navy ships range from manning to mission, the most significant difference can be found in the ship's organization which is patterned after the Merchant Marine. For example, the ship's "master"—although sometimes called "skipper" or "captain"—is Chief Warrant Officer John H. Williams, a graduate of the U.S. Merchant Marine Academy, Kings Point, N.Y. "Also," said Gilman, "we don't operate with as many people as the Navy uses nor do we have all the specialized ratings."

But one thing never changes—the jargon. Whether you're in the Navy or the Army's "navy" the seagoing language is universal.

There are other similarities between the two navies. The men and women aboard *Page* receive sea pay, go through many of the same shipboard drills, express the same concern for habitability and experience stress over family separations.

According to Gilman, deck and engineering personnel like those assigned to *Page* receive basic qualifications in their respective fields while attending the Army's advanced individual training schools at Fort Eustis, Va. After graduating, soldiers will generally be assigned to a floating craft unit. "If they're lucky," said Gilman, "they could be assigned to the *Page*."

The Army has no commissioned officers qualified aboard ship, so warrant officers are required to possess the highest





degree of technical and academic skills necessary to operate and maintain Army ships. In addition to shipboard duties, *Page's* soldier-sailors must maintain their basic Army combat and survival skills.

With gray hull, white superstructure and multicolored smoke stack, *Page* is the object of much gawking. Just the same, *Page* is all business with a record and reputation to prove it. Some of its crew have gone to great lengths to remain aboard. One crew member summed up the sentiments of many saying, "It's a good ship, a professional ship. It's the best ship in the Army's 'navy'." □

*Page's* seagoing soldiers prepare to take in all lines as the Army's ship gets ready to shift berths. Spec. 4 Thomas R. Jones (above left) is at the helm.







# Choose Your Own Study Program

If you have dreams of getting somewhere, education is the Navy's high road to success.

It matters not whether you are a petty officer in the engine room or a lieutenant in the plot room. The Navy offers courses, programs and schools that can help you do your job better and make you more valuable to the Navy.

Providing these educational opportunities for the Navy is the job of the Chief of Naval Education and Training, headquartered at Naval Air Station Pensacola, Fla. Through CNET, courses are funded and offered on duty, off-duty, afloat and ashore.

If your interests are in off-duty courses, the Navy Campus branch of CNET offers you various ways to take them. More help in meeting off-duty educational goals is provided by the Defense Activity for Non-Traditional Education Support, which helps you obtain academic credit for skills and knowledge you have picked up in the military.

On-duty courses can also be arranged. The following list of educational opportunities can be tailored to Navy people of all ages, backgrounds and motivations. If you are interested in any of the following 21 areas, you need only visit your nearest Navy Campus office or education services officer for details.

**Academic Remedial Training** is a literacy program. Recruits entering recruit training take a Gates-MacGinitie test to

determine their reading levels. Those scoring between a fourth and sixth grade reading level are put into the ART program. As the recruit successfully completes tests, he re-enters the recruit training cycle.

**The Job Oriented Basic Skills Program** offers preparatory training for "A" school for recruit graduates not qualified for the technical training. Begun in the late 1970s because of a shortage of petty officers, the JOBS program offers instruction in job-oriented reading and mathematics skills. It is given on duty, in four-to eight-week segments, before entering "A" school, and the time is added on to the Navy's training sequence.

**The Navy Campus Functional Skills Program** is a fully-funded on-duty program available to ashore and afloat commands upon request of the commanding officer. NCFSP courses are intended to improve individual development in reading, mathematics, composition and grammar. They are provided by accredited civilian institutions under contract with the Chief of Naval Education and Training. The program had almost 25,000 participants in fiscal year 1983.

**The Non-resident Foreign Language Training Program** enables military people and dependents to learn the basics of a foreign language, such as greetings, introductions, asking for directions, arranging meetings and asking for help while traveling. Materials include printed texts and cassette tapes called Headstart language kits. They are available in Japanese, German and Spanish. Tagalog and Italian will be available later this year. Kits are distributed free to commands through Naval Education and Training

Support Centers, Atlantic (Norfolk, Va.) and Pacific (San Diego).

**The Non-resident English as a Second Language Training Program** enables commands to establish English language training required by individuals to overcome language deficiencies. The training facilitates further military training and professional development. American language course materials may be purchased from Defense Language Institute, English Language Center, Lackland Air Force Base, Texas, or may be provided free for command programs approved by DLIELC. Materials consist of placement and progress tests, instructor manuals, workbooks, taped exercises and a variety of supplemental materials and training aids. A list of materials and application procedures are found in the Catalog of American Language Course, available from DLIELC on request.

**The Navy Campus High School Completion Program** provides high school completion courses fully funded under tuition assistance. The courses are available off-duty, ashore and afloat.

**High School Equivalency General Education Development Test** is designed for adults who have not finished their formal high school education and want to earn an equivalency certificate. DANTES provides GED tests to military people stationed at overseas and deployed locations. Tests are available through Navy Campus offices or education services officers.

**The Apprenticeship Program** (Navy Campus) enables enlisted people to complete apprenticeships in civilian trades, such as photography, while working in related Navy ratings. Credit is given for hours and type of work completed.

*A full-time student in the Navy Enlisted Education Advancement Program at Pensacola Junior College, Pensacola, Fla., researches material for a term paper.*



# Study Program

**College Admission**—DANTES provides the American College Testing assessment program and the Scholastic Aptitude Test free to military people seeking to meet undergraduate college admission requirements. DANTES also provides the Graduate Record Examination, the Graduate Management Admission Test, the Law School Admission Test and the National Teacher Examination for a fee to military people seeking admission to graduate-level programs.

**Certificate and Degree Program** (Navy Campus) offers a non-traditional option for Navy people to earn a college degree or a vocational-technical certificate without residency constraints. Individuals contract with a participating Navy Campus college to pursue a degree off-duty. No matter where they are stationed, they may continue to take courses to fulfill degree requirements. Financial aid is provided through the GI Bill or tuition assistance.

**Program for Afloat College Education** provides tuition-free post-secondary courses at sea for afloat personnel, taught by professors from civilian colleges under contract to the Chief of Naval Education and Training.

**Academic Credit from Testing** (DANTES)—The College-Level Examination Program, DANTES' subject standardized tests, and ACT proficiency examinations are available to active duty military people free. The exams are used to gain academic credit from colleges and universities. Certification exams are also available for some technical skills.

**Correspondence Courses**—Correspondence courses are available from the Naval Education and Training Program Development Center in Pensacola. In addition, DANTES publishes an independent study catalog listing college courses.

**Credit for Service Training**—DANTES contracts with the American Council on Education to evaluate service school training courses and military occupations (rates, ratings and LDO/CWO designators) to develop civilian college credit recommendations. These recommendations are published in the *Guide to the Evaluation of Educational Experiences in the Armed Forces (ACE Guide)*.

**The Enlisted Education Advance-**

**ment Program** is for qualified career enlisted people who are able to obtain an associate's degree in 24 months or less. The program offers individuals the opportunity to improve their qualifications for advancement, technical ratings and for CWO/LDO programs. Students receive full pay and allowances and are able to compete for advancement but are not eligible for proficiency pay. Students pay their own education costs. The individuals selected normally are assigned to a junior college or community college located near a major naval installation.

Eligibility requirements include a minimum of four years but no more than 14 years of continuous active duty service. The applicant must be a high school graduate or must have passed the General Educational Development test. Applicants must meet citizenship, physical, moral and other related requirements and be recommended by their commanding officers. Six years of obligated service will be incurred.

**The Enlisted Commissioning Program** is an undergraduate program for active duty enlisted people with previous college credit. It provides up to 30 months (36 months for technical majors) of full-time undergraduate study for a baccalaureate degree at selected colleges and universities. The student gets full pay and allowances but pays for the education. Upon graduation, ECP officer candidates report to Officer Candidate School, NETC Newport, R.I., or Aviation Officer Candidate School, Pensacola, and upon completion are commissioned ensigns in the unrestricted line and incur an active duty obligation of four years.

Applicants must have completed at least two years of undergraduate courses with good grades, be at least 22 (but not over 31) and be on active duty with at least four (but not more than 11) years of continuous active service at time of enrollment. They must meet citizenship, physical, moral and other related requirements and be recommended by the commanding officer.

**The Enlisted Commissioning Program (nuclear option)** allows outstanding enlisted people to obtain a degree in a technical field which may help the Navy meet a critical need for nuclear officer

accession goals. Only students at the nuclear power school and nuclear power training units are eligible to apply for this program. Selectees must major in technical courses and maintain a grade point average of 3.0 on a 4.0 scale. Applicants must have completed sufficient undergraduate work to complete a baccalaureate degree in 36 months. They may not be older than 23½ at commissioning. Only active duty males may apply.

NECP candidates will receive full pay and allowances but must pay for tuition, books and other fees incurred as a student in the NECP. Selectees must successfully complete Officer Candidate School upon graduation from their baccalaureate degree program and will be appointed ensigns in the unrestricted line (designator 1160 or 1170). Selectees will incur a five-year active duty obligation upon commissioning.

**Broadened Opportunity for Officer Selection and Training Program** is a one-year college preparation course. BOOST is an upward mobility, affirmative action program for Navy, Marine Corps and Coast Guard people, and for civilians who have the potential to be naval officers but whose past academic performance does not qualify them for an NROTC scholarship or entry to the Naval Academy.

Minimum SAT/ACT scores for eligibility are 350 verbal/400 math or 14 verbal/16 math. All candidates must be under 21 years as of July 1 of the year entering BOOST school. Applicants also must meet citizenship, physical, moral and other related requirements and be recommended by their commanding officers. The course is provided at the Service School Command, San Diego. Every candidate has the opportunity of successfully completing the program and earning a scholarship.

**The Naval Reserve Officer Training Corps Scholarship Program** consists of 63 units at civilian colleges and universities nationwide. The congressional ceiling for scholarship students is being raised from 6,000 to 8,000. These additional scholarships are being phased in at the rate of 500 scholarships per year beginning with FY 82. Students receive tuition, fees and books plus \$100 per month tax-free subsistence. The program produces unrestricted line officers with most having



technical degrees in engineering and science. Commissioned as regular officers, they serve a minimum of four years on active duty. Active duty enlisted people may also compete for NROTC scholarships.

**Armed Forces Staff College** at Norfolk, administratively supported by the Chief of Naval Education and Training, provides a professional development opportunity for midgrade officers. They study an intensive curriculum on joint plans and

operations. Each class is balanced with representatives from all of the United States military services as well as civilians from Department of Defense agencies and international students.

There are many graduate-level courses available through DANTES, the Navy Campus program, Naval Postgraduate School and other service schools. One additional program offered by the Chief of Naval Education and Training is designed to provide the future Navy with a cadre of officers to manage education and training activities:

The Education and Training Management Subspecialty (ETMS) may be earned through experience or formal education. There are Navy-approved curricula at colleges or universities located at the University of West Florida, Pensacola; Old Dominion University, Norfolk; San Diego State University, San Diego; Memphis State University, Memphis, Tenn.; George Washington University, Washington, D.C.; and Stanford University, Stanford, Calif.

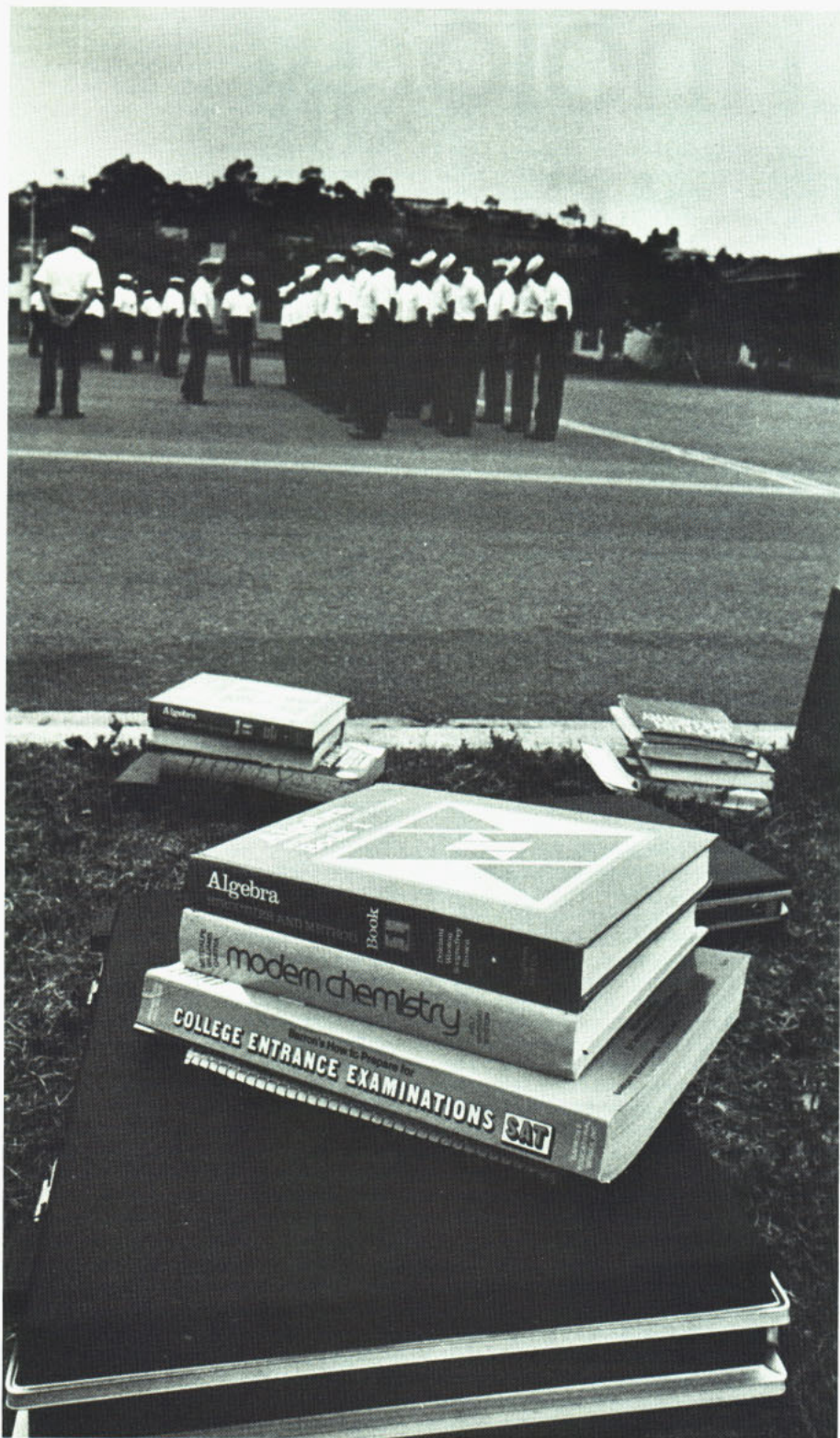
The graduate studies cover organizational behavior, curriculum development, resources planning and programming and computer applications in education and training. Officers who wish to pursue the ETMS graduate education program may qualify for the fully funded Graduate Education Program, the Advanced Education Program or Tuition Assistance/GI benefits.

The fully-funded Graduate Education Program is a full-time course for individuals screened by the Naval Postgraduate School. An annual notice seeks persons interested in postgraduate work.

The Advanced Education Program is for those persons who have started a postgraduate degree program off-duty and are within 12 months of obtaining the degree. In this program, the student receives pay and allowances while attending a civilian institution full time but the student pays the tuition.

The Tuition Assistance/GI Bill programs provide tuition assistance for persons attending off-duty graduate courses.

Whether you are enlisted or officer, afloat or ashore, take the high road to success that will make you better at your job and more valuable to the Navy—take the road to higher education. □





# Using Technology As The Teacher

A computerized, self-teaching training system that "talks" to students could spell the difference between life and serious injury or death for Navy air crews.

Civilian audiovisual and training specialists with the Naval Health Sciences Education and Training Command at the Naval Medical Command, National Capital Region, in Bethesda, Md., recently installed the new system at Naval Air Station Norfolk, Va., to help pilots and air crews update their aircraft ejection techniques. This low-cost instruction system, the training experts say, will pay for itself in a few years in reduced training and temporary active duty costs.

Interactive video instructional systems also are scheduled to be installed this year at hospital corpsman "A" school at Great Lakes, Ill., and advanced school at the Naval Schools of Health Sciences at Bethesda, Md., San Diego, and Portsmouth, Va. These systems will be programmed to help students improve their basic academic skills. Interactive video systems are expected to greatly reduce training costs and times for the Navy.

The system, using off-the-shelf, state-of-the-art computer hardware, puts the Navy on the leading edge of educational technology.

This educational innovation is being adopted and developed for Navy use by Frank J. Toth, a former Hungarian freedom fighter and winner of national and international film-making awards, and his

assistant, Carl B. Black, a former U.S. Air Force instructor, electronics specialist, scriptwriter and audiovisual producer. Toth, a GM-14, heads the command's educational media department and Black, a GM-13, is the former manager of audiovisual productions and computer-assisted instruction.

In the ejection techniques application, training would be conducted in squadron ready rooms. There students would find themselves in front of a typical personal or home computer, complete with keyboard, television screen (or CRT), and a video disc recorder. An instructor has loaded the system by putting a video disc with the appropriate lesson or program in the recorder.

The student types in name, ID number and other information. In full color and with background music, the screen welcomes the student. The computer, controlled by the student, presents the lesson and asks questions. The student answers—interacting with the computer—by touching the screen. Lessons can be replayed until correct answers are given to as many questions as course managers believe are required to master the subject. Students move through the instructional program at their own pace.

At NAS Norfolk, lessons will include a review of land and water survival techniques, parachute descent, how to secure the parachute harness and other gear so the ejection force doesn't injure crewmen,

as well as reminders to look at the altimeter before ejecting and to count properly so as to know when the parachute must be opened manually, if necessary. (Parachute gear includes a "baristat," a device that opens the chute automatically at 13,000 feet. Since most ejections—particularly the most hazardous ones—are at lower altitudes, according to Navy safety specialists, knowing when to pull the rip cord is crucial.)

While students go through these electronic texts and lessons systematically at their own pace, the computer keeps account of their progress. It tells course managers how often each lesson-based question is missed so the material can be changed to emphasize and repeat material students find difficult. An enormous amount of information about each student and how he or she reacts to the training—and on each class—can be provided. The machine remembers where students stopped their course work and what additional training they need. At the same time, course material can be changed quickly, insuring up-to-date information.

Toth's interest in "technology as teacher" was sparked several years ago as he studied changes in the reading habits, information acquisition and entertainment interests of American youth. "I asked myself, 'Who's being trained for what? What kind of students are we getting in the Navy?' As one admiral used to say, 'It's easy to teach at Harvard, which gets



the cream of the academic crop.' The average recruit is a television watcher who hasn't read many books. We need to consider the age we live in."

Toth then considered changes which have taken place in communication since Gutenberg's invention of movable type in the 15th century. Motion pictures were another revolution. In the 1930s, movies, filmstrips and slides entered classrooms, and their use increased in the 1940s. Television's impact was similar to Gutenberg's and society—some experts claim—

became almost totally visually oriented. The TV became part of people's daily diet, and even acted as babysitter.

Then came small and smaller computers, micro chips and computer-generated video games. Americans found themselves part of what Toth calls the "Pac Man generation."

"I realized," Toth said, "we had better come up with an educational technology that takes this into consideration if we want to reach these students. We needed something that combined text and visuals and

hooked them into a computer for management. When people read and study from printed material, they can flip back over previously covered pages to enhance their understanding. Educational technology didn't provide that luxury until the advent of videotape and a computer-assisted interactive system that allowed student and machine to 'talk' to each other. Such a system would be another tool for teachers, enabling them to give students more individualized attention.

"We can use games on the computer to



*Illustration by Bob George, art director, Naval Data Automation Command, Washington, D.C.*



# Study Program

find the student's academic and instructional level without the student realizing we're conducting a pretest. This information helps the computer and instructor develop an individualized remedial or tutorial lesson plan, pick the appropriate course material, teach it by machine and continually evaluate progress," Toth explained.

Toth and Black analyzed the quality of training prospective hospital corpsmen and technicians were getting at command schools. They were alarmed, but no more so than their public school colleagues who studied the outcomes of their instruction.

In reviewing published reports, Toth and Black said they found that:

- Many sailors entering hospital corpsman "A" and advanced schools are poor in reading, writing and arithmetic.
- Training programs are long and there's too much lecturing. There's almost no individualized instruction for rapid or slow learners.
- Instructional management needs up-

grading at all schools and at the Naval Health Sciences Education and Training Command.

• The schools' routine, formal training programs can't keep up with knowledge required on the job in the fleet. Hospital corpsman "A" school graduates don't perform as well as expected on the job. Refresher training is inadequate.

Black also reviewed academic attrition rates between 1977 and 1981 and, while the "A" school and advanced corpsman attrition dropped from 10 to 2 percent, the nuclear submarine medical technician failure rate shot up to 23 percent in 1981.

Business as usual, they told Navy officials, would mean "the Navy Medical Department will continue to lose dollars due to unnecessary academic attrition and loss of training time. Instructional management will remain marginal. The fleet will continue to suffer with low performance levels and retraining "A" school graduates will continue to waste the time of operational staffs."

## Teachers vs. Technology

Teachers are often uncomfortable with technology in the classroom. Slide projectors, computers, even television sets are sometimes suspect.

Nevertheless, this autumn the Naval Health Sciences Education and Training Command will begin training its medical people with a computer-assisted-and-managed instructional system featuring interactive video components enabling students to "talk" with the computer. It's one of the nation's most advanced pieces of educational technology.

It's also a way to individualize instruction for slow and fast learners, reduce failure, save class time and ensure mastery of material, according to Carl B. Black, the Navy civilian employee who helped develop the system. Black, now a writer-director with the Naval Audiovisual Center, is a former Air Force instructor. He is also an electronics specialist, script-writer and audiovisual and film producer.

He calls "unfounded" the fears of some

teachers that some technological teaching aids and computers could replace them in the classroom and decrease their role. Black says the new technology supplements, rather than supplants, instructors.

"It makes it much easier to develop one-on-one teaching situations—the goal of most good teachers—and is one of the best ways to allow for individual differences," Black explained. While developing the Navy system, he worked closely with teachers and others in the Montgomery County, Md., public school system—long rated one of the nation's best.

Black said an instructor's decision to use technological devices in the classroom is similar to a carpenter's decision to use a power saw rather than a hand saw. "Both will get the job done, but the power saw will do it faster, easier, cheaper with better results and leave more time to give individual attention to other projects and people."

Black predicts that using the new computer-assisted instructional system with interactive video—which will cost more than \$1.6 million through fiscal year 1988—will drop academic attrition by 25 percent. Money saved here alone will pay for the program "over a period of years."

He feels there will be more and better-qualified graduates, and academic course time may drop about 25 percent, making more time available for practical instruction. There should be additional savings in dollars, and graduates will be more proficient when they join the fleet. On-the-job performance will improve as more of the better-trained medical people join the fleet.

The management will improve, too, and the time staff people at hospitals and elsewhere take to retrain corpsmen "will be greatly decreased."

The Naval Health Sciences Education and Training Command this fiscal year will install seven of the new systems at NAS Norfolk to support the Naval Aviation Physiology Training Program. This summer, 10 individual work stations—each with the new training system—will be installed at Naval Schools of Health Sciences in San Diego, Bethesda, Portsmouth, and the Naval Hospital Corps school at Great Lakes. In FY 85, another 10 work stations are to be installed at the same sites. Training programs for operating room and X-ray technicians at all the schools also will use the work stations. Dental technician students at San Diego will use the work stations the next fiscal year, as well as physician's assistant students in Portsmouth. More than 100 computer-assisted-and-managed interactive video systems for training Navy medical people will be in use by the end of FY 86. Staffs at those locations will be trained to develop and operate their own software, so once in place, the system will be able to regenerate itself. The system's effectiveness will be evaluated during the next few years.

The Navy's high technology training system will produce better trained and highly skilled medical people capable of keeping more sailors and Marines more fit to fight than ever before. □

—Story by Kenneth J. Rabben





# Going Where The Guys Are

Story by Lt. Joe March, USS Midway (CV 41)

"Father Gene" Bertrand is not that different from his 5,000 male parishioners. He tried different jobs in different cities and then joined the Navy for adventure and variety. Now serving aboard USS *Midway* (CV 41) operating out of Yokosuka, Japan, Commander Victor E. Bertrand is one of only 15 Catholic chaplains in the Navy assigned to sea duty.

"The greatest benefit of being a Navy chaplain is a closeness that I don't think you can get in a civilian parish. I have the

opportunity to go where the guys are in their work areas," Bertrand said. "There's more contact and as a result they get to know you better . . . there's more opportunity for them to open up to you. That's important, I think, when you're dealing pastorally with men."

At almost any time of the day or night, crew members of the 65,000-ton ship can find the lean, friendly priest roaming the 4-acre steel deck, climbing the ship's myriad ladders or coming through any one of a maze of passageways in search of those who need him.

"It's made me feel that I'm a naval officer," he said. "At least I can say I've been to sea." His previous 12½ years of duty were varied but all shore-based.

As a boy, Bertrand's first aspiration was to be a dentist. "I had a lot of dental work done and got to know my dentist well. He encouraged me to take biology which I did quite well in and then chemistry which I 'flubbed.' That knocked me out of consideration for medical school," Bertrand said. It wasn't until his senior year that a religion teacher successfully provided enough impetus for him to enter religious life.

After graduation, Bertrand attended Loyola University in Chicago, and then the seminary, but he still was uncertain of his vocation.

"I had a hell of a time in Latin," Bertrand admitted. "so I just prayed on that and said, 'Lord, if you don't want me to

be a priest, flub me on the Latin."

Bertrand passed. After ordination, he taught high school for a year in the Chicago area before moving to a similar position at Bishop Gorman High School in Las Vegas, Nev., where he remained for seven years.

During his sixth year in Las Vegas, Father Bertrand began to see the limitations of remaining static.

"I was geared to think at the high school mentality," Bertrand said. "On weekends, I would give sermons in various parishes and I noticed I didn't have a feel for the problems adults have."

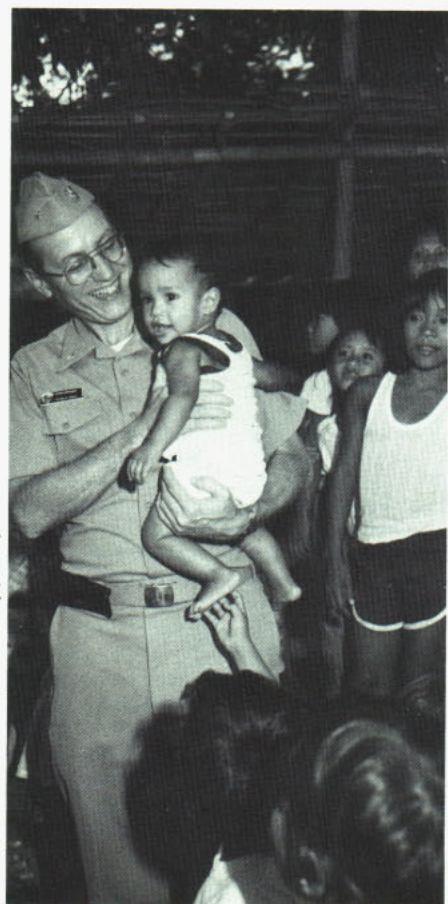
As a priest in Las Vegas, Father Bertrand also conducted Mass at nearby Nellis Air Force Base. His encounter with the military way of life ignited a spark of adventure. He considered joining the Air Force but soon rejected the idea, seeking more variety of assignments.

"I'd always been crazy about ships. I had a model collection of 33 ships at different times, most of them warships. Besides, both of my brothers had served in the Navy."

Now, Father Bertrand's parish consists of the nearly 5,000 men who man *Midway* and its 80-plus aircraft. As an added duty, "Father Gene" gets requests from smaller vessels of the *Midway* battle group to helicopter over and celebrate Sunday Mass, which he does every two weeks.

This mission occasionally has its drawbacks.

"If the sea is not smooth as glass, I can get sick. On a carrier I have no problem but it's a little difficult on small ships," he admitted. "I'm always praying for good weather." □



Above: Father Bertrand and AMHAN Edralin Abelon. Left: An orphanage in Olongapo, R.P., received almost \$2,000 from Midway's crew.



# Ocean Venture

Story by Lt. John Brindley, Joint Information Bureau, Atlantic

"Ocean Venture '84" was the largest joint service exercise conducted this year in the Caribbean by the United States. Beginning April 20 and continuing for 17 days, the exercise involved more than 32,000 active duty and reserve military people from all branches of the armed forces. With the Grenada operation still fresh in the minds of many of the participants, a sense of purpose and realism was injected into this year's exercise.

Rear Admiral Ralph R. Hedges, Commander U.S. Forces Caribbean and commander of the exercise said, "This exercise was designed to demonstrate and improve the capability of the United States to protect and maintain the free use of the sea lines of communication in the Caribbean Basin and the Gulf of Mexico. The exercise is expected to enhance the per-

*Right: Helicopters prepare to depart USS Iwo Jima (LPH 2). Above right: Amphibious assault vehicles approach Vieques Island, P.R. Below: A member of the 26th Marine Amphibious Unit.*



Photo by PH2 Jeffery A. Salter, FltAVComLant

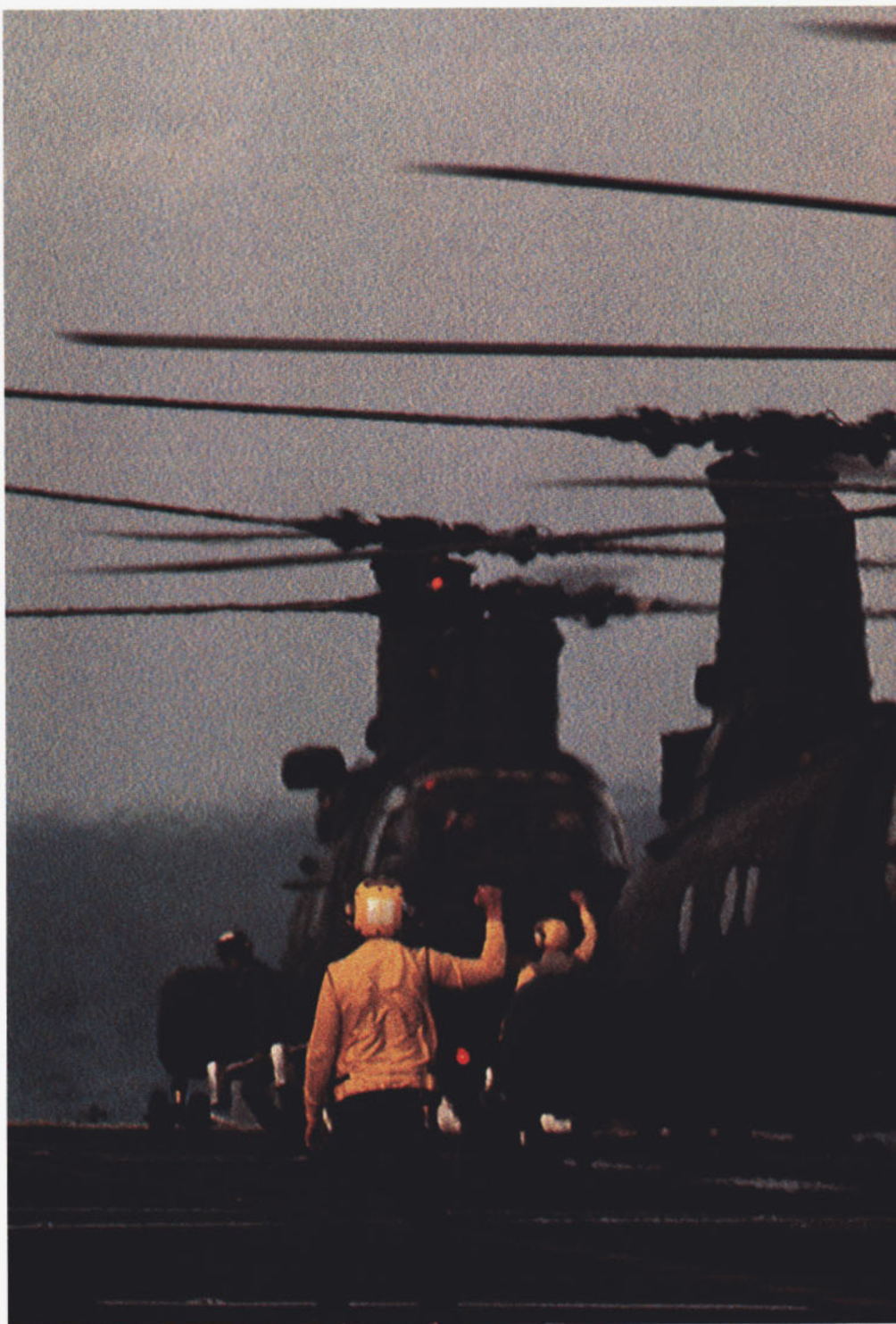


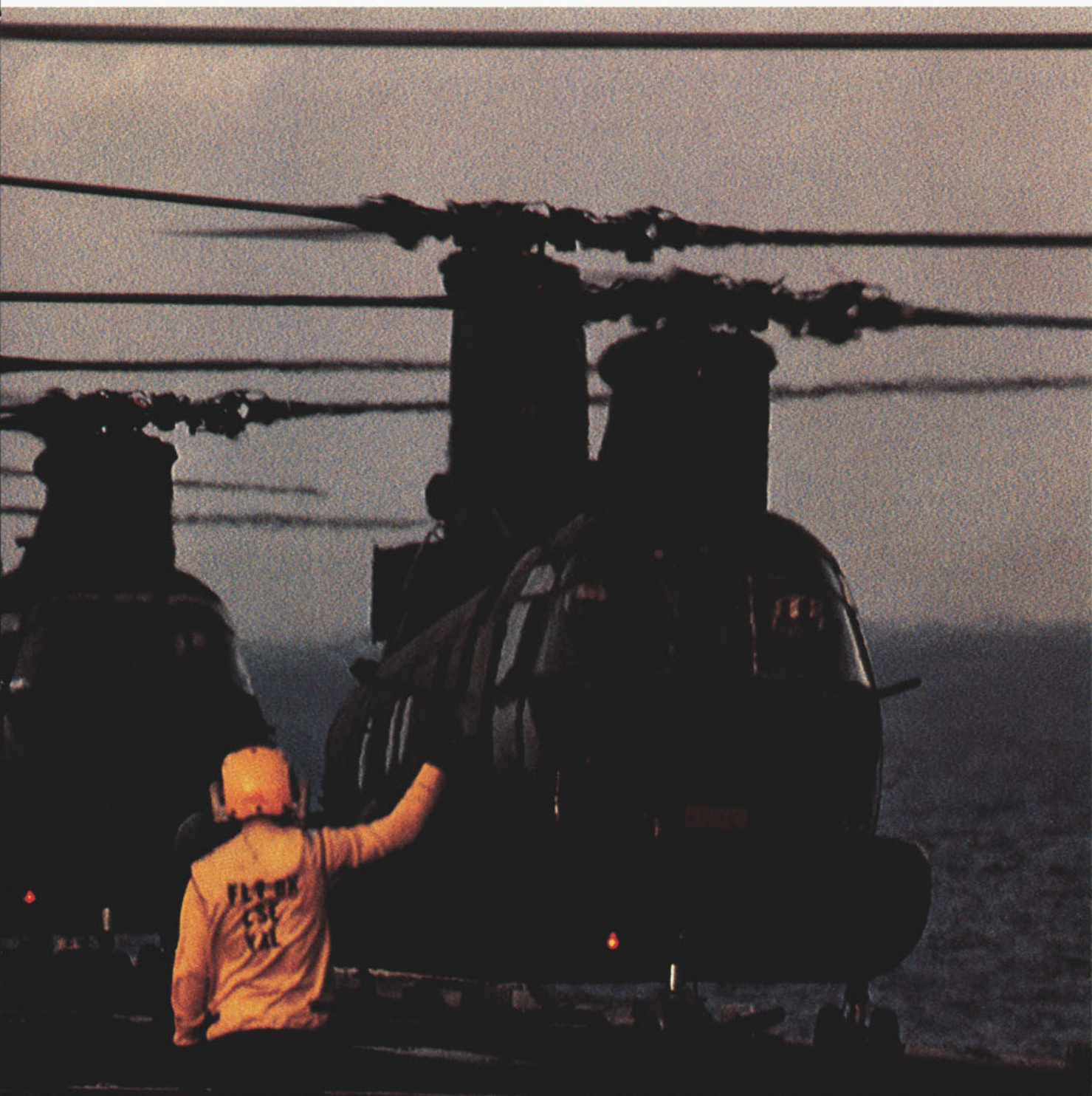
Photo by Tech. Sgt. Ken Hammond, USAF



# '84



Photo by PH2 Jeffery A. Salter, F1tAVComLant





# Ocean Venture '84

ception at home and abroad of the capability of the U.S. to project its military power, if necessary, to protect our national interests by supporting our friendly neighbors in the Caribbean."

Ocean Venture '84 included all aspects of modern warfare: naval battle groups,

*Below: A member of the 82nd Airborne Division parachutes into action. Middle right: Participants in Ocean Venture put their knowledge to work in the field. Far right: An M-60 tank rolls onto the beach from a utility landing craft attached to Assault Craft Unit Two.*

maritime air support, Army airborne operations and conventional group operations.

The exercise began with a mining exercise in the Norfolk, Va., operating area. As Florida National Guard troops deployed to Key West, Fla., to provide security, Joint Task Force 140 began testing command and control equipment and procedures.

In the next few days, B-52 bombers, supported by KC-10 tankers from the Strategic Air Command, bombed target areas;

300 dependents were airlifted to safety by giant Air Force C-130 and C-141 aircraft of the Military Airlift Command during non-combat evacuation operations staged at Guantanamo Bay, Cuba.

On April 30, D-Day began. Supported by USS *Harlan County* (LST 1196), USS *Glover* (FF 1098), USS *Thorn* (DD 988), and USS *Talbot* (FFG 4), the 26th Marine Amphibious Unit assaulted the beach on Vieques island, Puerto Rico. Colonel William W. Bahnmaier, commanding officer of the 26th MAU said, "My Marines were

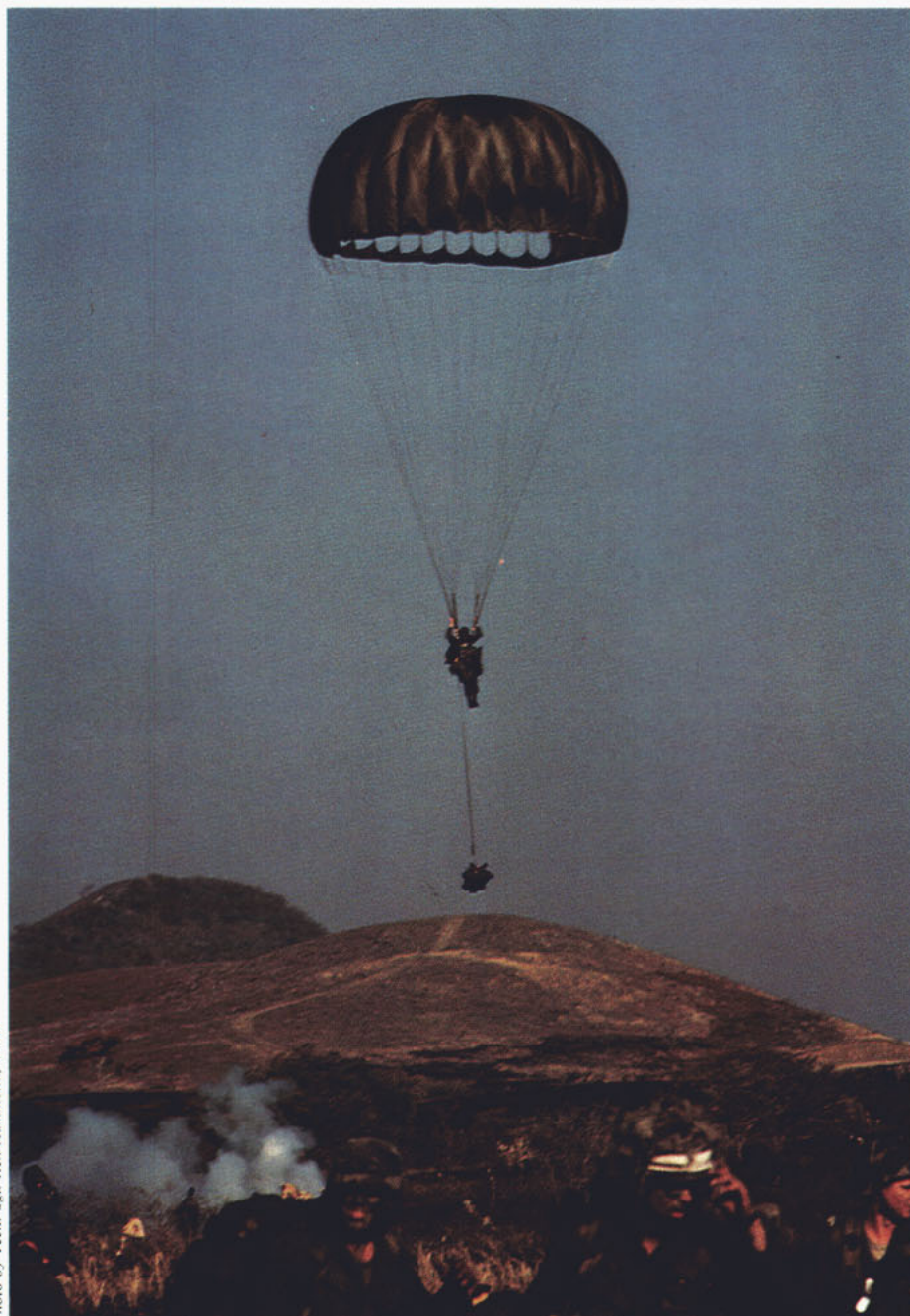


Photo by Tech. Sgt. Ken Hammond, USAF



Photo by Tech. Sgt. Ken Hammond, USAF



Photo by Master Sgt. Frank Gargelnick, USAF



able to cross the beach at the prescribed time because of the excellent efforts of the Navy. Not only were we in the right place at the right time, but once again we demonstrated to everyone that the Navy-Marine Corps team contains a unique capability to deploy, sail and conduct an amphibious assault anywhere in the world with precision."

Navy ships participating in this third Ocean Venture exercise were: USS *King* (DDG 41), USS *William V. Pratt* (DDG 44), USS *Preble* (DDG 46), USS *Stark*

(FFG 31), USS *Aubrey Fitch* (FFG 34), USS *Brumby* (FF 1044), USS *Caloosahatchee* (AO 98), USS *Engage* (MSO 433), USS *Exploit* (MSO 440), USS *Exultant* (MSO 441), USS *Fearless* (MSO 442), USS *Fortify* (MSO 446), USS *Impervious* (MSO 449), USS *Inflict* (MSO 456), USS *Leader* (MSO 490), USS *Pegasus*, (PHM 1), USS *Hercules* (PHM 2), USS *Aries* (PHM 5) and USS *Gemini* (PHM 6).

During another part of the exercise, more than 800 Army paratroopers from

the 82nd Airborne Division out of Fort Bragg, N.C., parachuted over the Puerto Rican National Guard Camp Santiago and later linked up with the 26th MAU on Vieques island.

By the conclusion of the exercise, the participants had grown to share a sense of purpose, camaraderie and professionalism. The Ocean Venture '84 mission of executing command and control of assigned forces, their rapid deployment and integration of reserve components into active duty units had been successfully met.

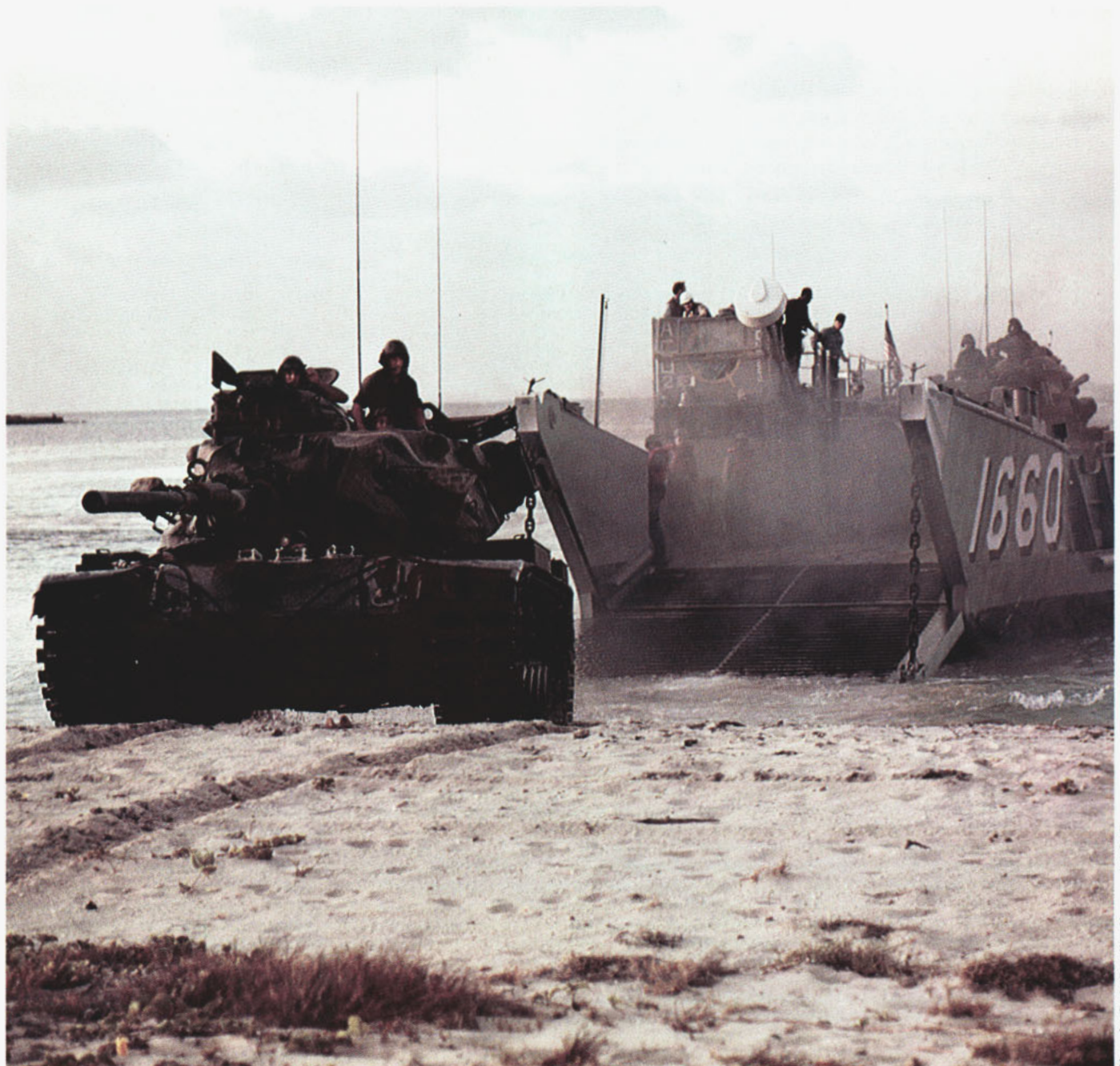


Photo by Tech. Sgt. Ken Hammond, USAF



# Trademen Feel

The needs of the Navy come first. That fact hit home recently for Trademen, whose rating is slated for disestablishment by 1988.

Disestablishment had been rumored for more than 20 years. Rumor became fact in 1982 when the Navy decided to replace TDs with civilian employees and contractors over a five-year period.

Under Navy policy, there must be justifiable reasons for assigning military people to a job. Assignments involving possible deployment in a direct combat support

role are justifiable. Additionally, military people may be assigned jobs that provide essential training in skills exclusive to the military or those that provide a base for overseas or sea/shore rotation.

Jobs not meeting these criteria must be assigned to civilian employees or contracted out. For example, civilians now work in many mess halls formerly operated by military people.

TDs install, maintain and repair the Navy's audio-visual training devices—flight simulators, anti-submarine warfare train-

ers, anti-aircraft warfare trainers, etc.—and are assigned primarily to shore billets with Fleet Aviation Specialized Operational Training Groups.

The rating was established in 1948 during the development of the peacetime rating structure. Before that time it was in the "specialist" group of exclusive emergency service ratings.

But a 1978 economic analysis of the TD rating concluded that "there is no justification for military personnel to perform the maintenance and operation services of





# Impact Of Navy's Needs

Navy training devices based solely on military requirements." It also stated that "in-house civilians will be able to maintain and operate training devices at a lower cost than the current inventory of TDs. . . ."

Another consideration is that the Navy is building up to a 600-ship fleet. Disestablishing the TD rating will create 2,300 billets that can be moved to ships without increasing the number of people in the Navy. There were 500 people a year coming in as TDs, and even though there was a desperate need aboard ships for their technical skills as fire control technicians and electronics technicians, they were never sent to sea.

Explanations of the decision to disestablish the rating are not received well by those it affects. The mood throughout most of the TD community is one of dismay and disbelief.

"A lot of TDs think disestablishment isn't going to happen. We have to get the word out that it is going to happen and



*TDAA Tammie A. Perkins graduated with the final Trademan course at Naval Air Technical Training Center, NAS Memphis, Tenn. Photo by PHAN Scott Norr.*

*Readiness testing of operational flight trainers (left) and micro/miniature repair work (below) are two of the jobs TDs perform.*



for them to act accordingly," said Master Chief Trademan Michael J. Blumenthal, assistant head of aviation training device requirements branch, Naval Air Systems Command. "They don't believe it because it's been going this way for 20 years. They see it as just another drill. Now, they're starting to feel the effects (of the disestablishment), but deep down they don't want to believe it."

When disestablishment of the rating was formalized, many TDs were caught off guard. "I wasn't prepared because the Navy had been discussing disestablishment for so long that a lot of people thought it was just another rumor," said Trademan First Class Steve Cook, who has 13 years in the TD rating.

For a long time, disestablishment was even a humorous topic of conversation in the TD community.

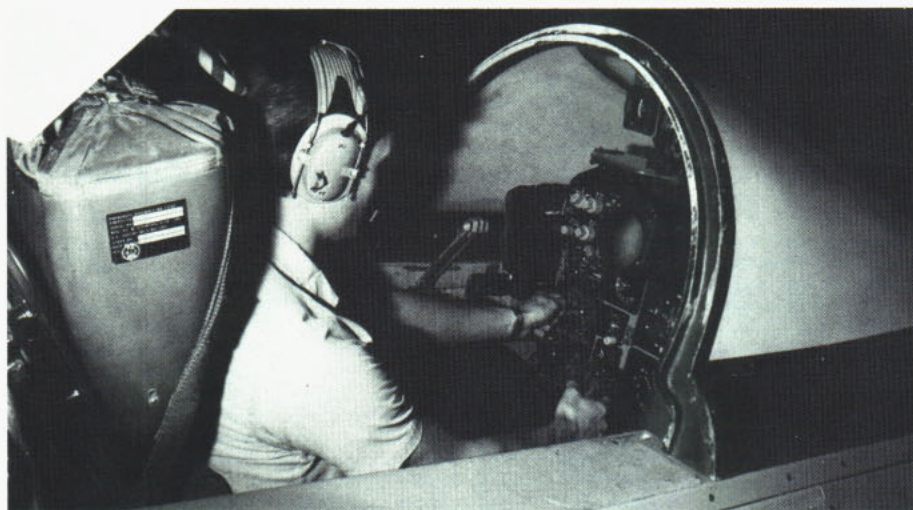
"It was a big joke when I went to 'A' school that the Navy was talking about disestablishing the TD rating," said Trademan Third Class Mark Humphries. "The attitude then (1981) was 'don't worry

about it, they tried this a couple of times before and it's nothing to worry about.' Now it looks like it's really going to happen." Humphries plans to convert to the construction electrician rating.

TDs are not being abandoned as a result of disestablishment. The Navy recognizes the valuable technical skills of the people in the rating and is trying to cross rate as many TDs as possible. Essentially all ratings with technical backgrounds are open to them: electronics technician, fire control technician, ocean systems technician and others. However, some technical ratings are closed to women because they are combat-related, sea intensive, or they impact on sea/shore rotations for men.

"The most positive aspect of this is the consideration that TDs are getting from the other detailers. Many are getting an 'A' school and sometimes a 'C' school.





TD2 Steven Murdock performs preflight check of weapons system trainer. Photo by PH3 Robert E. Brenner, VF 101, NAS Oceana, Va.

We're all trying to do everything we can for them," said Blumenthal.

The TD detailer, command career counselors and detailers for other ratings are placing as much emphasis as possible on meeting the needs and desires of TDs.

"Most TDs feel that the options being offered are quite good," said Chief Tradevman Stephanie P. Blake, TD detailer. "The only ratings closed to TDs are those that are closed to everybody. Basically

we've been given a wide-open field.

"Many people in the field are disappointed. They like being TDs and don't want to change. The position that I've taken in talking with them is that the whole Navy is open—reach out and go for it. Look at all the things that you can do rather than what you can't do."

Some TDs are already heeding that advice. There have been more than 400 rating conversions among TDs. Those who

have converted aren't happy with losing their rating but are pleased with the treatment they have received as they look for new career paths.

"I don't think I got a raw deal in any way," said Aviation Anti-submarine Warfare Technician Second Class Elizabeth Dumas, who recently converted from TD after five years in the rating. "If they're going to do away with the rating, then this (AX) is what I want to do. 1988 is the last year planned for TDs so for career purposes I don't think it would have been smart to try and wait it out. I'm still young enough to make a smooth transition in a career changeover."

Advancement opportunities are of great concern for TDs converting to new ratings. But TDs are being treated like any other rating conversion, and they have the same opportunities for advancement. However, some members of the TD community may be affected more than others.

"I'm eligible to go up for first class in

## Converting A Family

Disestablishment of their rating is sending Tradevmen in search of new career paths. It's not always easy but TDs are finding ways to make smooth transitions to new ratings.

Such was the case with Tradevman First Class Tommy G. Crouse and his wife, Tradevman Second Class Becky L. Crouse. The TD rating had almost guaranteed the couple assignments together throughout their careers. Disestablishment of their rating opened the risk of being separated.

With the help of detailers and career counselors, the Crouses found a challenging rating that would keep them together. The couple made a joint decision to convert to the ocean systems technician rating which is divided into two fields—maintenance and analyst. The Crouses

first choice was for the maintenance field, but they accepted the Navy's needs and converted to analysts.

The Crouses re-enlisted under the Selective Conversion and Re-enlistment program which guaranteed them assignment to a class "A" school in their new rating.

They graduated with the two highest grades in their class and received orders to U.S. Naval Facility Keflavik, Iceland.

By working closely with detailers and career counselors, the Crouses met the needs of the Navy while fulfilling their own desires.





March, but because I'll be in a new rating I think I'll have to wait until September when I can be better prepared and have more experience in my rating," said Dumas.

Overall, junior people converting from TD are expected to compete well for advancement in their new ratings. Senior people may have more difficulty.

"An E-4 or E-5 is going to have the same shot as anyone else going up for rate—a TD is intelligent enough to get the data from the books," said Blumenthal. "I truly believe there is going to be an advancement problem at the E-7, E-8 and E-9 level. Advancement board members are probably going to say that these TDs have to prove themselves in their new ratings before being advanced to chief, sen-

ior chief and master chief petty officer."

Some senior people in the TD rating—especially those going up for chief—are trying for advancement in their current rating before converting. They believe that they will have a better chance of being selected. Other TDs are not as concerned.

"After I meet the qualifications for advancement in a new rating, I don't think I'll be adversely affected by the crossover. Most of the E-7 billets the boards are looking to fill no longer require technical expertise. They're looking for management personnel," said Cook.

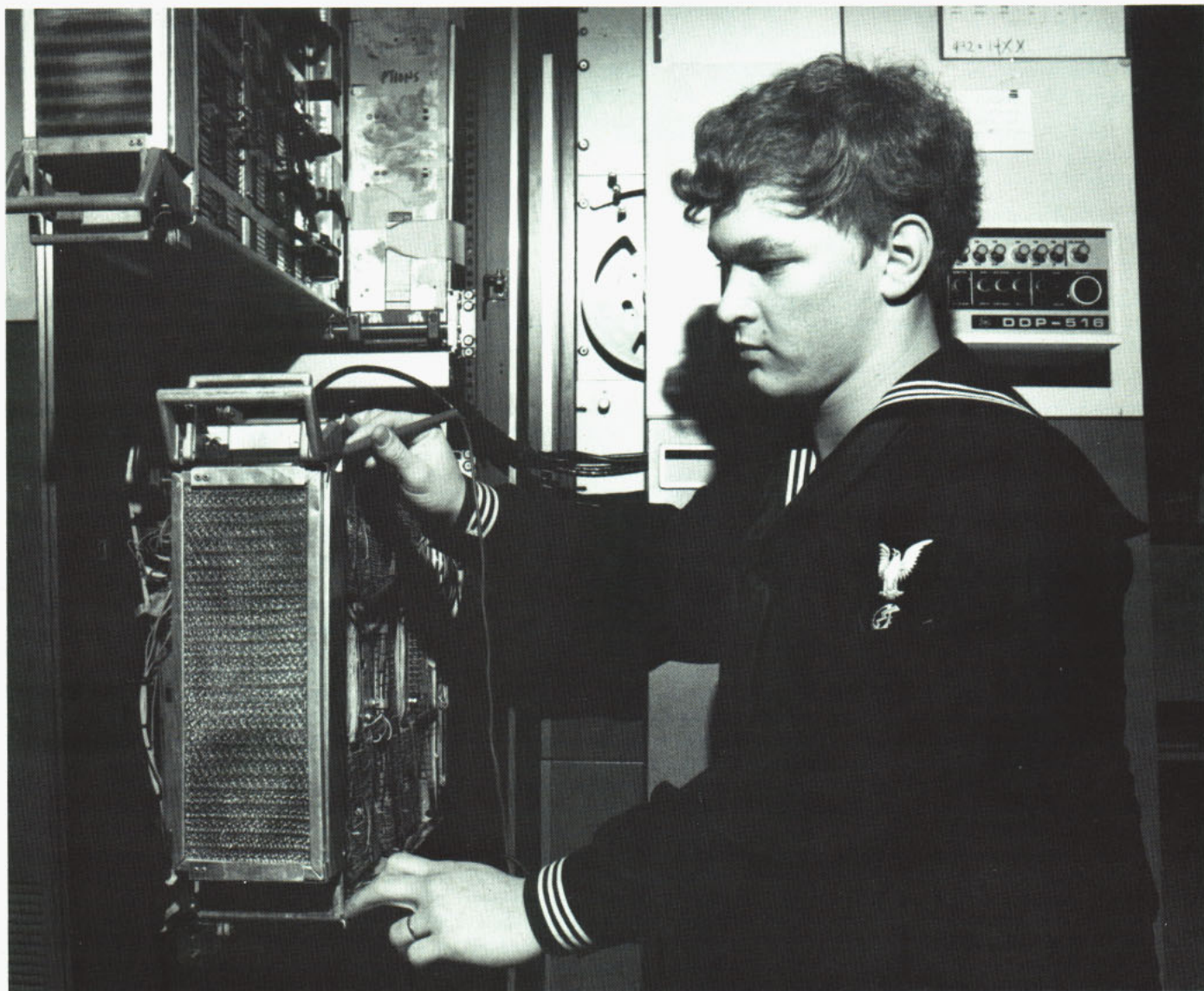
Disestablishment of a rating isn't something that just happens. It requires careful study, special planning and follows a logical procedure. On announcement of disestablishment, accessions into the rating

are stopped. Advancements within the rating continue but training is gradually phased out. "A" school inputs are stopped and advancement exams for the rating are phased out in favor of conversion exams. In the TD disestablishment, civilian contractors have already begun taking over some training devices.

The time required to effect the change creates a special problem: maintaining morale in the rating during the disestablishment period.

"I'm currently in a key management position with 30 people working for me," said Cook. "It's a struggle for me to keep

*TD3 William Tucker tests a computer's memory unit as part of the preventive maintenance system.*





# Trademan

these people motivated when they know they're not going to have a job in 18 months."

Retention goes hand-in-hand with morale. The Navy recognizes the value of the TD's technical skill and would like as many as possible to convert. Fortunately, initial fears that many TDs would leave the Navy have not been realized.

"When we first took a guess, we came up with a figure that 60 to 80 percent of the TDs would get out over the next two years," said Blumenthal. "Well that's just not happening—the people haven't bailed out."

Although there are some TDs leaving the Navy and getting jobs with contractors working on the same training devices, this isn't a problem—most TDs really want to stick it out. For many TDs, getting out of the Navy would mean throwing away security and turning their backs on a considerable investment in time and effort.

"I want to look for another job within the Navy because it would be foolish to get out with 13 years already invested toward retirement," said Cook.

Disestablishment is never easy for the members of a rating and TDs are not the first to feel its effects. A number of ratings have been disestablished over the years. Gone are the boilermaker, commissaryman and steward ratings.

The needs of the Navy can have consequences that are hard to understand, but many TDs have put aside their disappointment and have started looking toward the future.

"I've been a TD for almost 15 years—so of course I don't like the idea of losing my rating. It's the only rating I've ever known and it's a good rating," said Blake. "At the same time, this is also a fantastic opportunity to investigate and discover all the different ratings in the Navy. It's an opportunity to find something else interesting to do." □

—Story by JO2(SW) E. Foster-Simeon

—Photos by PH2 Allan Wiley  
and PHAN Bryan Sheehan,

FltAVFacLant, NAS Brunswick, Maine.

TD3 Jeffrey Constanzo inspects hydraulic and electrical fittings on P3-C flight trainer.





# Vinson Volunteers Give Up Liberty

Story by JO3 David M. Bailey

Photo by PH3 Mark Washington, USS Carl Vinson (CVN 70)

Crew members from USS *Carl Vinson* (CVN 70) made life a little better for 120 children at Duk Sung Bo Yuk Won Orphanage during a recent port visit in Pusan, South Korea.

Forty-eight members of ship's company, Carrier Air Wing 15, and the staff of Rear Admiral Thomas F. Brown III volunteered their liberty time to refurbish the orphanage's ailing three-story building. They provided the labor but supplies for the project required money.

Spontaneous contributions from the ship's crew and air wing members brought in enough money to purchase lumber, plumbing supplies and other needed materials. An anonymous member of the work crew donated \$200 for paint. The ship's G-1 division contributed \$1,000—the profits from their soft drink sales.

Painting the orphanage was one of the main tasks. Three teams of painters, wielding brushes and rollers, met the challenge of giving the building a much needed face-lift. Plumbers replaced piping, unclogged drains, and repaired water faucets.

Meanwhile, carpenters repanelled wooden doors and replaced broken latches and hinges. Electricians were kept busy rewiring the dining room/kitchen area. Only two lights worked—and these were bare bulbs dangling on frayed cords. Adequate lighting was installed, and numerous fire and shock hazards were eliminated.

Several specialists were tasked with individual projects. Instrumentman Third Class James D. Cotton cleaned and repaired six of the orphanage's manual typewriters used for their vocational classes.

Hull Technician Third Class Steven D. Cain welded several broken garden tools.

Highlighting the day was the picnic marking completion of the project. It provided the tired crew members with a chance to rest and get acquainted with the children. Steaks, hamburgers and hot dogs with all the trimmings were served by mess management specialists from the ship. A representative of Pusan's mayor, reporters, photographers and a local television crew were present at a brief ceremony during the picnic.

According to Captain Lester L. Westling Jr., the ship's head chaplain, the team of volunteers from *Carl Vinson* furthered the principles of "grassroots diplomacy." Further evidence of what they had accomplished was on the rooftop of the refurbished orphanage: the Korean flag and the stars and stripes, flying side by side in a sincere gesture of friendship.

Most important, however, was that the volunteers left behind smiling children with memories of American sailors who had helped them. □



*Taking a break from their volunteer work, BM1 Mark W. Tucker and HM1 Robert C. Corder entertain some of the children of Duk Sung Bo Yuk Won Orphanage.*



# Eyes On The Sky

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*"There is no richer field of science opened to the exploration of man in search of knowledge than astronomical observation; nor is there, in the opinion of this committee, any duty more impressively incumbent upon all human governments than that of furnishing means and facilities and rewards to those who devote the labors of their lives to the indefatigable industry, the unceasing vigilance, and the bright intelligence indispensable to success in these pursuits."*

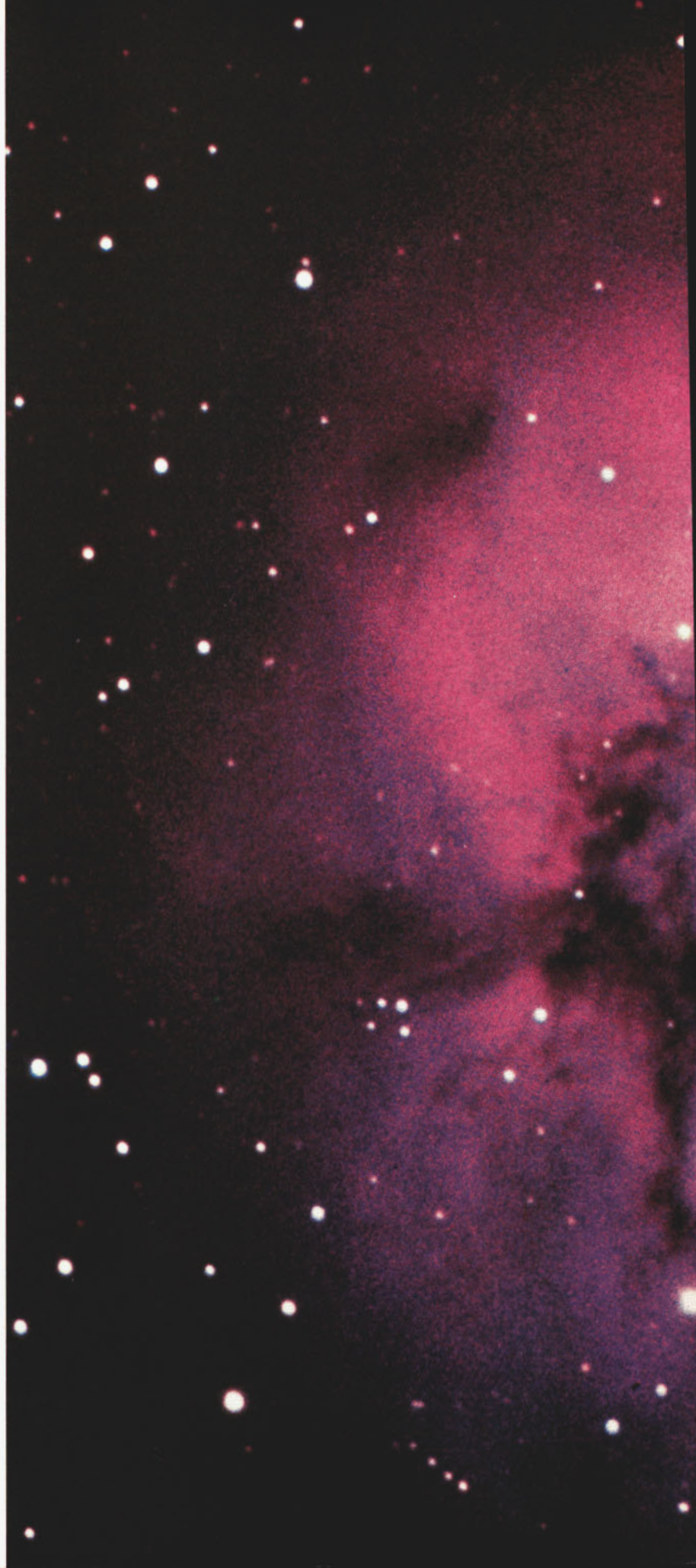
—John Quincy Adams, 1842

\* \* \*

In 1825, President John Quincy Adams went before Congress to request the establishment of what he called a "lighthouse of the sky." At that time no permanent astronomical observatory existed in the American hemisphere, and there were grave doubts that Congress had the authority to create such an institution. For many years Adams' appeals went unheeded. Finally, in 1830, Congress authorized "a suitable house for the Depot of Charts and Instruments of the Navy." In 1842 it became the U.S. Naval Observatory.

The observatory was originally located on a hill in Foggy Bottom in Washington, D.C., now the home of the Naval Medical Command. With the finest array of astronomical instruments in the

*The Orion Nebula lies more than 1,000 light-years from Earth. It contains very hot young stars which cause the nebula to glow.*









# Eyes On The Sky

country at that time, the observatory established its position among the leading observatories of the world. When its 26-inch telescope was installed in 1873, it was the largest refracting telescope in existence. With this instrument, the two moons of Mars were discovered in 1877, launching the observatory to international fame.

In 1893, the observatory was moved to its present site on a tree-covered knoll on Massachusetts Avenue, N.W., Washington, D.C. In addition to the District of Columbia location, the observatory maintains a time service substation in Richmond, Fla., and astronomical observing stations at Flagstaff, Ariz., and Blenheim, New Zealand.

The observatory is one of the few institutions in the world and the only one in the United States where positions of the sun, moon, planets and stars are continually determined. From these observations, the observatory provides accurate

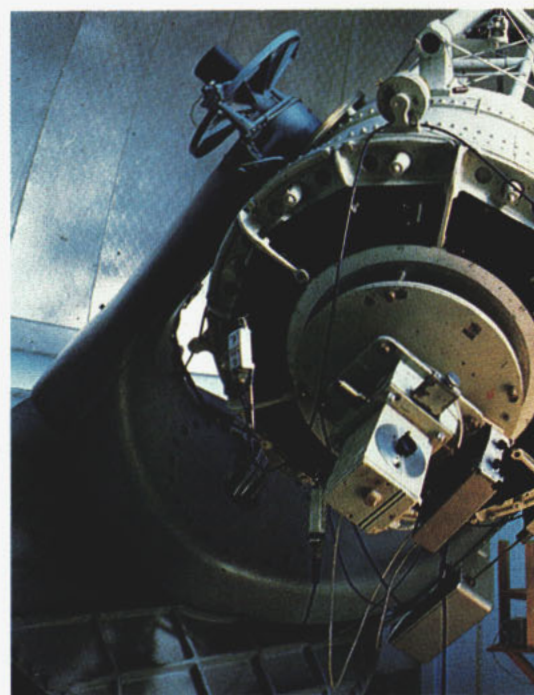
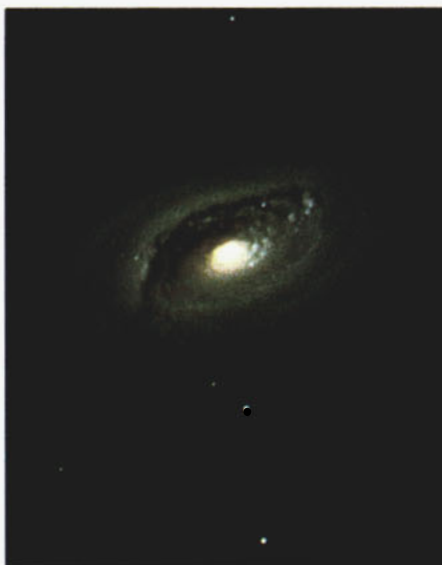
information essential for safe navigation and precise positioning.

The observatory provides the basis for all standard time used in this country and worldwide for the Department of Defense. The observatory controls the precise time and time interval (frequency) by monitoring timed systems such as satellites and radio navigation systems.

The observatory's Master Clock—a system of up to 25 separate but interconnected atomic clocks—maintains standard time in the United States. Portable atomic

clocks are used by the observatory to transfer time directly to those Navy and other DoD and government stations around the world which require the most precise timing for normal operation or advanced research. Some of these stations are also used as precise time-monitoring stations. The observatory's Master Clock may be called directly at (202) 653-1800, Auto-

*Right: The Messier 64 Spiral Galaxy is similar in shape to our galaxy. Center: The 40-inch reflecting telescope at Flagstaff, Ariz., is used to measure brightness and color of stars. Below: The U.S. Naval Observatory in Washington, D.C. Photo by Gail Cleere, Naval Observatory.*





von 294-1920, or the new (900) 410-TIME number. There is a 50-cent charge for the first minute and 35 cents for each additional minute on the 900 line.

The observatory also carries out programs of astronomical research with telescopes, including the instrument at the Flagstaff observatory which uses a 61-inch fused quartz mirror. A major new effort

involves the use of radio and telescopes in Texas, Florida and Massachusetts in a program called Very Long Baseline Interferometry (VLBI). Radio energy from Quasars, the most distant objects in the known universe (some 5 to 10 billion light-years away) is used to very precisely determine the Earth's rotation rate and the wobble of the Earth's axis.

The observatory maintains one of the leading astronomical libraries in the world. Among its 75,000 volumes are a number of rare books dating as far back as the 15th century.

The gradual growth, diversification and complexity of the observatory has been due to the growing demand for its services by the Navy and other DoD components. With the expanded use of satellites and space exploration, additional demands for scientific services have been placed on the observatory.

The U.S. Naval Observatory will meet the challenge of its increased role of scientific research and support services and will continue to chart the heavens, predict the positions of celestial bodies and determine precise time to support command, control and communications and accurate navigation at sea, in the air and in space.

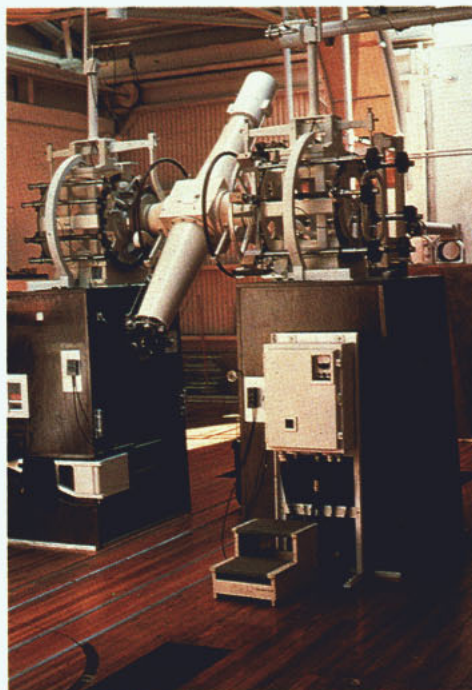
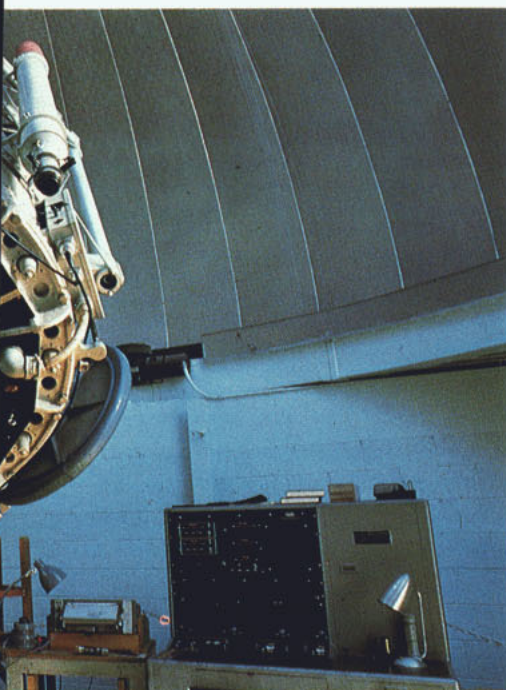
## Sun, Moon, Planets and Stars

The mission of the U.S. Naval Observatory is to determine the positions and motions of celestial bodies, the motions of the Earth and precise time. The observatory also provides astronomical and timing data required by the Navy and other components of the Department of Defense for navigation, precise positioning, and command, control and communications. The observatory makes this data available to other government agencies and to the general public and conducts an ongoing program of research.

The observatory establishes the time standard for the United States and conducts the only program in this country for determining the fundamental positions and motions of the sun, moon, planets and stars.

Each year the observatory publishes *The Nautical Almanac*, *The Astronomical Almanac*, *The Air Almanac*, *Astronomical Phenomena* and the *Almanac for Computers*. Catalogues of star positions and motions and numerous research reports in scientific journals are also published.

In the United States, the U.S. Naval Observatory is the sole authority for as-



*Above left: The 6-inch transit circle telescope is used to determine fundamental positions of celestial objects. Left: The observatory provides time measurement with banks of cesium beam atomic clocks.*



# Eyes On The Sky

tronomical data for navigation, civil affairs and legal purposes.

## Keeper of the Clock

In 1845, the U.S. Naval Observatory offered its first crude time service to the public: a ball suspended on a pole that was dropped exactly at noon. Today, the observatory uses atomic clocks to determine official United States time and offers the public a dial-the-time service that includes Eastern Standard and Universal Time.

The observatory has been at the forefront of timekeeping since the early 1800s. Following the invention of the telegraph,

the observatory sent daily time signals to Western Union and others to synchronize the nation's time. In 1904, the observatory provided and controlled a clock for a Navy radio station that broadcast the first worldwide radio time signal. In 1935, a special telescope known as a Photographic Zenith Tube was installed to determine Universal Time, also called Greenwich Mean Time.

As keeper of the Master Clock for the United States, the observatory uses up to 25 cesium beam atomic clocks housed in separate, environmentally controlled vaults. Accurate to 1 billionth of a second per day, these clocks supply the precise time measurement needed by communi-

cations stations for their electronics systems, by ships at sea to determine their exact position using signals from satellites, and by radio and television stations for broadcasting.

## Search for the Tenth Planet

Astronomers at the U.S. Naval Observatory are now searching for a 10th planet. But why do astronomers look for a 10th planet in the first place? For a very good reason—the planets Uranus and Neptune, circling on the far outer edge of our solar system, have not been showing up where predicted. This may mean that the gravitational influence of a mystery planet in an unknown orbit is affecting the outer planets.

In the time when Uranus was considered the seventh and last planet in the solar system, astronomers noticed that its orbit was being distorted and concluded that some unseen mass was providing the gravitational influence. Based on the planet's predicted and observed positions, astronomers calculated where the mass should be and discovered the eighth planet, Neptune.

Pluto was found in a similar manner. After predicting the position of the unknown mass influencing the outer planets, a number of photographs of an area of the night sky were taken on successive nights and the ninth planet, Pluto, was seen to move against the fixed backdrop of stars.

Today the search for the 10th planet is being conducted in two ways: by making calculations of the irregularities of the orbits of the planets Uranus and Neptune and predicting the forces necessary to influence their orbits, and by investigating the forces that might have ripped apart Neptune's satellite system many millions of years ago.

The problem may be solved soon—or it may not. But each new piece of information peels away another layer of the mystery and perhaps brings us a little closer to finding the 10th planet. □

—Story by JOI Dale Hewey  
—Photos courtesy of U.S. Naval Observatory



*The observatory's radio interferometer at Green Bank, W.Va., observes radio sources to determine rotational rate of the earth.*



# Commissioned After 10-Year Struggle

Story by J03 Russ Sawyer  
NAS Pensacola, Fla.

After a 10-year struggle, former Aviation Electronics Technician First Class Raymond Scott received his gold bars from Aviation Officer Candidate School. "It was a long wait," said Scott, "but I was determined to see it through."

Scott joined the Navy in 1973 with one year of college behind him. "I knew I wanted to be an officer and immediately began to find programs I could qualify for."

In "A" school, Scott applied for Broadened Opportunity for Officer Selection and Training, but couldn't qualify for any of the programs. He then applied for the Navy Enlisted Scientific Education Program but lacked the required one year of fleet time. He waited until he had the time and reapplied only to find out that the NESEP program had been disestablished.

Scott then began to gather as many college credits as he could while pursuing his career as an AT. He took several Program for Afloat College Education courses and then tried for the Enlisted Commissioning Program, but no luck—he had not completed enough traditional college credits.

Still determined to see it through, Scott applied for the Limited Duty Officer program but was not accepted. Again he continued to gather more college credits and completed his bachelor's degree in sociology in November 1982.

"Thanks to my wife, who supported me throughout all of these setbacks," said Scott, "I kept trying to get my commission. Some of the hardest parts of the whole process were in just filling out all of the applications and trying to remember the dates and events."

With diploma in hand, nearly 10 years after his first oath of enlistment, Scott applied for and was accepted into the Aviation Maintenance Duty Officer program.

"It was the program I wanted because it goes right along with my enlisted occupation."

In officer training, Scott found out some of the toughest obstacles were yet to be faced. "I really wasn't worried about the academics, but the physical part of the program had me worried."

Scott urges others to follow in his footsteps. "I see so many enlisted people who would make great officers, but they just put it off. You need the drive and the motivation to do it yourself because no one else is going to do it for you. What is said here in school is appropriate: determination, motivation, dedication and pride."

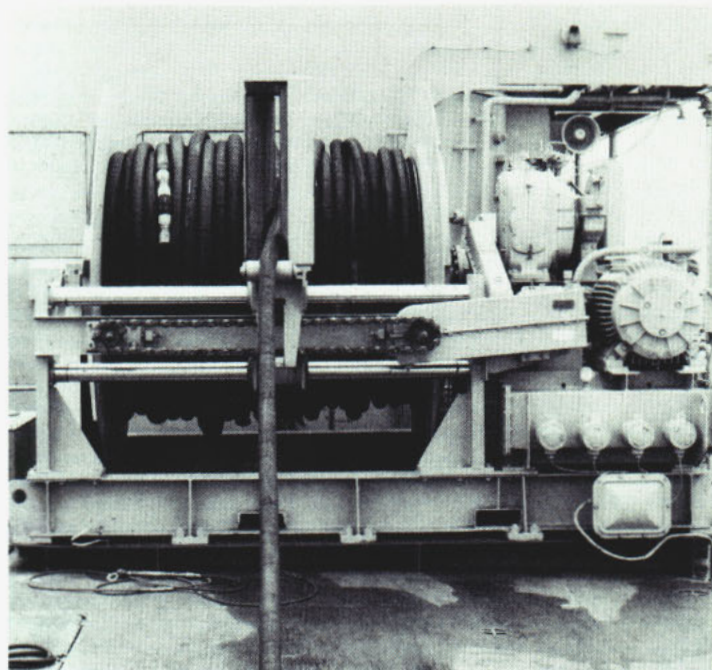


*Ensign Raymond Scott receives his drill instructor's salute after completing the AMDO program and being commissioned.*



# Towing The Line In ASW

Story by Ensign James Barrineau,  
USS *Edward McDonnell* (FF 1043)



Trying to match wits with a submarine and beat it at its own game can be exciting—especially for crew members of the frigate USS *Edward McDonnell* (FF 1043).

*Edward McDonnell* is one of six ships in the fleet employing TASS—the Towed Array Surveillance System—a passive listening device towed from a ship's fantail. Since its installation in 1978, TASS has been the determining factor in where *Edward McDonnell* goes and how it operates.

Anti-submarine warfare has always been *Edward McDonnell's* primary mission; the ship's major systems include an SQS-26 sonar, anti-submarine rocket launcher and anti-submarine torpedoes. Before TASS was installed, though, most of *Edward McDonnell's* deployments were to the North Atlantic to train and steam with other NATO ships. Today, the arena for extended deployments is usually in the Mediterranean and, except when transiting the Atlantic Ocean, *Edward McDonnell* operates alone.

One of the problems in listening for submarines is distinguishing the sound a submarine makes from background noise caused by the surface ship. Towing TASS solves part of the problem because the listening device is removed from the ship. But because *Edward McDonnell* has to remain undetected by the submarine, controlling the ship's noise, especially noise generated by the propulsion plant, is an ever-present concern.

"We're constantly checking to determine our noise level," said Lieutenant Junior Grade David Moody, the main propulsion assistant. "We're also in close touch with the bridge and combat information center to determine the right engineering lineup for whatever the ship is doing."

The combat information center on *Edward McDonnell* is also operated according to the needs of TASS. At times all electronic signal emitters are secured to keep the ship from being detected by a submarine, so radar scope operators are non-existent. Instead, the operations specialists manning the combat information center plot contacts discovered passively. This skill is not taught in OS school and usually must be learned through on-board training.

"What we do during TASS operations is much different from what we do for normal surface contact tracking," explained Operations Specialist Second Class Thomas Schoening. "We shift our focus from the status boards and communica-





tions monitoring to the submarine.

"In a way it's more relaxed than formation steaming because a lot of different things aren't happening at one time. Then again, it's sometimes more intense because you're focused on one thing only."

Ship handling is also different during TASS operations.

"When we're on TASS operations alone, it's easy to lose our alertness because no other ships are around," said Lieutenant Robert Burrell, *Edward McDonnell's* first lieutenant.

"We also have to remember that we're towing something behind us that restricts our maneuverability."

The TASS van, where the first submarine contact is usually made, is the heart of the operation. The van is manned by ocean systems technicians, a rate not normally found on board ships. They are trained to detect noise within the ocean and to read how a sound is made. The



ocean systems techs often have to volunteer for sea duty, because they usually are assigned to shore-based facilities.

"I volunteered to be on a TASS ship," said Ocean Systems Technician First Class Benjamin McKinney. "I've worked at a shore facility and I like the challenge of shipboard detection better."

Inside the TASS van, submarine contacts are made or broken. Charts and intelligence data are used to determine the best course to pursue an elusive submarine.

This role makes for solitary duty. While much of the rest of the fleet is steaming in impressive task groups, *Edward McDonnell* is usually on its own, tracking an unseen foe and perfecting its own subtle brand of warfare. □

*Opposite page: (Top) USS Edward McDonnell's (FF 1043) fantail is dominated by the reel needed to lower the array to optimum depth. (Bottom) OTSN Michael Sendling and OT3 Marcus Minter thread the array through its trough in preparation for deployment. Left: McDonnell's OTs gather around their "tail" as part of a pre-deployment check. Below: OTC Jimmy Eppinette examines the array.*





# Bearings

## Go Straight Up, Young Man

Some go east, some go west, and a few go straight up.

Commander Jon McBride is one who is headed straight up—and his journey from his home in the mountains of West Virginia is leading to the foothills of space. McBride is scheduled to pilot the space shuttle *Challenger* on its next flight into orbit this fall.

McBride is no stranger to the space shuttle program. During the historic first space shuttle flight, he piloted the lead chase plane, flying up to meet *Columbia* upon its return to Earth and accompanying the shuttle to the ground.

"During flights two, three and four, I was involved with check-out and evaluation of computer software used aboard the orbiters, and for flights five, six and seven, I was capsule communicator—the 'voice of Houston,' " he said. "Since then, I've been training for my own mission. It will be the longest space shuttle mission to date—10 or 11 days."

Three naval officers—McBride, mission commander Captain Robert Crippen, mission specialist Lieutenant Commander David Leestma—and two women, mission specialist Sally Ride and Kathryn Sullivan, will comprise the *Challenger* crew.

McBride said it is great to be readying for an actual flight, and credits Navy training as the reason so many Navy pilots have been involved in the space program.

"To land on a pitching aircraft carrier deck at night requires precise skills and a lot of concentration," McBride said. "Experience like that is a real plus." He ought to know. He's logged 4,500 flight hours and made 400 carrier landings.

McBride submitted his application to NASA through the Navy in 1977 and was invited to Houston for an interview.



Photo by PH1 Lon Lauber

**Cmdr. McBride has piloted some 30 different types of aircraft in his career.**

"NASA screened 10,000 applicants, invited 200 for interviews, and picked 15. I felt very honored to be among that group," he said.

McBride, whose son, Rich, will graduate from the U.S. Naval Academy this

summer, says, "I set goals. I try to wake up each morning with something specifically outlined to do that day, something to bring me closer to those goals." ■

—Story by JO2 Jeff Harstedt,  
NavPACen, San Diego



## LMET: Learning To Lead

Naval Training Center San Diego is where new recruits receive basic training and where young technicians learn to operate and repair sophisticated Navy equipment. It is also where petty officers learn to become leaders.

"The Leadership Management Education and Training school is 80 hours of intense concentrated courses designed to produce the finest and most skilled managers and leaders this Navy ever had," said the school's director, Master Chief Mess Management Specialist Fred B. Bihis.

It was discovered through observation that superior leaders exhibit many of the same skills and qualities. LMET focuses on the concept that these leadership

skills can be learned, dispensing with the myth that leaders are born and not made.

LMET was first introduced in 1978 when a randomly selected group of junior petty officers participated in the pilot course at Naval Amphibious Base Coronado, Calif. Today, NTC San Diego is one of 12 sites where the course is offered to prospective leading petty officers.

"LMET courses at NTC (San Diego) provide the techniques that can be applied successfully by the LPO in everyday situations. It's our goal to help second and first class petty officers become effective leaders and managers," said Bihis. "The aim isn't to fit all leaders into a mold. It is to show that their personal strengths and weaknesses can help them develop into better leaders."

Students apply classroom theory to leadership and management problems found on the job. Class discussions range from the need for clarity when giving orders to administrative actions that enable the middle manager to maintain control.

LMET courses are fully accredited and each graduating student earns three college credits. LMET is a valuable tool in the growth and development of Navy petty officers as they make the difficult transition from worker to middle manager.

LMET is also available at the chief petty officer, division officer, executive officer and commanding officer level. Contact your detailer or command training officer for more information. ■

—Story by JO1 Al Holston Jr.,  
NTC San Diego

## Officers Need Subspecialties

First priority among naval officers is their warfare specialty—aviation, surface, submarine or special warfare. However, to keep pace with the Navy's increasing complexity, officers are being encouraged to pursue subspecialties as well.

Today, there are some 70 subspecialty areas for Navy officers, ranging from

oceanography and meteorology to telecommunications and national security affairs.

Some subspecialty billets require proven experience only, but some 6,000 billets require postgraduate education. Such requirements may be fulfilled at designated universities or at the Naval Postgraduate School, Monterey, Calif.

Before consideration for postgraduate school, officers should work toward establishing a track record of on-the-job experience or correspondence courses.

These independent efforts are important prerequisites for selection for postgraduate school.

Not every officer will follow the subspecialty route. But, according to the *Unrestricted Line Career Guidebook*, officers should blend their operational tours with shore tours in subspecialty areas. In addition to warfare specialists, this provides the Navy with technical and managerial experts. ■

—Story by JO1 D.L. Everette,  
CNET PAO

## ETMs Needed

Navy officers with the education and training management subspecialty are in high demand, and a number of educational opportunities are available to those wishing to pursue this subspecialty.

Harvard University, Cambridge, Mass.; The George Washington University, Washington, D.C.; Memphis State University, Memphis, Tenn.; Old Dominion University, Norfolk, Va.;

University of San Diego, San Diego; The University of West Florida, Pensacola, Fla.; and Stanford University, Stanford, Calif., have agreements with the Navy to provide such training.

The officers learn curriculum development and evaluation, organizational development and personnel management, the Navy resource identification and procurement system, educational research and technology, and the application of computer technology to education and training.

More than 500 ETM billets are located throughout the continental United States at fleet training centers, recruit training centers and school commands, health education and training centers, education program development centers, air training activities and officer education centers.

Interested officers should call the CNET, officer candidate program, at (904) 452-4684 (Autovon prefix 922). ■

—Story by JO1 D.L. Everette,  
CNET PAO



# Bearings



## Searching For A Few Eagle Scouts

Former president Gerald Ford is only one person on a long list of prominent Americans who has earned the rank of Eagle Scout. If you are an Eagle Scout, you're on that list of prominent Americans too, because only one scout in 100 ever earns that award—and there are only an estimated 500,000 living Eagle Scouts.

The National Eagle Scout Association is a group made up of those who earned the Eagle Scout rank while members of the Boy Scouts of America. The NESA is trying to locate all living Eagle Scouts. The search is going on throughout business, industry and the armed forces.

There are now some 77,000 NESA members, but more than one million young men have earned the rank of Eagle Scout since the first award was presented in 1912. The association doesn't know how many of those Eagle Scouts are still living, or where they live.

Eagle Scouts of all ages are being asked to contact the National Eagle Scout Association, Boy Scouts of America, 1325 Walnut Hill Lane, Irving, Texas 75062-1296.

## Finding A Way Around The Fog

Dr. Hermann Gerber, atmospheric physicist at the Naval Research Laboratory in Washington, D.C., may have just made lighthouses and foghorns obsolete. He has developed and patented a saturation hygrometer that can sense relative humidity that exceeds 100 percent in a haze or fog.

Gerber said that it is important to understand the formation of hazes and fogs because of their adverse effects on shipping, naval operations, the operations at airports and all traffic in general. A better understanding of hazes and fogs should eventually lead to improved prediction of their occurrence and thus benefit those involved in naval operations who need to be aware of such

adverse weather conditions.

In explaining his research, Gerber noted that the difference between water vapor and liquid water in the atmosphere depends primarily upon the surrounding RH—relative humidity. Dense hazes can result as the RH increases, because when the RH exceeds 100 percent, the haze droplets undergo an explosive growth and evolve into the much larger droplets found in fogs and clouds.

Progress in understanding the formation of hazes and fogs has been hampered by the lack of instruments able to measure the RH factor accurately above 95 percent and the inability to measure supersaturated conditions—conditions where the relative humidity is more than 100 percent—until Gerber's invention.

As a result of his development, Gerber is already gaining new insights into the causes of fog and haze.

## Marines Accept New Air Cushion Amphib

"Of my 34 years as a Marine, two pieces of equipment stand out more than any in terms of having a profound impact on amphibious warfare," said General Paul X. Kelley, Commandant of the Marine Corps. "The first is the helicopter. The second is the LCAC. The LCAC offers a revolutionary dimension to amphibious warfare."

The craft he is referring to is the Landing Craft, Air Cushion. The Marines recently accepted delivery of the LCAC which is capable of speeds up to 50 knots on calm seas and can carry 150 troops. It gives the Marine Corps the ability to assault 70 percent of the world's beaches as opposed to the current 17 percent accessible to today's amphibious assault vehicles.

As described in *Jane's Fighting Ships*, "LCACs are supported above the land or water surface by a continuously gen-

erated cushion of air held by flexible 'skirts' that surround the base of the vehicle."

It can clear a 4-foot obstacle and is approximately five times as fast as any of its predecessors. Mobile cargo can be off-loaded in five minutes and bulk cargo in 15 minutes, only half the time it takes now.

Secretary of the Navy John F. Lehman Jr. said the vehicle gives "a revolutionary dimension to amphibious warfare." With the exception of the V-STOL (*Harrier*) aircraft and the helicopter, Marine Corps amphibious equipment has seen few major changes since World War II.

The LCAC is compatible with ships currently being used by the Navy to deliver landing forces. But right now, the LCAC is undergoing more testing at the Naval Coastal Systems Center in Panama City, Fla. Assault Craft Unit-5, already commissioned at the center, will do the testing on the LCAC before its scheduled relocation to Camp Pendleton, Calif., in mid-1986.



## Transient Flight Line

If first impressions are lasting ones, then it's no surprise that the Sherman Field Transient Line at Naval Air Station Pensacola, Fla., has one of the finest reputations in the fleet.

"We feel that when a pilot steps out of his plane, his first impression of NAS Pensacola will come from his first few minutes with the transient line," said Lieutenant R.M. Chang, transient line branch officer.

With a staff of 23 civilians working three shifts, 24 hours a day, 365 days a year, the line handles an average of 550 aircraft per month.

"What we do is simple," explained aircraft attendant supervisor Harvey Olson. "We provide services for all types of aircraft arriving here. From an F-18 to a C-5A. That includes providing them with fuel, oil, chute packing, liquid



Photo by PH3 Ralph Kos

**Jim Causey on the transient line.**

oxygen—which is very dangerous—and personnel services...just about everything."

Chang said that the average time it takes for the transient line crew to complete a turnaround (the time from when a pilot radios the transient line for what he needs until the aircraft is ready to taxi out for takeoff) is 15 to 20 minutes, depending on the services.

Most of the comments about the transient line staff's performance reflect the efforts of its crew members: "The best line I've seen in 14 years," one pilot said. "Service...even at 1 a.m. in the morning, was helpful, courteous and quick," said another.

From the sounds of the pilots' testimony, the professional services performed by the transient line staff stretch beyond those first few minutes that an aircraft arrives into everything the crew does. And that's how good reputations are made. ■

—Story by JO3 Russ Sawyer,  
NAS Pensacola

## Marathon Run At Sea

Four sailors aboard USS *Yellowstone* (AD 41) completed a 26-mile, 385-yard marathon on board the destroyer tender while at sea.

For Electronics Technician First Class Vicky Jacobs and Electrician's Mate Fireman James B. Lewis Jr., it was their first marathon. Chief Electronics Technician Raymond Stansfield ran his marathon at the same time that his wife Suzanne, some 4,000 miles away in Virginia, ran hers. And Electrician's Mate Third Class Greg Renaud, running in his 26th marathon, made it the second one he had run backwards.

The materials handling passageway on the ship's second deck was the site of the marathon. While *Yellowstone* was anchored in the North Atlantic Ocean, each runner completed 241 laps, which included 18 laps of 850 feet, 223 laps of 552 feet, more than 900 corners,

and an extra 50 feet.

"The corners slowed us down a little," Stansfield said. "Still, I'm happy we all finished."

The chief completed his marathon run in less than five hours. Though he didn't know his wife's marathon time in Virginia Beach, Va., when he finished, he expected that she had finished in a shorter time.

Jacobs, who has been running less than a year, was happy just to have finished the marathon; she said training for it on board the ship was very different from running on land.

"When the seas got rough, it was like running on hills that I couldn't see," she said.

Lewis was surprised to have completed his first marathon. Originally intending only to accompany Renaud during the first 10 miles, he was persuaded to finish the run.

Renaud, in contrast, is a seasoned marathon runner. He ran his first marathon at age 12 in the company of

his three older brothers. It took him five hours, 27 minutes to run the marathon backwards. Running forward, he could have crossed the finish line in less than three hours.

"My best marathon time was two hours, 48 minutes in November 1982 when I completed the Marine Corps Marathon in Washington, D.C.," he said.

That 1982 time qualified Renaud for running the Boston Marathon; however, he lacked the funds to travel there and compete. He hopes to requalify later this year.

There are quite a few runners on board *Yellowstone*, some who have done well in other organized races, and the tender provides incentives for them. The ship's recreation fund pays race entry fees for anyone who runs in organized races; also, every person who runs 250 miles on board is awarded a "250-Mile Club" T-shirt. ■

—Story by Lt. Janice M. Bellucci,  
NR NIRA Det. 206



# Reserve Seabees Show Readiness

Story by JO1 Vic Loisel, NR AV Unit 0193, Willow Grove, Pa.

The challenge: get 89 combat-ready reserve Seabees and their heavy construction equipment from their permanent drill site to an airfield, have them fully staged for deployment to a remote area, and ensure they're ready to fight and build projects during combat. And do it all within 48 hours from the time of the order to deploy.

Sound impossible? Perhaps, but that was the mission for the Seabees of Reserve Naval Mobile Construction Battalion 23, 8th Regiment, during the unit's last active-duty-for-training period.

Operation Green Stinger '84 was a test of Seabee reserve readiness. The Navy's construction battalions have literally been busy as bees perfecting their readiness capabilities. Training has been intensified, skills have been developed and modified,

and special equipment has been created. But the Navy wanted to know how fast a battalion could respond to orders to deploy.

One of the units tasked with testing the rapid response was the 23rd, the battalion that last year, for the fifth time in 10 years, won the Rear Admiral John R. Perry Trophy awarded annually to the most mobilization-ready battalion.

This was the second test of reserve Seabee rapid deployment—RNMCB 24 had been through a similar exercise two weeks earlier. But, for the first time, the additional complexity of taking a convoy from the battalion's permanent drill site (at Fort Belvoir, Va.) to the airlift site (at Andrews Air Force Base, Md.) was required. And the 48-hour deadline still had to be met.

The mobilization exercise was planned



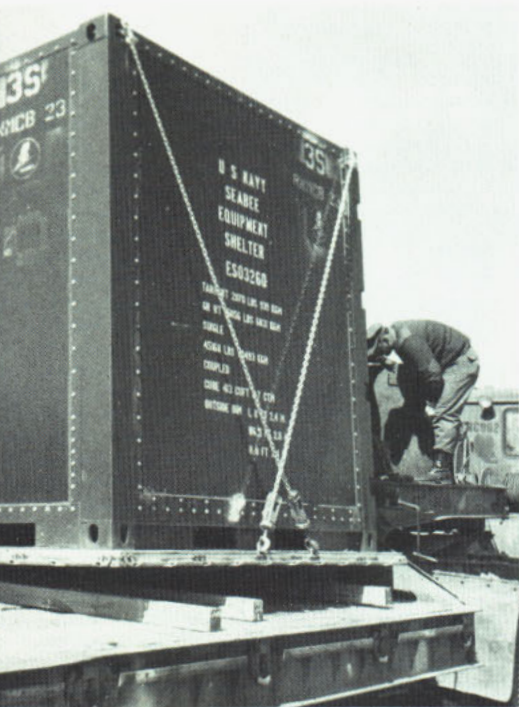
around a two-week annual active-duty-for-training period at Camp Upshur, Marine Base Quantico, Va. When the order to deploy came through, the 23rd's air detachment and its support team were in quarters at Camp Upshur. The detachment's construction equipment and a handling crew were at Fort Belvoir.

Immediately, a heavy security perimeter was established, and the permanent drill site at Fort Belvoir began humming with activity. The team's construction equipment was brought out of storage and run through a detailed operational check and wash down. Where necessary, machinery was dismantled for air transport. Food and mess supplies, medical equip-





*Opposite page: BT2 Eugene Fleming checks his gear before flying. Center: Tricon containing equipment and supplies is loaded aboard a trailer for convoy to Andrews AFB, Md. Left: Tricon is loaded onto C-130 for flight to Fort Bragg, N.C. Below left: Lt. Robert Jackson samples the new style field rations. Photos by PH2 Heidi Nickel, USNR-R*



Instead, they got a good night's sleep.

The next morning they traveled to the permanent drill site at Fort Belvoir, where they completed processing and had a rigorous inspection to determine the combat readiness of each man.

The construction equipment had been loaded aboard Army flatbed trucks that morning and convoyed to Andrews AFB. There the equipment was assembled on the flight line and again inspected—this time by Air Force people—to verify the air worthiness of the cargo.

At this point, when the air detachment had passed its personnel and gear inspection, proving it ready to deploy, and all its construction and field support equipment had been positioned and readied for loading onto aircraft, the clock stopped.

Seabees of the 23rd had more than met the challenge—they'd beaten the deadline by 11 hours.

Commander Tom Gross, the 23rd's former commanding officer and now the 8th

Regiment's chief staff officer, said, "The performance of the battalion's air detachment was superb. They have demonstrated that a reserve battalion of Seabees can measure up to all the challenges associated with being prepared to go within 48 hours."

But the rapid deployment call was just the first part of Operation Green Stinger. An actual "flyaway" of the air detachment on Air Force C-130s was still to come, with landings in "hostile territory"—an expeditionary airstrip at Fort Bragg, N.C. The team had to set up a defense perimeter and "dig in," and then complete several construction projects during a six-day field exercise while under heavy attack by "aggressors"—a crack Ranger combat team from Fort Bragg.

Still there was more. In addition to Green Stinger, the battalion had to go through an intensive combat training program, followed by a demanding three-day field exercise.

To top the two weeks off, the air detachment had to "retrograde"—account for and reload all its equipment and supplies for return to Andrews AFB. This time, however, there was no support team. Just 89 weary Seabees.

Captain Melvin H. Chiogiji, commander of the 8th Regiment, commented on Operation Green Stinger and the 23rd's two weeks of active duty: "It went very, very well. This was the first time ever an 89-man air det actually redeployed itself back out of the field. The 8th Regiment's PRCP (personnel readiness capability program) has increased markedly because of this." □

ment and communications gear were drawn and checked. Then the equipment and supplies were loaded into "tricon" containers which the 8th Regiment helped design.

It was only the second use of the containers, and their first service on a surface convoy as well as on an airlift. They were judged to be far more efficient than older methods.

Back at Camp Upshur, the air detachment team had also turned to. Men were mustered, inspected and checked for medical and dental fitness. They were then issued full field combat gear and weapons for self-defense.

They weren't given liberty that night.



*Who's a Navy spouse? Some Navy man's wife? Not anymore,  
and especially not in the case of the Jaynes, where. . .*

# Joe Is a Navy Spouse

Story and photos by Dave Fraker, NAS Lemoore, Calif.





She grew up in a circus, he in a conservative family. Her mother tamed lions, his father was a college professor.

She became a naval aviation maintenance officer; he is not yet ready to channel all his energies into one career.

They are Joe and Evelyn Jaynes; they met and married while attending college under the Navy's Broadened Opportunity for Officer Selection and Training program in San Diego. She was then an aviation machinist's mate with one year in the Navy—he was a machinist's mate third class with three years of naval service.

They went on to the University of Florida on four-year scholarships, but Joe dropped out after two years. "I decided a Navy career was not what I wanted," he said. "If I would have remained I would be surface and she would be aviation. Those career choices are not compatible. Our time together would be limited, so I quit school and went to work. I feel I made the right decision."

Lieutenant Junior Grade Evelyn Jaynes is now an assistant maintenance officer with the Organization Maintenance Division at Naval Air Station Lemoore, Calif. "We are four officers and 50 enlisted," she said. "We have all the functions of a squadron, and we have a mixture of rates. I have to make sure my people get the proper training to satisfy the requirements of the division and the requirements of their rates. We are responsible for helo maintenance and all transit line operations."

Evelyn said she will stay in the Navy as long as she continues to enjoy her chosen career field. "It has good and bad points but the bottom line is I enjoy what I am doing," she said.

In her designated field, 30 to 40 women are among 600 officers competing for assignments and promotions. "We start working with my detailer at least a year before transfer. Before we came here we both felt the choices were limited. Some were at overseas areas and others were in stateside locations we did not want. I said, 'Let's go to Lemoore.'"

This summer the Jaynes transfer to Naval Air Station Brunswick, Maine—a location chosen by Joe because it is a part of the United States they have not seen. "Moving to different areas adds to the

spice of life," Joe said.

Joe—tall and thin and wearing wire-rimmed spectacles—entered the Navy at age 17, immediately after completing high school, and made several cruises to the Mediterranean.

Joe describes Evelyn as quite persuasive and goal-oriented. "She has directed all her energies toward becoming the best aviation maintenance officer she can be. I can see myself as an anthropologist, engineer, foreign affairs specialist or a physicist. I am just not ready to direct all my energies into one area, but I plan on attending the University of Maine when we transfer. My ambition is to get my degree in engineering."



When the Jaynes arrived in Lemoore, Joe worked in resources conservation. "We are draining the brackish water from the subsurface of farmland and storing it in large solar evaporation ponds. I find the work interesting and challenging, plus, the pay is good," he said.

"People make the assumption I am in the Navy. Then Evelyn gets resentful when people ask why she isn't following her husband around. She answers, 'Because that is not normal for me.'"

How does Evelyn describe her circus upbringing? "Growing up for me was like going to the fair and never leaving for 18 years." Her mother—Harriet Beatty—is the daughter of world renowned lion tamer Clyde Beatty. Evelyn said of her mom, "My mother was the star; she was on center stage surrounded by lions and tigers. My dad was in the background training the animals, but he was sure of himself and was an equal partner."

"I never really was in an act but I did fill in on the trapeze, or the dog acts, and I would be in the production numbers. My parents were independent contractors and worked for many circuses. I was never in a town more than two weeks, so I didn't spend much time in public schools. I dropped out of high school in the 10th grade."

Evelyn describes Joe as unique, understanding and very supportive. "With society the way it is, it is very hard for a person in his position, but he is very secure with himself."

Evelyn, a petite blonde, first had thoughts about joining the Navy when she was 14. "I just knew I wanted to be close to the ocean and the Navy was what I wanted. I wanted a tactical billet, and now I push paper, manage people and manage resources."

When Evelyn joined the Navy in 1975, she became a participant in a new program broadening women's opportunities—she was assigned to Fighter Squadron 101 and was the first woman in VF-101 to actually work in the maintenance shop. Eight months later she was accepted for the BOOST program.

Evelyn's near-term goal is to attain a master's degree—probably in computers—before making lieutenant commander. In long-term planning, she would like to perhaps some day work for NASA in maintenance.

For the Jaynes, children are a possibility but not right now. Their diversity of careers is punctuated with understanding and compromise, and their social lives include attending both military functions and civilian events with Joe's business associates.

The role Joe fills as spouse is perhaps one many men would not want or could handle. However, he stands by his decision and said, "The Navy is her career, but I do not have to take seconds and neither should any spouse of a military person. Every marriage is a series of compromises and each partner is an equal."

So, to answer the cliché question, "Who is a Navy spouse—some Navy man's wife?"

Not so with the Jaynes. In today's Navy, Joe—like countless other husbands—fills the spouse's role. □



# Tarawa-class Amphibians

## Four Amphibs Rolled Up In One

What kind of Navy ship has a full flight deck for launching helicopters and *Harrier* aircraft, and a floodable well deck for launching amphibious landing craft? Only one class of ship combines these vastly different operations: *Tarawa*-class amphibious assault ships—the Navy's only class of LHAs.

The Navy has had two ships named *Tarawa*. The first was a World War II-era *Essex*-class aircraft carrier; the second USS *Tarawa* (LHA 1), although similar in appearance to the first, is a new, almost revolutionary, kind of ship.

If the two ships were moored next to each other, they'd be about the same length and width, have a comparable displacement and would be noticeable for their large flight decks and starboard-side islands. But similarities would end there.

The LHA may look like a traditional aircraft carrier, but it's not—it's a general purpose amphibious assault ship. Its flight deck is laid out for helicopter operations; in the aft section of its 820-foot hull is a well deck almost large enough to hold two World War II destroyers. Farther forward are modern living spaces for 1,800 Marines and the 900 sailors who man the ship.

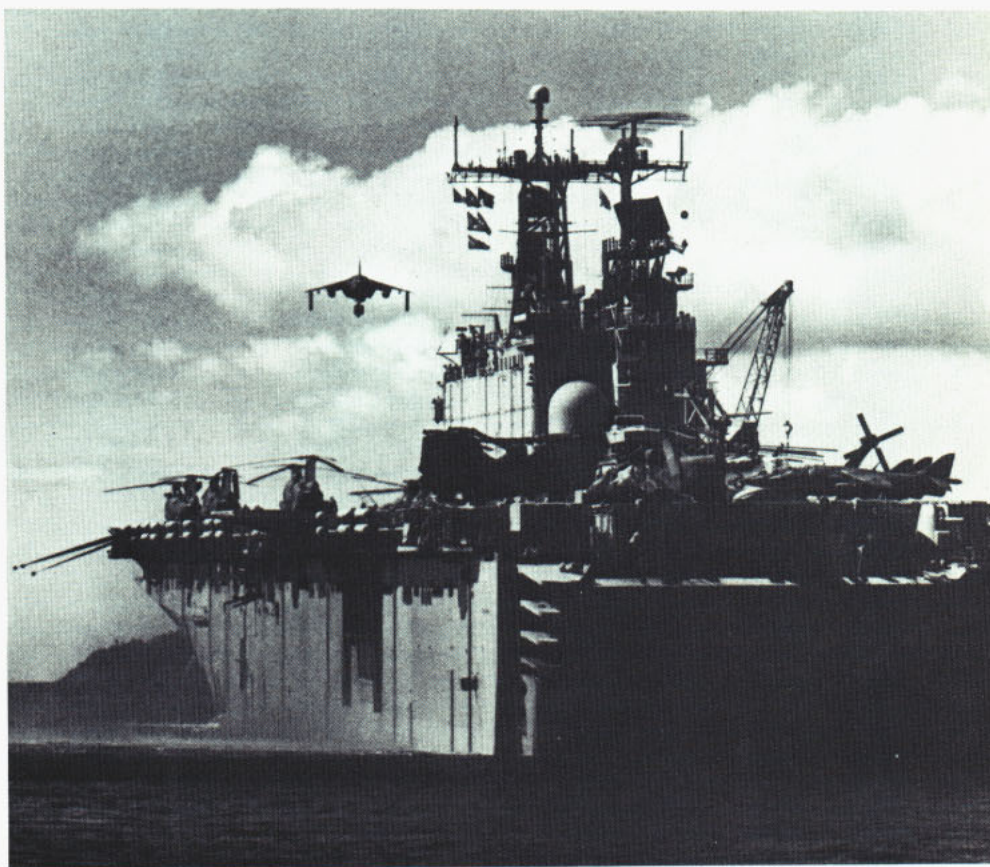
When the Navy asked for a "general purpose" amphibious ship, that's exactly what it received in the *Tarawa* class. The LHA is a blend of four other types of ship: amphibious assault ship (LPH), amphibious transport dock (LPD), amphibious cargo ship (LKA) and dock landing ship (LSD). Each LHA can carry more troops and helicopters than an LPH, more cargo than an LKA and launch as many landing

craft for a beach assault as an LSD. In fact, an LHA with one or two other amphibious ships can put ashore a landing team of 2,000 Marines—without an LHA, at least five specialized amphibious ships would be needed for the job.

*Tarawa*'s two-acre flight deck allows nine CH-46 *Sea Knight* troop-carrying helicopters to be loaded at a time. When that group takes off, another nine CH-46s are readied on deck. As a rule, LHAs usu-

ally operate with a mix of about 25 helicopters—including *Sea Knights*, heavy lift CH-53 *Sea Stallions*, UH-1 *Hueys* and AH-1 *SeaCobra* attack helicopters. In addition, they can also carry six AV-8A *Harrier* fixed wing jet aircraft. During a deployment in 1981, USS *Nassau* (LHA 4) deployed with 20 *Harriers* and no helicopters.

Beneath the flight deck is a hangar bay for storing and maintaining aircraft; the







floodable well deck for landing craft; spaces for the Marines' guns, vehicles, other equipment and supplies; berthing for the crew and Marines; and support facilities to keep the "small city" under way and mission ready.

Deep inside the ship are the largest boilers ever installed on a U.S. warship. They power two geared turbine engines which turn two propellers. The power plant creates 70,000 horsepower at the shafts—enough to push a *Tarawa*-class ship through the water in excess of 20 knots.

When under way, each *Tarawa*-class LHA can carry a combination of 250 jeeps, trucks, howitzers, tanks and similar landing force equipment, along with 1,800 pallets of cargo and ammunition—enough to support a battalion landing team for weeks of combat operations. And all of the equipment and supplies can be loaded or off-loaded quickly.

Using a combination of helicopters launched from the flight deck and assault craft launched from the well deck, an LHA can put ashore an assault landing force of more than 1,800 Marines in a matter of hours.

Accommodations on the ship for embarked Marines include spaces for a rifle battalion, a helicopter squadron, the landing force commander and his staff, and elements of tank, artillery, engineering and other support units including a Navy surgical team and the boat crews for the landing craft. Habitability for the Marines has been greatly improved over earlier classes of amphibious ships. Berthing areas include television sets, ironing boards and irons, and bunks made of aluminum in-



stead of canvas. A troop acclimatization room—a large space in which temperature and humidity can be closely matched with that of a prospective landing zone—helps keep Marines in top physical condition, even in bad weather that would prohibit them from exercising on the flight deck.

In combat there are usually casualties, and LHAs are equipped to handle them. Each ship boasts four operating rooms, pre- and post-operative wards capable of handling 300 people, X-ray facilities and three dental operating rooms. In fact, *Tarawa*'s medical facilities have been described as equal to those of some small cities.

Topside, *Tarawa*-class ships have three 5-inch guns—more than a destroyer has! For anti-aircraft defense, LHAs have two *Sea Sparrow* missile launchers and six 20mm guns; *Phalanx* close-in weapon systems are also being installed.

The Navy has five of these 40,000-ton-displacement ships: *Tarawa*, USS *Saipan* (LHA 2), USS *Belleau Wood* (LHA 3), USS *Nassau* (LHA 4) and USS *Peleliu* (LHA 5). They may look like traditional aircraft carriers but they're not. They're the only class of U.S. Navy ships with both a large flight deck for aircraft and a flooding well deck for landing craft. □

—Story by JO1 William Berry



# Kiser Runs For Children

Story by Susan Worsham, ComNavBase, Charleston, S.C.

Chief Machinist's Mate Steve Kiser celebrated a not-so-traditional Thanksgiving last year. He ran more than 100 miles in 24 hours.

In fact, the 35-year-old runner clocked 101.5 miles in the 24-hour Thanksgiving Day marathon in Charleston, S.C., and raised more than \$2,500 to benefit the March of Dimes.

"More than 250,000 babies are born every year with birth defects," Kiser said. "Instead of enjoying a traditional turkey dinner, this is what I wanted to do to say 'thank you' for the good health of my family."

Ultra marathons are nothing new to Kiser, who was assigned to the staff of Commander, Submarine Group Six in Charleston at the time of the November run. He had run in similar events in 1981 and 1982.

The first year, he raised \$550 dollars for the March of Dimes.

"When I did the first run, I started by myself, counted my own laps and kept asking myself what I was doing there," he said. "I think a lot of people didn't believe I could do it, and that's why we didn't raise much money."

Kiser did complete the marathon, though, running 91 miles in the 24 hours.

The next year, he ran more miles and raised \$2,500. Other runners joined him and helped raise more money for the March of Dimes.

This year's run attracted more runners and more dollars. Two running teams from the Charleston-based submarine tender USS *Canopus* (AS 34), a team from a local running club and other runners—more than 50 people in all—participated in "The Third Annual Steve Kiser Run Against Birth Defects." At the end of the

ultra marathon, they had collected \$3,000 for the March of Dimes.

Six years ago, Kiser couldn't have run a marathon. He was 40 pounds overweight, plagued with rheumatic fever and had asthma. He started running to get in shape and, after two months of running, entered his first 10,000-meter run. Elderly women, young children and most of the other participants left him behind during the run.

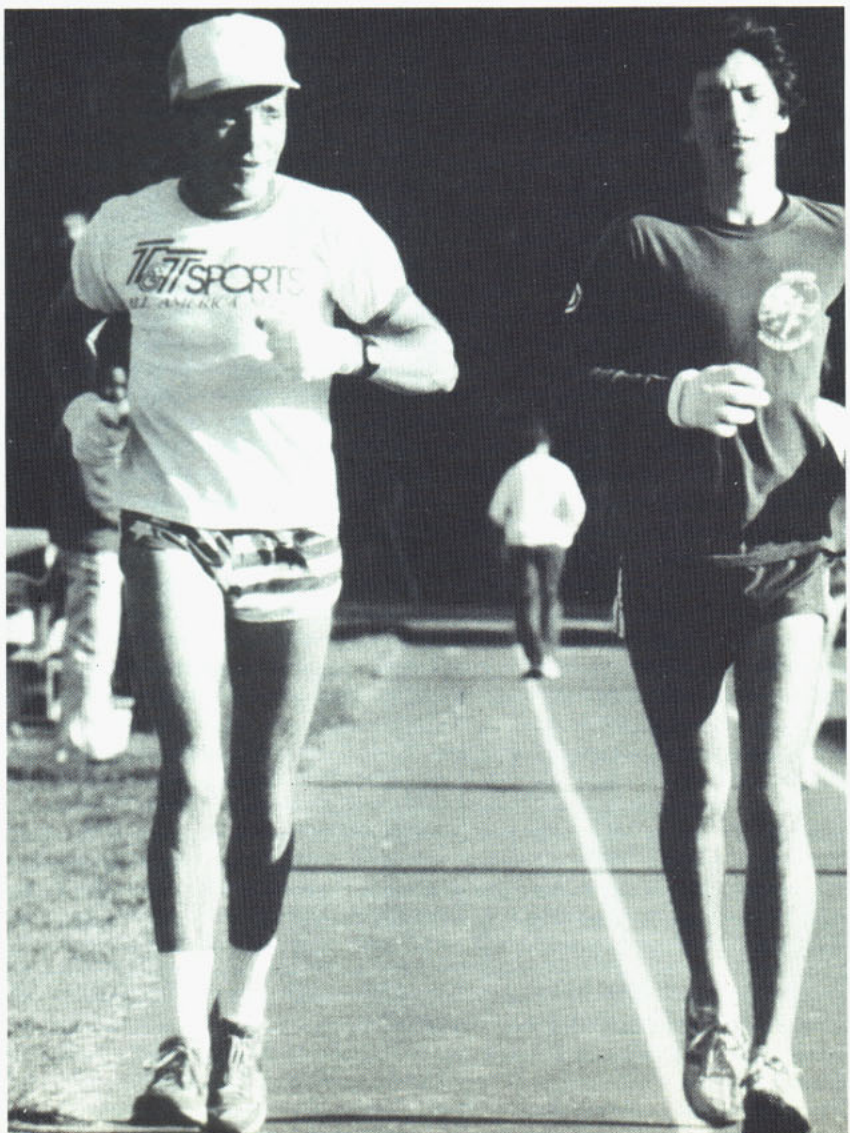
"It didn't come easy for me. I was just like every other beginning runner. At first it was a matter of endurance. Now it's a form of relaxation."

Kiser's training for the 1983 marathon included running 10 to 15 miles a day and

30 to 40 miles on weekends, weight lifting, bicycle riding, sit ups and running in place in a pool of water. Running in water takes stress off the body because the water helps hold it up. The resistance of the water also helps strengthen the legs.

When asked why he subjects himself to the strain of a 24-hour marathon, Kiser's answer is simple.

"I made a trip down to the neo-natal clinic at the Medical University of South Carolina," he said. "When I saw the spirit and stamina those children displayed, I decided that no amount of pain or hardship I could endure in 24 hours could compare to the suffering those children would endure over a lifetime." □



*"I don't have a lot of material things, but I do have my health, my family and a healthy son. That's what keeps me going for 24 hours," said MMC Steve Kiser. David Polous (right) ran with Kiser for 85 miles during the marathon. Photo by PHC Tom Dougherty, AVFacLant, Charleston, S.C.*



# Mail Buoy

## Let's Hear it for the Seabees

Your December 1983 article on Beirut was very interesting, but I have a few questions.

The article said a lot about the Marine Corps and naval fleet support, but not once has *All Hands* mentioned anything about the Navy Mobile Construction Battalion that has been in Beirut since Nov. 24, 1983. A 42-man detachment from Rota, Spain, went to Beirut to build bunkers and other support projects. The Seabees put the Marine's 22 MAU underground and have not received any credit from *All Hands* or any other naval magazine.

For the first time since Vietnam, the Seabees entered a combat situation and held with pride their great traditional motto: "Can do."

Since sending our first detachment in November, we have sent 90 additional men to Beirut.—SW2 Stephen E. Smith, NMCB One

• *Publication of the above letter is All Hands' way of letting readers know that the Seabees also served in Lebanon. It's an almost impossible task to mention every unit, every group, all the time. We haven't excluded Seabees from our pages, however, having written about NMCB 4 in March '83, NMCB 5 in April '83, NMCB 133 in June '83, NMCB 3 in September '83, and RNMCB 23 in November '83.*—ED.

## Commissioned PGs

The article "Ships With Wings" (March 1984) states that these [*Pegasus*-class hydrofoils] are the first combatants to be commissioned and the first to have actual commanding officers. This will come as quite a surprise to the former commanding officers of the Asheville-class patrol combatants such as USS *Douglas* (PG 100). I was an ET2 in 1977 when the Navy decommissioned my gunboat out from under me.—ET1 David Lee Eddy, USS *Sumter* (LST 1181).

• *ET1 Eddy refers to our statement that "Other classes of patrol boats have only been 'placed in service' and are commanded by officers in charge." The statement should have read: "Other classes of hydrofoil patrol boats. . . . There have been four hydrofoils in the Navy other than the PHM—Highpoint (PCH 1), Flagstaff (PGH 1), Tucumcari (PGH 2) and Plainview (AGEH 1)—all of which were "in service." The Asheville (PG 84)-class gunboats were commissioned. We apologize to the PG community for the error and are grateful to ET1 Eddy for pointing it out.*—ED.

## Brothers Beatty

I write in response to the April 1984 article about the four Hispanic brothers in the Navy. I and three of my brothers are in the Navy. Our father, who served in the Navy during the Korean conflict, was a hospital corpsman. I entered the Navy in 1974 and am currently an instructor at Great Lakes. My brother EM2 Mark Beatty entered the Navy in 1972 and is currently serving at a reserve unit in New Orleans. My brother MM2(SU) Marshall Beatty entered the Navy under the nuclear power program and is assigned to USS *Scamp* (SSN 588) homeported in Groton, Conn. My brother FTM3 Matthew Beatty entered the Navy under the ET/FT/DS program and is currently attending training school at Mare Island, Calif.



Since my entry into the Navy, I have been assigned to the same areas as my brothers, so the Navy allows me to see not only the world but also my brothers.—HMC(SS) Martin Beatty.

## Initiation On The Ice

"Antarctica: Navy and Science Working Together" by Lieutenant Lynnette Metcalf in *All Hands*, June 1984, is a most informative article with excellent photography.

It is quite a special privilege to serve on "the ice" and even more special to be promoted in the austere environs of Antarctica. Only a small fraction of the world's population has ever set foot on the southernmost Continent. Only a minute fraction of the Old Antarctic Explorers (OAE) are women. So while not wishing to diminish the uniqueness of Chief Dianne Feltham-Kidwell's promotion and initiation while on the ice, it should be recognized that she is not the "first female chief" to have served with the Naval Support Force, Antarctica. Such distinction will always be held by Chief Air Traffic Controller Pertricia Towne,

who served with NSFA 1978-1980.

In one of Admiral Byrd's last public interviews on television, he was asked about women serving in such a harsh, isolated and God-forsaken place. As I recall, he predicted that women would never be assigned to that type of arduous duty. On the 50th anniversary of Admiral Byrd's flight over the South Pole there were around 50 American women working on the continent—military women, scientists, and women contract employees. I wonder what Admiral Byrd would think about that. Several American women, civilian scientists and contract employees have even "wintered-over"—Lt.Cmdr. J.A. Benny, MSC, USN (OAE).

• *You're right. Chief Feltham-Kidwell wasn't the first female chief to have served with Naval Support Force, Antarctica. We didn't put it exactly right, but she was the command's first female chief selectee while deployed to Antarctica.*

*Little did Admiral Byrd know what would come to pass "On The Ice."*—ED.

# Reunions

• **USS Lindsey (DM 32)**—Reunion being planned. Contact J.L. Arrington, Route 10, Box 361-H, Charlotte, N.C. 28213.

• **USS LST 688**—Reunion being planned. Contact Carl Knauff, 1912 Ashland Dr., Clearwater, Fla. 33515.

• **USS Hambleton (DMS 20)**—Reunion being planned. Contact John (Doc) Romolo, 34 Hastings St., West Roxbury, Mass. 02132.

• **USS LST 907 (World War II)**—Planning reunion. Contact Phillip Altieri, 386 Wyoming Ave., Fairfield, Ohio 45014.

• **USS Tabberer (DE 418)**—Reunion being planned. Contact Sylvan (Goldie) Goldfein, Box 108, Norma, N.J. 08347; telephone (609) 691-6139.

• **USS Pine (AV 12)**—Planning a reunion. Contact Frank Gorthy, Box 416, Evart, Mich. 49631; telephone (616) 734-2833.

• **USS Arizona**—Reunion association seeks names of all who served aboard USS *Arizona*. Contact W.C. Nolte, USS *Arizona* Reunion Assoc., Hicksville, Ohio 43526; telephone (419) 542-7122.

• **USS Barnstable (APA 93)**—Reunion being planned. Contact Howard (Bud) Kramer, 11 Brown St., Peabody, Mass. 01960; telephone (617) 531-2153.

• **USS Pawnee (ATF 74)**—Reunion being planned. Contact LeRoy E. Zahn, P.O. Box 576, Ellinwood, Kan. 67526.



# Reunions

• **Marquette University NROTC Unit**—Planning a reunion for members of the classes of '44, '54, '64, '74, and other interested alumni. Contact Lt. D. Coles, USN, Marquette University NROTC Unit, Milwaukee, Wis. 53233; telephone (414) 224-7076.

• **USS Tinosa (SSN 606)**—Planning 20th anniversary reunion. Contact HMCSS Baird, USS *Tinosa*, FPO N.Y. 09588; telephone (207) 439-1000, ext. 2144.

• **USS Asheville**—Reunion being planned for those who served July 1936-January 1939. Contact Walter Ashe, 40 Shorewood Dr., Asheville, N.C. 28804.

• **USS Conway (DD 507)**—Reunion being planned for World War II crew members. Contact William Donnelly, P.O. Box 492, Sandy Creek, N.Y. 13145.

• **LST 755 (World War II)**—Reunion being planned. Contact Forest Armentrout, 1924 Wendell Ave., Lima, Ohio 45805.

• **USS Antietam (CV/CVS 36)**—First reunion October 1984, Pensacola, Fla., for all who served aboard. Contact Robert E. Craig, 230 Mosswood Circle, Winter Springs, Fla. 32708; telephone (305) 327-0979.

• **USS Kalinin Bay (CVE 68)**—Reunion October 1984, for former officers, crew and VC-3 squadron members. Contact Theodore H. Gardner, 7 Elmhurst Place, Cincinnati, Ohio 45208.

• **U.S. Asiatic Fleet (4-Stacker) Destroyers**—Reunion Oct. 1-7, 1984, Montgomery, Ala. Contact Ernie Holt, 37 N. Turkey Trot Road, Dadesville, Ala. 36853; telephone (205) 825-6995.

• **USS Plunkett (DD 431)**—Reunion Oct. 2-5, 1984, Norfolk, Va. Contact George A. Schweis, 18 Spruce Drive, Marshallton, R.D. 4, West Chester, Pa. 19380; telephone (215) 436-9761.

• **USS Metcalf (DD 595)**—Reunion Oct. 3-7, 1984, Baton Rouge, La. Contact John M. Chittum, 350 S. Walnut St., Huntington, W. Va. 25705; telephone (304) 523-6963.

• **26th USNCB**—Reunion Oct. 4-6, 1984, Eau Claire, Wis. Contact Harry Friedrich, 3671 Mockingbird Lane, Dayton, Ohio 45430.

• **Marine Corps Aviation Association**—Convention Oct. 4-7, 1984, Washington, D.C. Contact MCAA, P.O. Box 296, Quantico, Va. 22134.

• **USS Coral Sea (CVA 43)**—Reunion Oct. 5-7, 1984, Norfolk, Va. Contact Sal Avellino, 45-11 Arcadia Lane, Great Neck, N.Y. 11020; telephone (516) 466-9088.

• **USS Laprade (DE 409)**—Reunion Oct.

5-7, 1984, Panama City Beach, Fla. Contact John Turner, 2524 Sonora Calzada, Pensacola, Fla. 32507; telephone (904) 455-5806.

• **USS Foote (DD 511)**—Reunion Oct. 5-7, 1984, New Orleans. Contact Bill Stone, 408 Bedford St., Concord, Mass. 01742; telephone (617) 369-2762.

• **USS Thorn (DD 647)**—Reunion Oct. 5-8, 1984, Seekonk, Mass. Contact Henry C. Anderly, 39 Squantum St., Cranston, R.I. 02920; telephone (401) 942-5498.

• **USCG Shawnee (WAT 54)**—Reunion Oct. 6, 1984, Eureka, Calif. Contact Ray Smith, 122 Hawthorn Way, San Rafael, Calif. 94903; telephone (415) 472-1530 or Roy Bailey, P.O. Box 459, 253 Country Club Dr., Avila Beach, Calif. 93424; telephone (805) 595-2054.

• **USS St. Paul (CA 73)**—First reunion Oct. 9-11, 1984, Clearwater Beach, Fla. Contact USS *St. Paul* Reunion, Box 364, Port Richey, Fla. 34288-0364; telephone (813) 847-4734.

• **USS Fremont (APA 44)**—Reunion Oct. 11-14, 1984, Norfolk, Va. Contact Gerald Ford, 14505 El Rio Ct., Dale City, Va. 22193; telephone (703) 670-7773.

• **"Banana Fleet Marines"**—Reunion Oct. 11-13, 1984, Myrtle Beach, S.C. 29577. Contact Hank Thalgott, P.O. Box 95, Oxford, Fla. 32684; telephone (904) 748-2587.

• **USS James E. Craig (DE 201)**—Reunion Oct. 12-14, 1984, San Diego. Contact Bill (Doc) Woods, 1481 Fifth St., Imperial Beach, Calif. 92032; telephone (619) 424-5722.

• **USS Emmons (DD 457/DMS 22)**—Reunion Oct. 12-14, 1984, Wilmington, N.C. Contact Ed Reynolds, P.O. Box 165, Red Springs, N.C. 28377; telephone (919) 843-5924.

• **CASV-3**—Reunion Oct. 15-19, 1984, Patriot's Point, S.C. Contact J. Murray Johns, 12922 So. 123rd E. Ave., Broken Arrow, Okla. 74011; telephone (918) 369-5467.

• **VP 14, VB 102, VPB 102 (World War II Pacific)**—Reunion Oct. 18-21, 1984, Sacramento, Calif. Contact Gordon A. Miller, 3416 Strolling Hills Road, Shingles Springs, Calif. 95682; telephone (916) 677-5215.

• **USS Sumner (DD 333) (The Old Bushnell)**—Reunion Oct. 19-21, 1984, St. Louis. Contact Doc Frederick, 6553 Delfern St., San Diego, Calif. 92120; telephone (619) 286-2017.

• **USS New Jersey (BB 62)**—Reunion Oct. 19-21, 1984, Atlantic City, N.J. Contact H.P. Fagan Jr., 52 E. Lincoln Ave., Valley Stream, N.Y. 11580; telephone (516) 568-1234 (home) or (516) 420-4400 (office).

• **USS Major (DE 796)**—Reunion Oct. 19-21, 1984, Gettysburg, Pa. Contact C.C. Wilson, R.D. 2, Box W-10, Stonington, Conn. 06378.

• **Taffy 3, all ships of Battle of Leyte Gulf**—40th anniversary reunion Oct. 25-27, 1984, Charleston Harbor, S.C. Contact HERITAGE, 840 Colorado Ave. So., Minneapolis, Minn. 55416; telephone (612) 545-5595.

• **USS John C. Butler (DE 339), USS Samuel B. Roberts, USS Raymond, USS Dennis, USS Hoel, USS Johnston, USS Heerman**—Taffy 3 reunion. Charleston, S.C., Oct. 25, 1984. Contact Chester W. Skoczen, 326 Chestnut St., North Syracuse, N.Y. 13212.

• **USS Natoma Bay (CVE 62), VC 9, VC 63, VC 81, CarDiv 24**—Reunion Oct. 25-27, 1984, Charleston, S.C. Contact Glenn O. McWilliams, 966 Harbor Towne Road, Charleston, S.C. 29412.

• **USS Dyson (DD 572)**—"Little Beaver Squadron" reunion, Oct. 26-28, 1984, Tucson, Ariz. Contact John H. Carter, 702 N. Shepherd Hills, Tucson, Ariz. 85710; telephone (602) 298-7862.

• **USS Twiggs (DD 591) and USS Paul Hamilton (DD 590)**—Reunion Oct. 26-28, 1984, Anaheim, Calif. Contact Ed Andres, Ramada Inn, 1331 E. Katella, Anaheim, Calif. 92805; telephone (714) 978-8088.

• **USS Blackhawk (AD 9) and assigned destroyer divisions**—Reunion Oct. 26-28, 1984, Paducah, Ky. Contact G.H. Mason, 5112 21st St. N.E. Puyallup, Wash. 98371; telephone (206) 863-8700.

• **USS Foss (DE 59)**—Reunion Oct. 26-28, 1984, Charleston, S.C. Contact Kimber L. White, 10 Sweetbriar Dr., Newport News, Va. 23606; telephone (804) 595-3368.

• **USS Thatcher (DD 514)**—First reunion Oct. 26-30, 1984, Boston. Contact G.C. Hinds, 5509 Shooters Hill Lane, Fairfax, Va. 22032; telephone (703) 278-8254.

• **USS Hermitage (LSD 34)**—Reunion being planned for crew members who served aboard *Hermitage* 1959-1961. Contact C.J. DeHart, 1459 Robin Road, Waterloo, Iowa 50701; telephone (319) 291-6435.

• **USS Surprise (PG 63)**—Reunion being planned for original crew members of *Surprise*. Contact L.E. Cecil, 6443 Via Townsend, West Palm Beach, Fla. 33406.

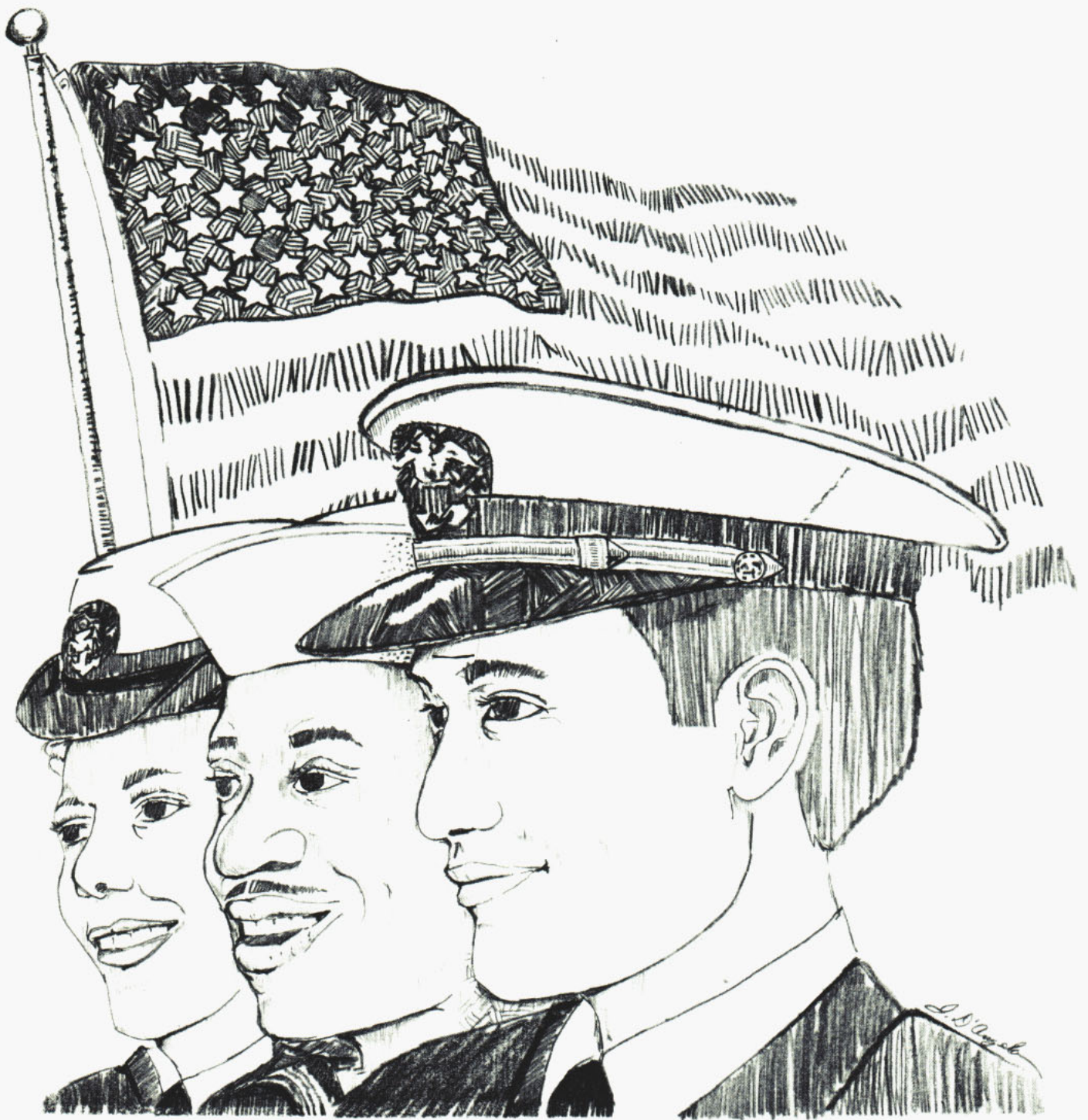
• **USS Pettit (DE 253)**—40th anniversary reunion being planned with Destroyer Escort Sailors' Association. Contact Edward L. Lesniak, 8311 N. Osceola Ave., Niles, Ill. 60648; telephone (312) 967-7655.

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