

★ ALL HANDS ★

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION



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MAY 1967





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May 1967

Nav-Pers-O

NUMBER 604

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• **AT LEFT: UNDERSTOOD**—Signalmen copy incoming blinker light message as COMPHIBRON Three enters port. Unfortunately, name of ship and photographer cannot be credited because this information was not included in the caption.

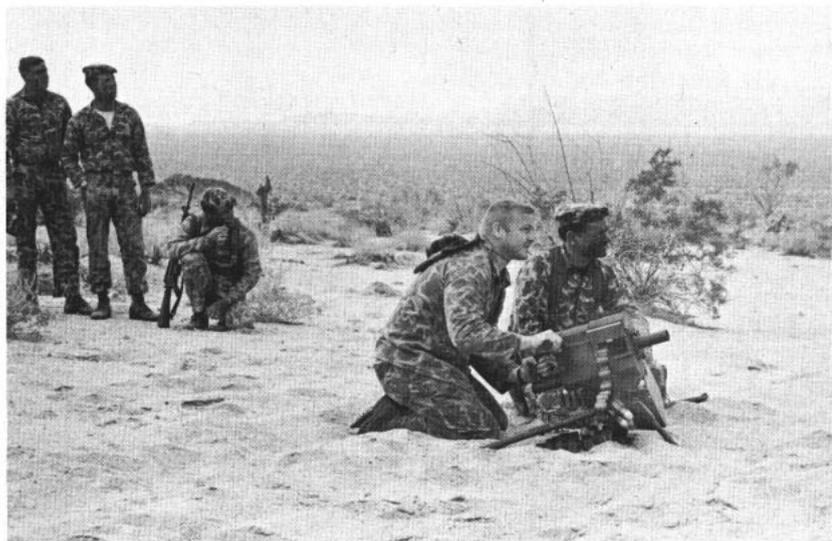
• **FRONT COVER: SYMBOLIC OF THE DESTROYER FLEET**—A swift greyhound toges through the waves, leaving free sealanes in its wake.—Actual model for artwork done by ALL HANDS staff artist Peter Sasgen was the escort ship USS Edward McDonnell (DE 1043).

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.



SEALS IN ACTION

Navy's Triphibian



THE NAVY'S SEAL TEAMS are trained to conduct small unit reconnaissance, ambush, and demolition raid missions in enemy-controlled areas. Seals are able to operate with little support in restricted waters or in a land environment.

Seals (derived from the words Sea, Air and Land) compare with the U. S. Army's Special Forces or the Air Force's Commandos, and can be classified as combination frogmen, paratroopers and commandos.

To earn a place with this elite group a man must undergo an extensive training program.

All Seals are volunteers who are selected from the Navy's highly trained Underwater Demolition Teams (UDTs).

As well as being UDT men, Seals must be qualified parachute jumpers, proficient in at least one foreign





Teams

language and experts in all types of hand-to-hand combat and self-defense measures.

In addition, they must be in excellent physical condition, highly motivated, mature, stable and self-reliant.

In essence, Seal training teaches reconnaissance, demolition and search and rescue.

Besides Navy training facilities, Seals also utilize Army and Air Force facilities.

Seals get extra pay because of the nature of their work. Each Officer Seal is paid \$220 per month above his regular pay: \$110 for parachuting and \$110 for demolition work. Enlisted Seals receive \$110 per month extra: \$55 for parachuting and \$55 for demolition work.

The first Seal teams were commissioned in 1962. At present there are over 100 Seals assigned to the Pacific Fleet.

Seal Team One, based at the U. S. Naval Amphibious Base, Coronado, Calif., deploys detachments to the Vietnam conflict zone and other areas of U. S. Pacific Fleet operations. The team is a component of the Naval Operations Support Group, Pacific, also based at Coronado. Other units making up the group are Underwater Demolition Teams 11 and 12, Beach Jumper Unit One and Boat Support Unit One. The Support Group functions

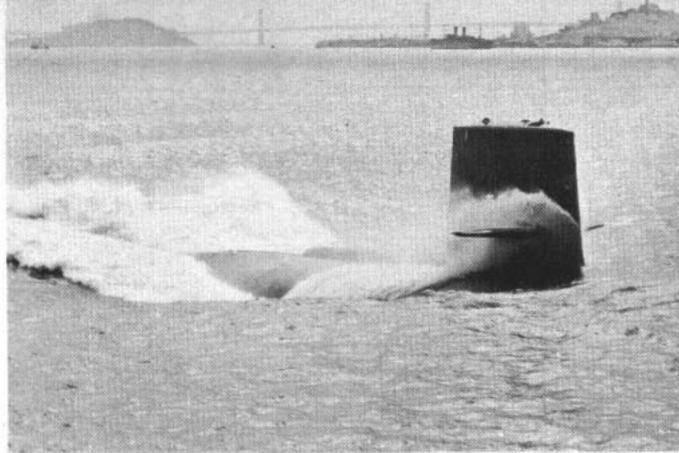
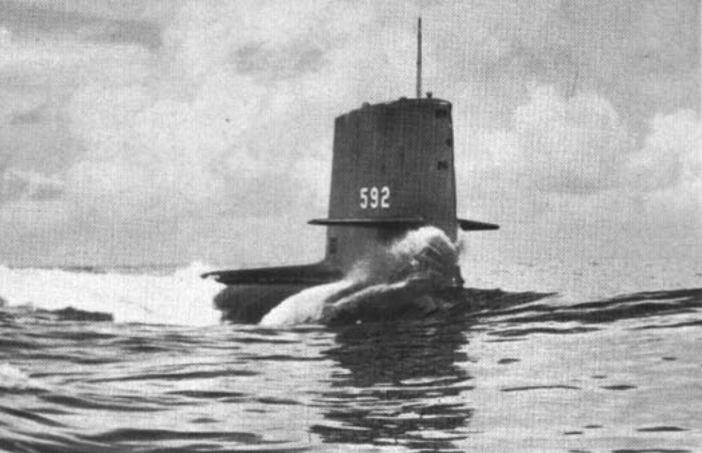


as the reconnaissance, raiding and unconventional warfare arm of the Amphibious Force, Pacific Fleet.

Clockwise from Upper Left: (1) Sea-Air-Land capabilities gave the Seals their name. These "amphibious commandos" practice making stealthy approaches and retreats by rubber boats. (2) Viet Cong sampan crew is caught by Seal Team. (3) Three members of the U. S. Navy Seal team descend from hovering helicopter by rappelling ropes to set up an ambush in the jungle. (4) Navy Seals slip ashore from an

armed LCM-6 to set an ambush in Vietnam. (5) Green and black "warpaint" and camouflaged uniforms allow Seals to blend into natural surroundings. (6) Members of a U. S. Navy Seal team aboard mechanized landing craft fire on Viet Cong huts during special Vietnamese/American operation in the Rung Sat Special Zone. (7) Navy Seals train with rapid fire M-18 grenade launcher. The 40-mm "Honeywell" launcher fires at a rate of 250 rounds per minute with effective range of 350 yards.





ATOMIC TWO—USS Snook (SSN 592) and USS Scamp (SSN 588) are two of four nuclear subs with SubFlot One.

Sailing With SubFlot



SUBMARINE rescue ship USS Florikan. (ASR 9) is on guard topside. USS Salmon shown here as an SSR is biggest submarine in the group.



SUBMARINE Flotilla One is no stranger to the San Diego naval complex. It has been around for 18 years—about as long as some of its younger sailors. The flotilla is headquarters for all the subs on the west coast and is made up of squadrons Three and Five, each with three divisions.

Broken down into more tangible proportions, this means 29 submarines, two submarine tenders and two rescue ships. Four nuclear subs are in its arsenal—uss Scamp (SSN 588), Sculpin (SSN 590), Snook (SSN 592) and Permit (SSN 594).

Except for uss Salmon (SS 573), all the flotilla's conventional submarines were commissioned during or shortly after World War II. Although the conventional subs are aging ladies, they have had their faces lifted and now have a modern

look that gives them high marks in antisubmarine warfare potential. All are perfectly capable of detecting and destroying an enemy sub.

The various units of SubFlot One spend considerable time with surface ships and Navy aircraft in hunter-killer exercises. Some of the subs are operating with the U. S. Seventh Fleet in the western Pacific.

The stateside submarines are berthed at Ballast Point on the Point Loma Peninsula near the entrance to San Diego Harbor. This is their base for operations and the place where they receive tender care from uss Sperry (AS 12) and Nereus (AS 17).

ONLY ONE of SubFlot One's original ships is still with it—she is uss Volador (SS 490). She was, in fact, the flotilla's flagship when SubFlot

TENDER LADY—USS Sperry (AS 12) is one of two serving with SubFlot One.





Chanticleer-rescue-salvage team.

One

One was activated on 15 Nov 1949.

Nowadays, *Volador* is older and perhaps wiser. She is no longer the flagship but she keeps young at heart by being overhauled every now and then. *Volador* came close to non-existence. She was on the building ways at the Naval Shipyard, Portsmouth, N. H. when World War II ended in 1945. Work wasn't resumed on her until August 1947 and she was launched in May 1948.

After builder's trials, she entered the Fleet as one of the latest Greater Underwater Propulsion Power (GUPPY) snorkel attack-type submarines in the Navy. She could attain high speeds and cruise underwater for long periods of time.

A funny thing happened to *Volador* during a Reserve training cruise to Hawaii in 1950. Her crew expected to be out of San Diego only two weeks but Korea erupted into world prominence and *Volador* didn't return for several months.

During her lengthened cruise, *Volador* and her men rescued two Navy pilots and a war correspondent from the Pacific after their helicopter crashed off the coast of Korea.

For the next three years, *Volador* operated locally from San Diego but did make cruises to Seattle and Alaska to operate with Canadian ships and Fleet aircraft. Cruises with the Canadians, in fact, became almost habitual for *Volador* during the next nine years.

In 1962, *Volador* entered the San Francisco Naval Shipyard to be converted to the Guppy III class under the Fleet Rehabilitation and



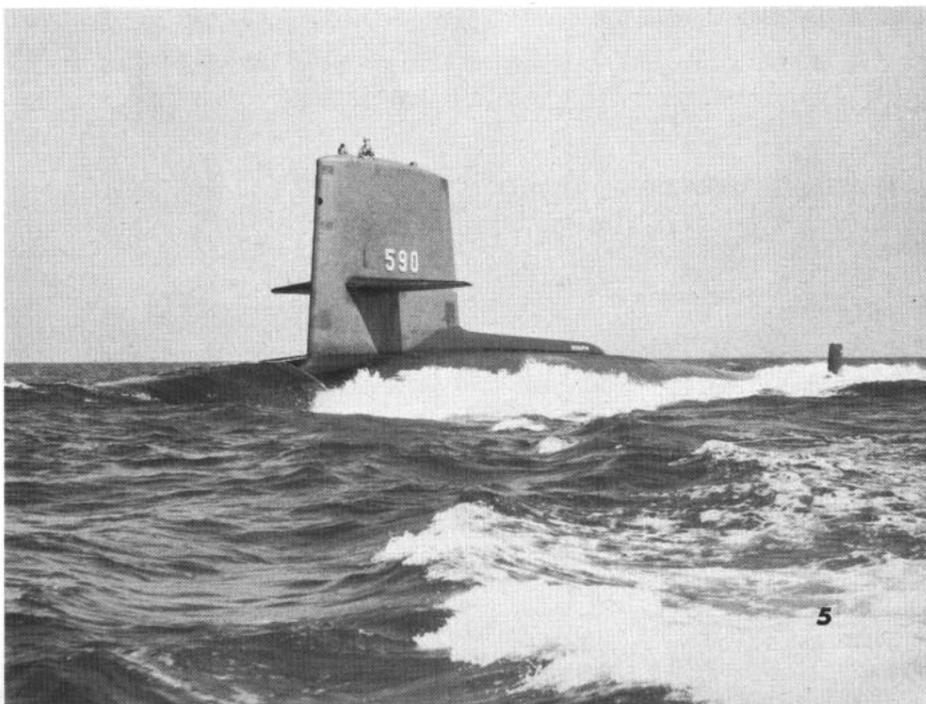
TWO MORE A SUBS—SubFlot One's atomic team is rounded out by USS *Permit* (SSN 594) above, and USS *Sculpin* (SSN 590) shown below on cruise.

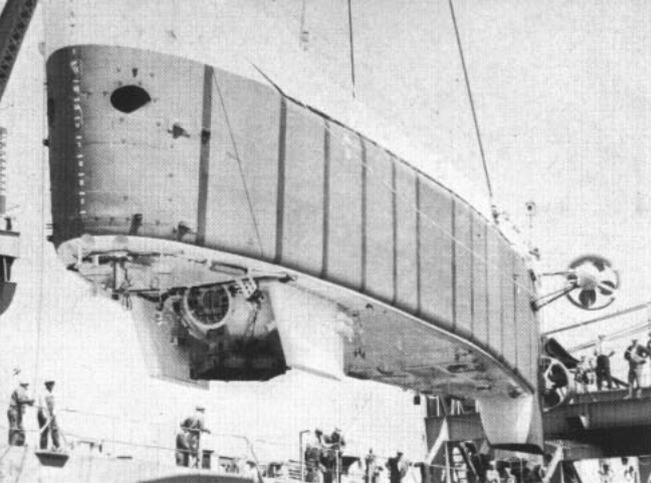
Modernization Program (FRAM). When she emerged from surgery, she was 15 feet longer and sported new electronic, fire control and sonar equipment. She became one of the most modern diesel-electric submarines in the Fleet.

Volador has seen 17 flotilla commanders and several skippers of her

own come and go, in addition to countless men in her crews. She is, however, basically no different than she was when she joined the flotilla—still steadfast and loyal.

IF YOU HEAR a submarine sailor in San Diego talking about Big Sal, the chances are he won't be referring





TRIESTE II is part of SubFlot One's Deep Submergence Group. Rt: USS Nereus (AS 17) shares the tending duties.

to a fat lady named Sally. More than likely, he will mean *uss Salmon* (SS 573).

Sal has been called unique by her crew and maybe she is. Among other superlatives, her crew says she is the longest and largest conventional submarine in the world.

They also claim she is the youngest diesel-powered ship in Submarine Flotilla One and that she is the first sub to receive a gold efficiency E.

The present *Salmon* is the third to bear the name, the other two were commissioned in 1910 and 1935. The latter was one of the S Class—a result of the London Treaty of 1935.

The present *Salmon* was commissioned in August 1956. She measures more than 350 feet and displaces 2334 tons. Originally, *Sal* was a radar picket submarine and, as such, literally bristled with radar and electronic equipment. *Sal's* high surface speed made it possible to operate in fast company—even carrier task forces. In addition to

controlling aircraft, *Sal* provided early warning of enemy air attacks.

When the Submarine Radar Picket Program was reevaluated in 1961, *Sal* was redesignated an attack submarine and, in 1965 a high capacity Guppy battery and the three PUFFS sonar domes were installed.

In 1963, *Sal* surpassed her own record by adding a gold hashmark to her solid gold E becoming, according to her crew, the first submarine in history to be awarded the battle efficiency E for six consecutive years.

SUBFLOT ONE has a couple of types that even experienced sailors don't see every day. They are the submarine rescue vessels *uss Chanticleer* (ASR 7) and *Florikan* (ASR 9). They participate in salvage operations and train Navymen to rescue submarine crews.

The two ships are similar in appearance and characteristics. *Chanticleer*, for example, carries a crew of five officers and 75 enlisted men. She is over 251 feet long and has a

42-foot beam. She displaces 2040 tons and can travel at more than 14 knots.

Fortunately, few submarines have to be rescued and salvage work sometimes runs thin, so the two ships double as target, screen escort and torpedo recovery vessels. They are frequently called upon to assist in special projects. One such project was the recovery of a Navy *Cutlass* jet fighter which had crashed off Point Mugu, Calif. Another was keeping a severely damaged ship afloat after a collision and escorting her nearly 200 miles to San Diego.

Last year, *Chanticleer* launched an operation to help supply the Navy with divers. The program consisted of lectures, movies, quizzes and indoctrination dives during which minor underwater tasks were performed.

THE ESTABLISHMENT of a deep submergence group has been one of the later developments in Submarine Flotilla One. The group was established in 1965 and trains hydronauts—underseamen who man the fleet of submersible vehicles.

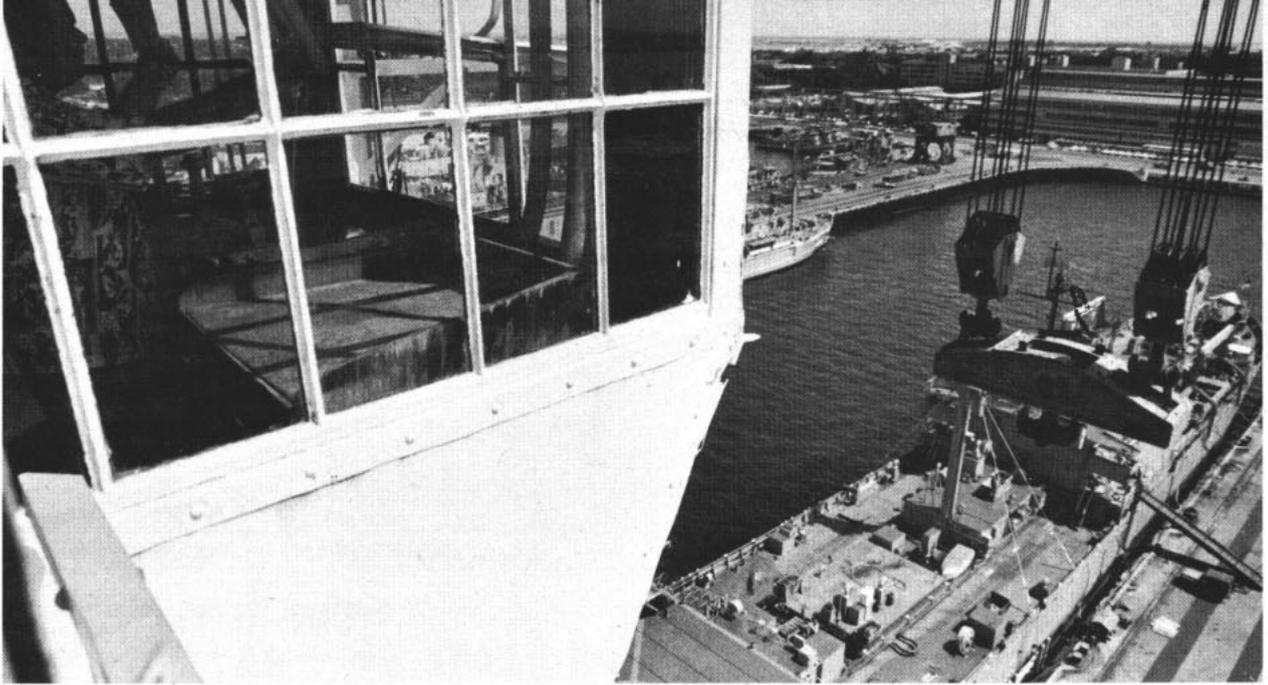
Hydronauts test and pilot the deep submergence vehicles and supply the public with much of what it knows concerning the world beneath the sea.

One of the better known vehicles of the deep submergence group is *Trieste II*—the deep-diving, record-breaking bathyscaph known to the world for its many underwater exploits both in its present form and as the original *Trieste* designed by Professor Piccard of Switzerland.

To support *Trieste II* operations, the Deep Submergence Group also has a specially designed bathyscaph floating drydock.

GOING CONCERN—1955 SubFlot One change of command looked like this.





Pearl's Hammerhead

PEARL HARBOR'S giant 200-ton capacity hammerhead crane has been in operation since 1935, at the Naval Shipyard's ship repair facility.

The behemoth weighs over 960 tons, and is over 165 feet tall. During World War II, it was the only crane on the island capable of removing the gun barrels from a battleship's gun turret, and it played a big part in the renovation of several of the battleships damaged during the attack on Pearl Harbor.

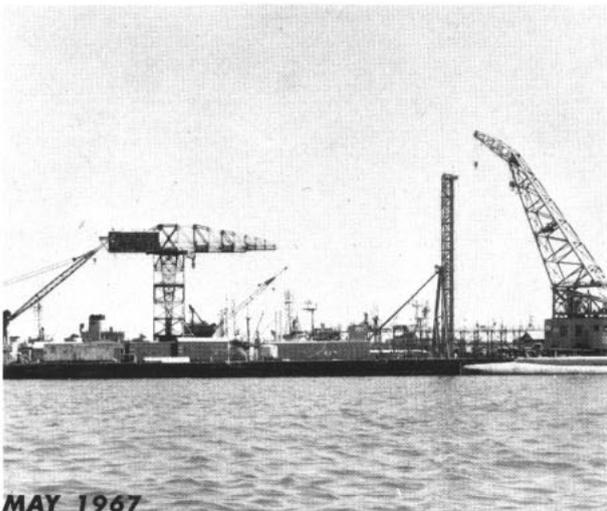
The crane is capable of hoisting more than 450,000 pounds at a speed of 11 feet per minute, and can swing a maximum load around in a little more than six minutes.

The hammerhead is used only for

jobs that are too big for the other cranes at the shipyard; jobs such as lifting turbo-electric generators and electrical equipment from the holds of cargo ships, or moving equipment which weighs more than a hundred tons.

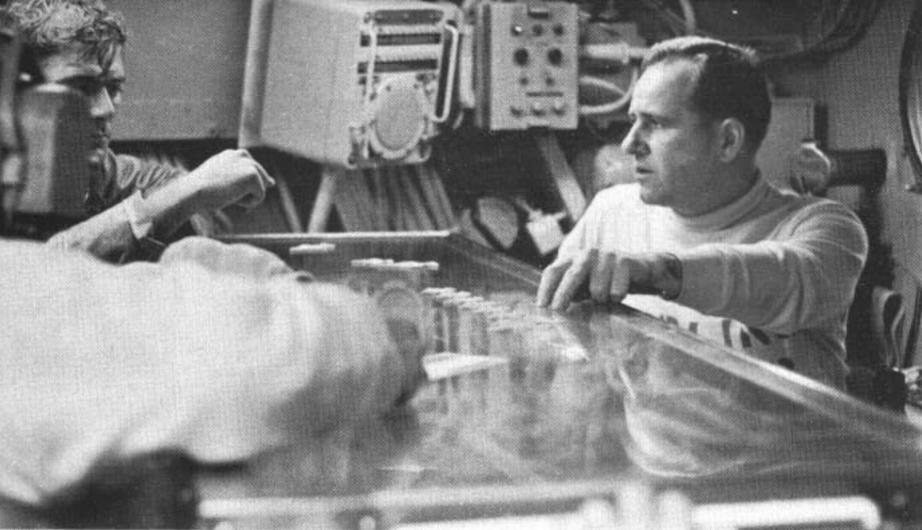
A Hawaiian tapa-cloth pattern has been painted on the sides of the hammerhead, marking it unmistakably as the Pearl Harbor hammerhead.

Clockwise from Top: (1) Operator lowers hammerhead's hook during equipment test. (2) Hammerhead looms high over Pearl Harbor Naval Shipyard. (3) The giant of cranes moves a shipyard crane for overhaul. (4) Hammerhead and fellow weightlifters on the job.



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HERE'S WHERE—Aircraft handling officer tells directors where he wants turn-around. Rt: Phantom is towed to start.

TURN-AROUND: ALL SET

WITHIN 30 TO 45 MINUTES a crew of skilled professionals completes a thorough inspection, fuels, performs minor repairs and adjustments, services the air, oxygen, and hydraulic systems, and rearms and respots an airplane aboard a U. S. Navy aircraft carrier. This is a "turn-around."

A typical sequence repeated more than 30 times a day aboard *USS Coral Sea* (CVA 43), for example, starts with the landing of an F4B Phantom. (*Coral Sea* operates with two aircraft squadrons — VF-21 and VF-154.)

As the pilot clears the landing area and taxis toward the bow of the ship, he gives his waiting maintenance supervisor a thumbs-up signal to tell him that, according to the instruments in the cockpit and the feel of the plane, it is ready for another flight. The back seat man or Radar Intercept Officer (RIO)

also indicates that his equipment is working properly. These signals are relayed to everyone involved in the turn-around. The Aircraft Handling Officer uses them to plan his next launch spot. The Lox, fueling and ordnance crews use them to determine their servicing priorities, and the squadron maintenancemen use them to coordinate the activities of their trouble-shooting crews.

After the Phantom is secured and its engines are shut down, the plane captain climbs up to the cockpit area to help the pilot and RIO with their equipment and give them a hand in disengaging themselves from the parachute harness and ejection seat. This usually is the time he receives his instructions concerning specific items he should check on before the airplane flies again: a dirty windshield; a pencil dropped in the cockpit; or any other thing which could affect the next strike.

Once on the flight deck, the Pilot-RIO team discusses with the maintenance supervisor as they perform their post-flight inspection of the airplane any possible items which may require further or closer investigation.

This inspection, carried out in conjunction with the tests and checks performed by the various servicing crews, not only confirms the pilot's feel in the air, and his instrument readings, but may reveal danger signals such as a structural failure, a possible fuel or hydraulic leak, or a worn tire. While the squadron's maintenancemen are making their inspections, the red shirt fueling crews fill the empty tanks with JP-5 jet engine fuel at the rate of 125 gallons per minute.

Under each wing the ordnance crews position, load, and fuse the bombs, missiles and rockets assigned for the next mission. They make

THUMBS UP—Pilot signals his maintenance chief his F4B is OK. Rt: Pilots walk to their planes to fly another mission.





PLANE captain services his craft.



GETTING SET—Coral Sea ordnanceman moves bomb across deck to rearm plane. Below: Phantom, loaded with Sidewinders, is refueled for flight.

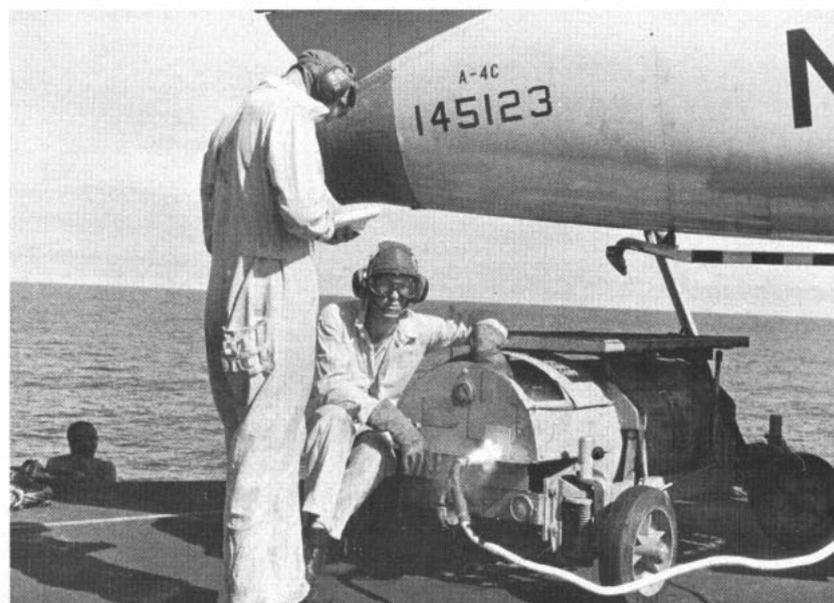


make their pre-flight inspections to insure there have been no slip-ups during the preparation, then strap into their cockpits and, on signal, start the engines. Finally, after completing all of their systems and equipment tests, they give their

thumbs-up signal and prepare to taxi toward the catapult. . . Another turn-around completed.

The crews find shelter and relax. For there will be nothing much to do for a whole 20 minutes.

LOADING UP—Coral Sea's LOX crew pumps liquefied gas into aircraft.



TO GO

the final electrical and mechanical connections between the weapons and the airplane's bomb racks and test the installation for security and correct operation.

When the fueling is completed the LOX (liquid oxygen) men move in and fill the plane's converters. (Since jet aircraft fly at extreme altitudes the pilots must breathe oxygen. Liquefied oxygen is condensed in a small container where it is converted to its gaseous state and supplied to the flight crew for breathing at high altitudes.)

With the time for the next launch rapidly approaching, the flight deck crew takes over. A tow bar is attached to the nose wheel, and a tractor hitched to the other end. At a signal of the yellow-shirted director, the plane captain climbs into the cockpit to ride the Phantom's brakes.

At the same time, the director's crew removes the chains which were securing the aircraft to the deck during this preparation period. The plane is towed toward the after end of the flight deck where it is spotted exactly where the Aircraft Handling Officer indicated it should be when he placed the scale model on his planning board in Flight Deck Control.

Only minutes after the ready Phantom has been secured in its new spot, the loudspeaker announces "Pilots are manning aircraft for the next launch."

The new Pilot-RIO team members



1

Seawolf on Patrol

ONE LOOK around at most any place you happen to be in the Navy, either on the high seas or ashore, will tell you that the helicopter is playing many roles in the Navy today.

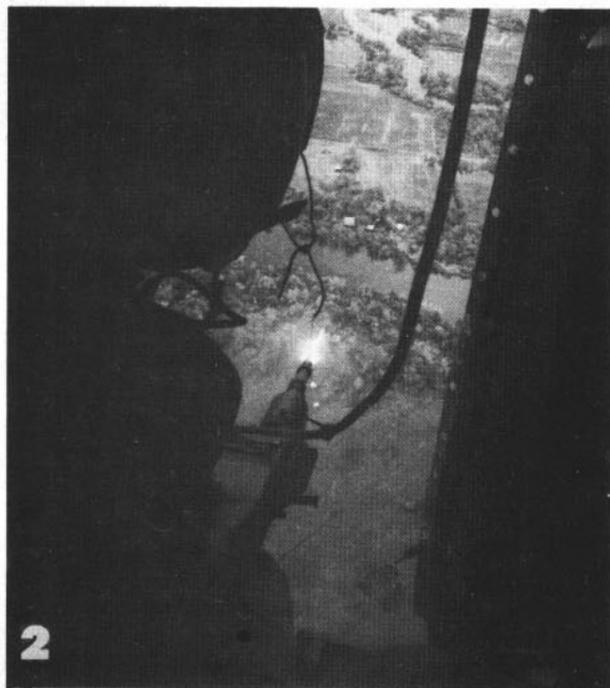
In Vietnam the Navy helicopter has really been outdoing itself. Missions such as medical evacuation of the wounded, rescue of downed

pilots on land and at sea, bringing supplies to isolated areas, fire support and observation are among the tasks performed by the choppers.

One of the latest assignments to be given the Navy whirlybird is that of sharing river patrol missions with PBRs, river patrol boats. The *Seawolf* flying on high gives the river patrol a valuable observation point

for spotting Viet Cong junks, sampans, and fortifications. Armed with rockets and M-60 machine guns, the *Seawolf* can dish out devastating firepower to support the boats on the surface.

These photos will give a hint as to what it is like to fly one of these armed copters on a combat patrol in the Vietnam fighting zone.



2



ALL HANDS

(1) A Navy armed *Seawolf* UH-1B helicopter teams up with a river patrol boat to search for enemy junks in the Co Chein River, central Mekong Delta in Vietnam.

(2) Port door gunner of a Navy *Seawolf* sends a rain of lead, hundreds of rounds a minute, into Viet Cong ambush positions in answer to enemy fire. The helo's M-60 machine guns and 14 rockets make the *Huey* a devastating weapon against the Viet Cong.

(3) A *Seawolf* copter pilot looks for red smoke marking the position of friendly units as he adjusts his rocket sighting device for a firing run on a Viet Cong bunker.

(4) Navy copter crewman wearing a flak vest locks on the barrel of one of the M-60 machine guns carried by the heavily armed helicopter. The barrels are removed as a safety precaution when the craft is inactive.

(5) Officer in charge of *Seawolf* Detachment 25 and pilots study charts while planning all-day operations in support of river patrol boats hunting the Viet Cong.

(6) Pillars of smoke, seen from a helicopter, mark the spots where this and two other *Seawolf* armed copters and U. S. Air Force F-100 jet aircraft made accurate rocket strikes on enemy units that ambushed Vietnamese river assault ships during combined U.S.-Vietnamese operations in the Mekong Delta. The helicopter is circling to make a strafing run on the position.

(7) Making a low fast pass, an armed *Seawolf* helicopter fires two of its rockets at the Viet Cong sampans attempting to escape from a canal in Vietnam.

(8) Looking over the pilot's shoulder, crewmen of the wing ship are able to see the lead helicopter of the two-ship light fire team. During an attack or low level reconnaissance, one helicopter remains aloft to provide cover while the other makes the sweep. A heavy fire team is made up of three *Seawolf* helicopters.





FOR TREATMENT, RESEARCH, TRAINING

'It Rates

IN THE COURSE of his career the Navyman will collect more in the form of medical care than he will in reenlistment bonuses.

His cough medicine is government issue, and the doctor who prescribes it does not send him a bill. Immunizations are gratis. Aspirins, eyeglasses and antacid tablets are free. His children are born in Navy hospitals or their deliveries are paid for by the government, and as they grow up their quota of cuts, bruises and broken bones costs little or nothing. Illness to a Navy family may be painful, but not to the checking account.

But the availability of medical care does not tell the entire story. Medical care, like any service, may vary in quality: The high quality of Navy medicine is every bit as important as its availability.

The National Naval Medical Center aptly represents these high medical standards. It is also partially responsible for them.

THE NATIONAL Naval Medical Center is located in Bethesda, Md., a short drive from the District of Columbia.

Almost 250 acres of park lands surround the center. Patients and their visitors stroll beneath oak, sycamore and magnolia or play golf on the nine-hole course. Children catch sunfish and small bass from the lake.

The park is dominated by the tower of Bethesda, which rises above all other buildings in the area. At its base is a cluster of lower buildings.

There are six medical components at the center. One, of course, is the hospital. The others are medical support and training organizations. They are a source of trained men and new medical techniques—two factors which are most important in the treatment of sick and injured patients.

In addition to the hospital, there is the Naval Medical School, the Naval School of Hospital Administration, the Naval Dental School, the Naval Medical Research Institute, and the Navy Toxicology Unit.

The Naval Hospital

Except for its proximity to the five support commands, Bethesda is a fairly typical naval hospital. It is not the Navy's largest; certainly not the smallest.

Each day hospital obstetricians deliver an average of six babies. A daily average of 11 major and 87 minor surgeries are performed. About 1700 outpatients are treated and 1100 radiological examinations and treatments conducted. Emergency cases average 40. The galley prepares and serves 3600 meals and the clerical staff handles 20,000 records, reports and forms.

with the World's Best'

THE NATIONAL NAVAL MEDICAL CENTER

The hospital has several specialties: microsurgery for deafness, plastic surgery, thoracic surgery, neurologic treatment, neurosurgical procedures, oncology (the study and treatment of tumorous growths), tropical diseases, radiation therapy, radioisotope studies, open heart surgery, and acrylic ocular prosthesis (artificial eyes).

It is this hospital which pioneered in the field of freeze-dried tissue preparation and storage. The world's first tissue bank was founded here in September 1949 and since has collected, sterilized and preserved human tissue through the technique. Such tissue includes, among other things, arterial segments, bone and skin.

The bank is now operated by the Naval Medical Research Institute, which furnishes freeze-dried tissue to hospitals throughout the world.

THE CARE AVAILABLE at Bethesda—and at other Navy hospitals—is evident in the treatment of Vietnam casualties. The Medical Center is prepared for the arrival of war patients each day, some with battle wounds, others with tropical diseases.

These men remain in the hospital longer than the average patient, and often pose special problems for the hospital administration.

Like all patients, the men receive the best care modern medicine can offer. Of perhaps equal importance, their stay at the hospital is made as comfortable and as pleasant as possible. Morale, as well as medicine, is important.

Casualties from Vietnam and the Seventh Fleet receive preliminary treatment in an on-the-scene medical facility. When the immediate danger is over, they are evacuated by air to a stateside hospital near their home. Those ordered to Bethesda land at Andrews AFB, where they are met by a specially equipped hospital bus or an ambulance and taken to the medical center.

The veteran's first stop is the emergency room, where a medical officer conducts a preliminary examination. A Red Cross representative provides a kit of welfare articles and asks a rather rhetorical question: Would the patient like to make a free telephone call home?

If the patient's condition is serious or critical, the presence of his next of kin is usually indicated. In such a situation the hospital can be very helpful.

Working with local and national welfare groups, transportation for the next of kin can be arranged. If child care is needed, it will be provided. If there is a question of finances, the next of kin may be provided aid and housing so they might remain near the hospital as long as necessary.

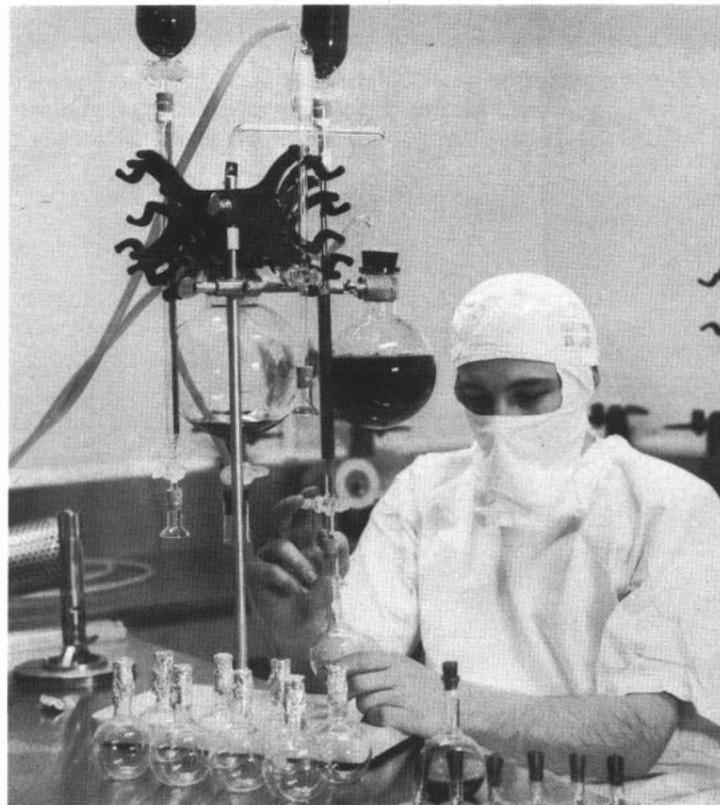
MOST CASUALTIES from Vietnam and the South China Sea face several months (three months, on the average) in the hospital, and perhaps several trips to the operating room. The hospital administration goes to great lengths to make certain these weeks are not as tedious as they might be.

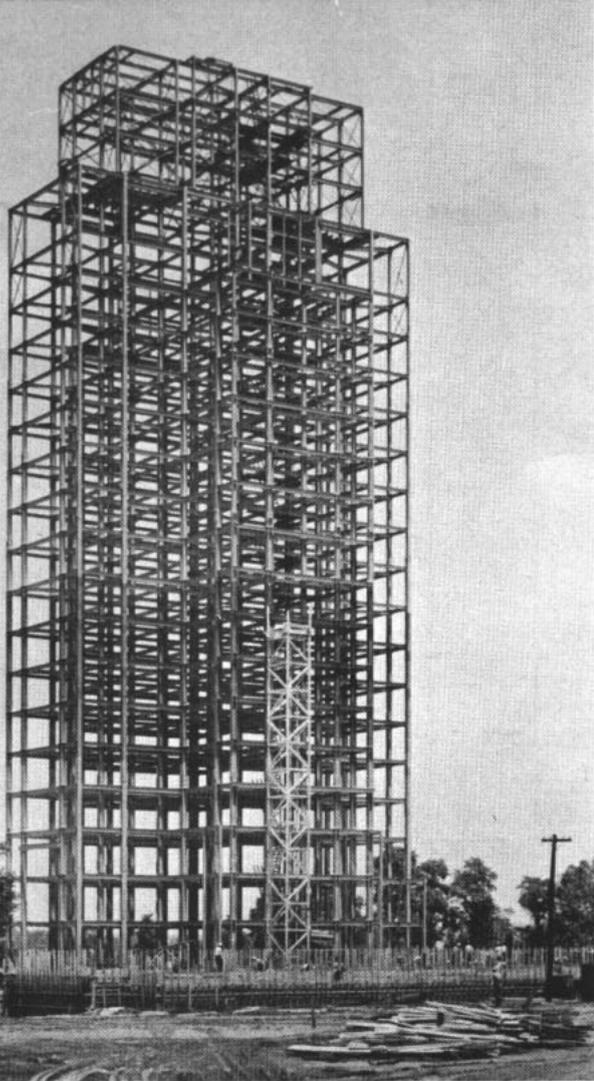
The patients who are confined to bed are provided television sets. There are books—study materials if requested—games and puzzles.

At the end of each ward is a sun porch, where the men play cards, write letters, or listen to the free jukebox (donated by a manufacturer). There is a large library and a well-equipped hobby shop. When conditions permit, the ambulatory patients may go outside into the park land.

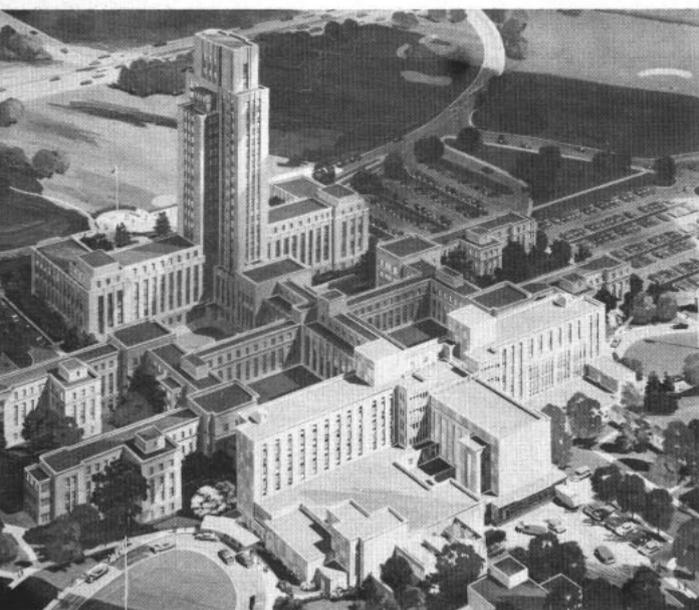
The importance of food—good, as well as healthful—is not overlooked. Hospital messes come under a differ-

TECHNICIAN prepares nutritional fluids to study tissue cells, by passing it through germ removing filters.





THE 'BONES' of National Naval Medical Center's tower looked like this during construction in 1941. Below: Concept shows expanded facilities completed in 1963.



ent organization than do general messes, so they are not considered for the Ney Award. If they were, Bethesda would probably be a leading contender.

Many patients eat at the hospital mess, where they may dine in pleasantly decorated surroundings. Those who are confined in beds or who are on special diets are served in the wards. And the food is hot.

LIKE MANY LARGE hospitals, Bethesda is a teaching institution. Some of its training programs are conducted independently; others in cooperation with the adjacent Navy Medical School.

The training programs conducted at this, and other naval hospitals, are largely responsible for the proficiency of career medical officers and hospital corpsmen.

The training is usually lengthy, always thorough. A doctor who wishes to become a pediatrician, for instance, must serve a two- to three-year residency. The pediatrics program provides the highest caliber of professional medical officers to care for military children. The officers who complete the residency program are then certified by the American Board of Pediatrics.

Upon entering the program, the prospective pediatrician is designated assistant resident and is assigned equal time on the ward and in the nursery. While assigned to the nursery, he spends each afternoon in the outpatient emergency and walk-in clinics.

DURING THE FIRST part of residency training, the doctor carries out diagnostic and therapeutic procedures and is responsible for routine patient care. Later, he is able to manage, without supervision, all normal medical pediatric problems in the infant and child. He also learns to cope with most of the common medical and surgical emergencies encountered in his specialty.

In the second year of training he spends most of his time in the pediatric clinic. Two weeks are spent in the allergy clinic, one month in the cardiology and neurology departments, and two months in the pediatric psychiatry department of the Children's Hospital in Washington, D. C.

In this stage of the program emphasis is placed upon care of the child with epilepsy, diabetes, and cardiac or neurological disorders.

Third-year pediatrics residencies are of limited availability, and much sought after. The resident who qualifies may receive advanced training in a number of subspecialties: child psychiatry, neurology, cardiology, hematology, mental retardation, allergies . . . So that such training may emphasize quality rather than quantity, the resident is usually limited to no more than two or three subspecialties.

Residency training at the Bethesda hospital is also available in other fields. You may need a medical dictionary for some of them.

Internal medicine; Thoracic and cardiovascular surgery; Urology; Ophthalmology; General surgery; Radi-

ology; Anatomic and clinical pathology; Otolaryngology; Orthopedics; Obstetrics and gynecology; Neuropsychiatry; Anesthesiology; and Plastic surgery.

Bethesda's naval hospital also has an intern training program. A rotating internship covering at least one year is provided to furnish supervised practice in internal medicine, surgery, pediatrics and obstetrics. The intern receives thorough training in laboratory diagnosis and is allowed four 'weeks' training in a selected subspecialty. For one month, the intern is assigned to the emergency room on a 24-hour on, 24-hour off rotation.

ENLISTED hospital corpsmen also receive formal training at the hospital. Among the specialties offered are:

- Eye, ear, nose and throat. The Navyman learns to assist medical officers in the diagnosis and treatment of eye, ear, nose and throat diseases. He sets up equipment, administers tests, and does clerical work. The course lasts 26 weeks.

- Urology. The corpsman assists the medical officer in the diagnosis and treatment of kidney and bladder problems. He becomes familiar with urology X-ray procedures, operates and maintains urology equipment, and prepares supplies and utensils. The course lasts 26 weeks.

- Operating room. The corpsman maintains the operating rooms, makes minor repairs to the equipment, and maintains the supplies. During operations he assists the surgeon and the anesthesiologist. The operating room course is 26 weeks in duration.

- Electroencephalography. The Navyman assists in performing EEG (brain wave) tests. The corpsman prepares the patients for the examination, records the results, and maintains the equipment. The course is 16 weeks long.

- Neuropsychiatry. The corpsman learns the care and treatment of neuropsychiatric patients, and to conduct certain varieties of neuropsychiatric therapy. He is trained to observe and report patients' conditions and actions, and to maintain the ward and clinical equipment. The school lasts 16 weeks.

- Cardiopulmonary. The student is trained in all phases of cardiopulmonary examinations, including cardiac catheterization. He learns to photograph the inside of the heart, to make arterial puncture studies and pulmonary functions studies. He receives detailed instruction on the anatomy of the heart, lungs, and circulatory system. In addition, he learns the cardiopulmonary X-ray procedures and how to analyze the gas content in the blood. The course is 52 weeks in length.

- Electrocardiograph and basal metabolism. The Navyman conducts examinations, prepares the patient, and maintains the equipment used in electrocardiograph tests. He also learns to calculate basal metabolism during the 16-week course.

- X-ray. The hospital's X-ray training program en-

compasses the final 26 weeks of a 52-week course, the first segment of which is conducted at the adjacent Naval Medical School. During the training in the hospital, the X-ray technician operates the equipment, receives experience in the application of X-ray therapy, and maintains the X-ray gear. He conducts fluoroscopic examinations, carries out dosimeter monitoring duties, processes film, and maintains X-ray files.

The Naval Medical School

Though many hospitals conduct vigorous training programs, their first duty is the treatment of sick and injured. As a result, naval hospitals rely heavily upon a steady supply of qualified medical men, both officers and enlisted, trained by institutions such as the naval medical school.

At present, the on-board program for physicians and paramedical officers includes 16 separate courses ranging from a one-week course in the medical aspects of NBC warfare defense to a four-year AMA-approved residency course in anatomical and clinical pathology.

For enlisted men, the school offers 10 different training programs, including courses for clinical laboratory technicians, radioisotope technicians, optical technicians, and the Navy's only schools for medical photography and medical illustration.

In the course of training clinical laboratory technicians, the school must maintain a laboratory. To avoid duplication of effort, therefore, the medical school does the laboratory work for the hospital.

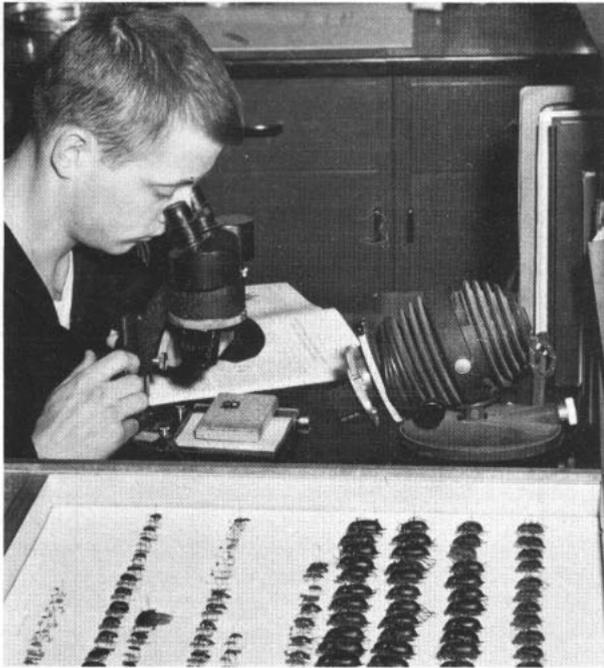
The school has a well stocked medical library. Medical department personnel may borrow medical texts and publications from the Edward Rhodes Stitt Medical Library. If foreign texts are needed, the library will provide translation service. In addition, through an inter-library loan system, data may be obtained from other libraries, including the National Library of Medicine and the Library of Congress. The Stitt Library contains more than 40,000 volumes.

The Naval Medical School pioneered the Navy's medical television program, which is now connected to federal medical activities in Washington, D. C., by an intermedical microwave TV network. The television facilities are used in teaching, and will probably form the basis for future automatic instruction of students.

THE INSTITUTION also teaches by correspondence. At present more than 4000 men and women are enrolled in Naval Medical School correspondence courses. The courses are designed primarily to prepare medical department personnel of the Inactive Reserve for active duty, but they are often taken by active duty Navy men, military men of other services and of friendly nations.

Traveling teaching teams present courses at locations throughout the U. S. at the request of the activity and upon approval of the Bureau of Medicine and Surgery. To date, courses in operational medicine and classified courses in the medical aspects of NBC warfare have

NATIONAL NAVAL MEDICAL CENTER



BUGGY BUSINESS—Lab student examines insect in Entomology Branch, Laboratory Department, NavMedScol.

been offered. These courses consist of lectures, publications provided on a loan basis, and many teaching aids—including professional lectures recorded on video tape.

One of the most important aspects of any organization is its ability to meet new problems and new situations. The medical school's flexibility is indicated by the recent establishment of the Global Medicine Program.

The new program is designed to train physicians in tropical medicine and military medical problems arising from the extensive operations in Southeast Asia. The program offers several specialized courses, and those medical officers who wish to participate may do so either by coming to the National Naval Medical Center or by ordering a packaged course.

THE GLOBAL medicine program consists of a variety of specialized courses, each designed for medical department Navymen bound for some specific type of duty.

For example, men bound for Southeast Asia as part of a MILPHAP group (Military Provincial Hospital Assistance Program) receive a tailor-made curriculum consisting of a series of lectures designed to indoctrinate the students in such topics as geography, geopolitics and medical aspects of counterinsurgency. These teams supply badly needed medical services to civilians in Vietnam and assist in the improvement of hospital plants and sanitary conditions.

The medical man who can spare the time to spend a few days at the Medical School will find almost every variety of training aid at his fingertips. Four study cubicles have been built, and contain the latest in training aids.

A compact eight-millimeter cartridge rear-screen projector is available for viewing teaching films. Videotaped lecture playbacks are available by means of a special tie-in with the television studio. The most up-to-date slide-sound equipment is available. Binocular compound microscopes are available for the study of slides.

IN ADDITION, the school is exploring the possibilities of including computer assisted instruction. Among other things, a computer could be used to locate patients who are afflicted with a disease under study.

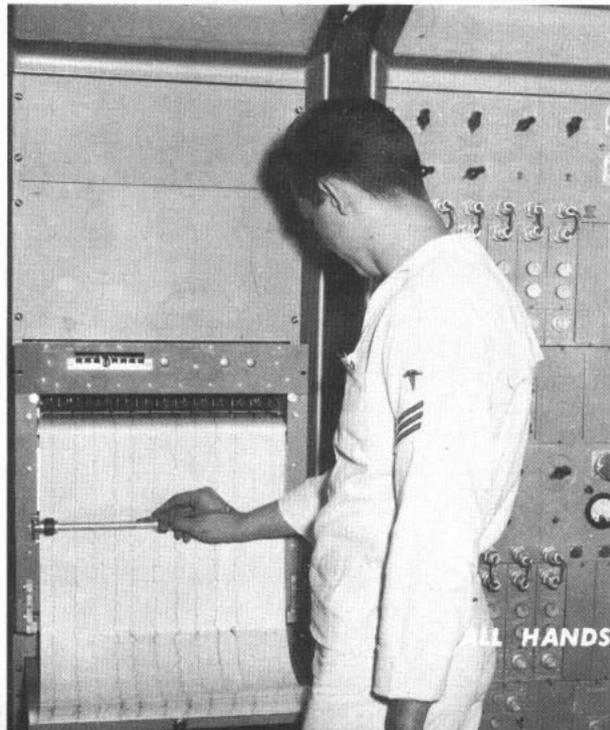
In addition to the hardware available to the global medicine student, each booth contains many reference texts and brochures covering various aspects of operational medicine. And if more information is needed, the Stitt Medical Library is easily accessible.

The courses are composed by a special staff, led by a technical informational specialist in medical science. The staff is involved in continuous reading, analysis and searching of numerous sources, such as formal scientific journals, audio-visual materials and abstracts. When necessary the staff consults with appropriate medical specialists.

New findings are especially important. They are included in the teaching material immediately, in hopes of shortening the time gap between uncovering new knowledge in medical research and the application of that knowledge in the field.

For the medical officer who cannot visit the medical center, there is a Global Medicine Synopsis series.

BRAIN—Navy medical technician checks EEG (electroencephalographic brain wave) tracings at Medical Center.



These are a group of compact refresher courses presented in convenient package form. Such courses are made available to all naval hospitals and naval field medicine training schools for use in the training and indoctrination of medical officers ordered to Southeast Asia. Diseases common to the tropics and unusual diseases not generally found in the U. S. are included in the series.

Since the medical officer is not likely to have encountered these diseases before, stress is placed on symptoms, diagnosis and accepted treatment.

In addition, the first unit of the series deals with subjects which are new and very important to the young Navy physician: problems he will encounter in a field hospital company or a collecting and clearing company. Casualty transport, medical logistics, field medical practice and environment are all included.

The contents of a typical package consist of a video recording and a looseleaf notebook of instructional materials—in effect, a self-contained miniature library. The course is intended for oral presentation with accompanying slides, which are also furnished in the package.

A good deal of other textual material is also included in each package. The student will usually find articles concerning World War II experience with the disease under study, recent publications, and bibliographical references which guide the medical officer to further material.

The Naval School of Hospital Administration

The quality of hospital administration is of the utmost importance to naval medicine. At the Naval School of Hospital Administration the Medical Service Corps Officer has the opportunity to become thoroughly versed in his field. The school offers 10 months of instruction in the modern theory and practice of progressive management.

The Naval School of Hospital Administration was originally begun in 1942 to meet the wartime demands for skilled officers. Today it is responsible for three major training programs, offers college credit through association with The George Washington University, and maintains a professional association with several other universities which offer graduate programs in hospital administration.

Courses in hospital administration are taught by military instructors, plus civilian professors from The George Washington University.

The program is designed to provide selected students maximum opportunity for development and education in the field of medical department administration.

The curriculum follows a pattern of basic subjects, with special emphasis on finance, supply, food service, hospital engineering, personnel records administration, and legal aspects of hospital administration.

Other subjects concern various aspects of accounting, business and public administration, composition, report writing, psychology, speech and statistics.

Seminars, panels and special projects afford the student an opportunity to correlate basic academic work with lecture material. The student studies, analyzes and discusses the practical aspects of medical department administration. He is also expected to solve administrative problems.

Field trips to armed forces medical facilities, civilian hospitals, the National Institutes of Health and similar institutions give the student an opportunity to observe and evaluate, at first hand, the administrative operations of a wide variety of medical activities.

OFFICERS who are selected for the 10-month course have already had substantial experience in different phases of hospital administration. The majority of students are active duty officers of the Medical Service Corps, usually lieutenants and below.

Since the school began, a total of 1102 students, consisting of 1023 naval officers, nine Army officers, 56 Air Force officers and 14 foreign officers have graduated from the school.

In addition to the 10-month school, the command offers an orientation program for officers commissioned directly from civilian life and an indoctrination program for Medical Service Corps officers commissioned from the enlisted ranks.

The orientation course is designed for men who are new both to the Navy and to the commissioned ranks. It is of one month's duration. Most of those students commissioned from civilian life hold a master's degree from an accredited school in sciences allied with medicine or from a school with a graduate program in hospital administration.

These new officers receive training in medical department organization and functions, naval orientation

PRESSURIZED—Physician emerges from experimental pressure chamber after 6-day, 600-foot working dive.



IT RATES WITH THE WORLD'S BEST

and leadership, and naval administration. The course is one month in duration.

The indoctrination program is designed for newly commissioned Medical Service Corps officers (supply and administration) who have been appointed from enlisted status. This course is also one month in duration.

The new officers receive training in naval orientation, naval leadership, naval communications and classified matter, damage control and safety, medical department orientation, hospital administration, military justice and legal aspects of hospital administration.

The Naval Dental School

The Naval Dental School is the only one of its kind in the Navy. Unlike most dental institutions, which train students to become dentists, the school is devoted entirely to advanced training.

The school provides advanced education to both the dental officer and the technician. It also has clinics serving inpatients of the Naval Hospital and active duty and retired personnel. The school has a staff of 35 dental officers, four Medical Service Corps officers, 76 dental technicians and 24 civilian employees.

The officers not only teach and carry most of the clinical load, but also engage in research studies and develop training aids, publications and correspondence courses.

Dental officers ordered to the school may take one of six 10-month courses. Of the six courses offered, one is in general dentistry and five are in dental specialties.

Training takes place in the classroom, clinic and laboratory. Many guest specialists lecture throughout the year, thus bringing a wide variety of concepts to the graduate dentist. Since 1962, when the school became affiliated with Georgetown University, officers may re-

BANK ON IT—Human tissue deposits are stored at room temperature and are available for surgical use.



ceive credit toward a Master of Science degree for courses taught at the dental school.

After an officer completes the graduate course, he may receive further advanced training and qualify to practice, teach, and conduct research studies in a special field. The school also offers second- and third-year levels of graduate education in five areas of special study, approved by the Council on Education and the American Dental Association.

There are usually about 28 officers enrolled in the graduate program. A total of 581 officers have completed advanced courses in general dentistry and specialties, and 64 have completed second- and third-year levels of study.

AS FOR THE enlisted dental technician, the school offers training which prepares the enlisted man to assist in the clinical care of patients and in administrative procedures; to fabricate dental prostheses designed by dental officers; and to maintain and repair dental equipment. Dental petty officers are trained to be technical specialists in the Advanced Prosthetic and Repair Schools and to be general dental technicians in the Advanced General School.

The repair school is the only one of its kind in the Armed Forces. Repair technicians maintain and repair some 2000 dental operating units and laboratory equipment throughout the world. A total of 1079 dental technicians have completed one of the three courses.

The school pioneered in the use of visual education for training dental personnel. At first, officers financed the project, buying apparatus and films out of personal funds. Today, the school's audiovisual department produces motion pictures, television programs and videotape recordings. Several of the motion picture films have won international awards.

The department also develops scientific exhibits, which travel internationally as well as to major dental meetings in the United States. Almost every year the school has received awards for its dental exhibits.

Members of the dental school staff are usually engaged in naval medical research studies of drugs, equipment and procedures to improve dental treatment. The school has laboratories for both biochemistry and microbiology research.

In the process of training officers and technicians, the school furnishes support for the adjacent naval hospital.

A recent innovation is a portable unit used to provide dental care to hospital patients. The unit is rolled right to the bedside.

The Naval Medical Research Institute

The research institute serves as a central biomedical laboratory for the Navy. One of its primary jobs is investigating the physiological and psychological effects of rapid technological advances—how, in other words, new machines affect the men who operate them.

The institute is also the Navy's headquarters for

research on the prevention, treatment and rehabilitation concerning diseases of particular naval importance. It conducts research on infectious diseases of importance in global operations and trains Navymen in research laboratory methods.

In addition, the Naval Medical Research Institute provides an expert staff for consultation with other activities. The staff often serves on advisory and review councils.

First commissioned in World War II, the research institute was intended to solve problems arising from wartime activities. During its initial years of operation, extensive studies were conducted on protective clothing, insect repellents, sea water desalination, aviation oxygen equipment, physiological effects of tropical environments and the problems involving immersion in cold water.

Wartime activities also included the development of vaccines and body armor and studies on night vision, nutrition, oral hygiene and tropical diseases.

THE PROFESSIONAL staff at the institute includes Navy officers in the Medical, Dental and Medical Service Corps, plus a few line officers assigned for specific studies. Enlisted Navymen are often involved in the work, and may be assigned either for temporary duty or extended tours.

In addition, a core of career civil service scientists maintain continuity and orient the research program. This group is occasionally supplemented with contract personnel with specific talents needed in certain research projects.

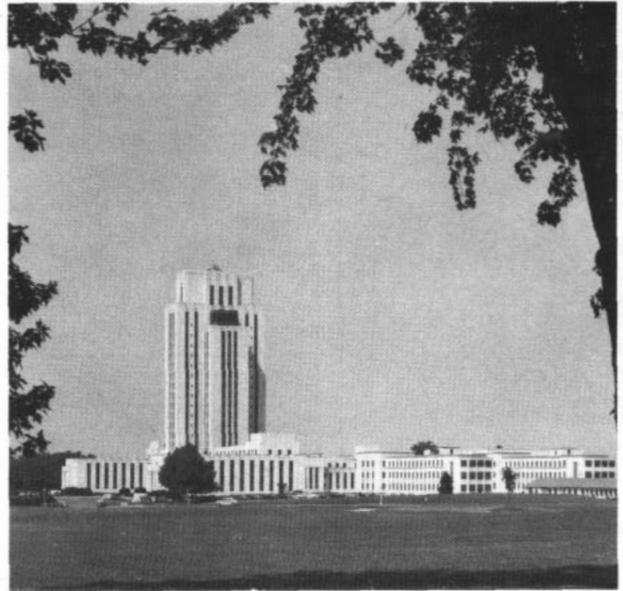
Even the casual visitor would recognize NMRI for what it is: a laboratory. The equipment includes a human gradient calorimeter, pressure chambers, and a replica of a ship's compartment. There are surgical suites, weather rooms with controlled temperatures and humidities, rooms for virus and tissue culture work, and a high amplitude vibration laboratory. Additional equipment is installed as it is needed.

Larger equipment includes an electron microscope, mass spectrometers and an ultra-centrifuge. Supporting the staff activities are completely equipped animal laboratories, a library, an instrumentation laboratory, a photographic library and laboratory, and conference rooms.

MOST NMRI projects originate when biomedical problems arise from naval operations—or when future operations are expected to cause such problems. Today's program has three major objectives: clinical support, disease prevention, and discovering ways man can work safely with the latest sophisticated weapons systems.

As a result, the work is varied.

Dysentery, for instance, is a problem associated with crowded environments which has confronted the Navy for many years. One of the most complete collections



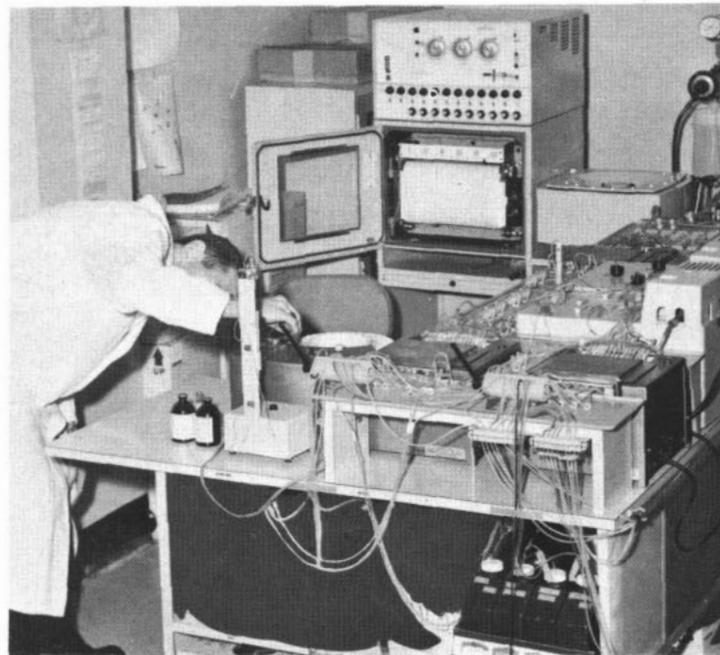
MEDICAL CENTER—Located in the complex are medical, dental schools, research institute and toxicology unit.

of the principal strains of bacteria which have been responsible for dysentery outbreaks was collected by an NMRI investigator. Because the collection was available, along with background material on each outbreak, the institute has been able to provide data of great use in further teaching and research programs.

Considerable work has been done in areas such as submarine medicine. The institute has prepared decompression tables and determined the human tolerance to atmospheric carbon dioxide, oxygen and nitrogen.

In the area of shipboard medicine, the organization has studied motion sickness, sunburn protection and

IT PERFORMS 12 separate blood chemistry exams simultaneously in Clinical Chemistry Division of NavMedScol.



problems involving hygiene and toxicology.

A particularly active area has been that of experimental surgery, in which there has been considerable work related to the development of open heart surgery and vascular prostheses.

IN RESPONSE to the recent increase of meningococcal meningitis at recruit training centers, a vigorous research program was undertaken by NMRI on the control and prevention of the disease.

Other communicable and environmental diseases, both common and exotic, are also subject to NMRI investigation. Researchers look for causes, treatments and preventive measures.

The organization has also carried out extensive studies on drug toxicity in the kidney, on laser injury mechanisms, on the functional anatomy of the visual system, on mechanical pulmonary injury and on diseases of laboratory animals.

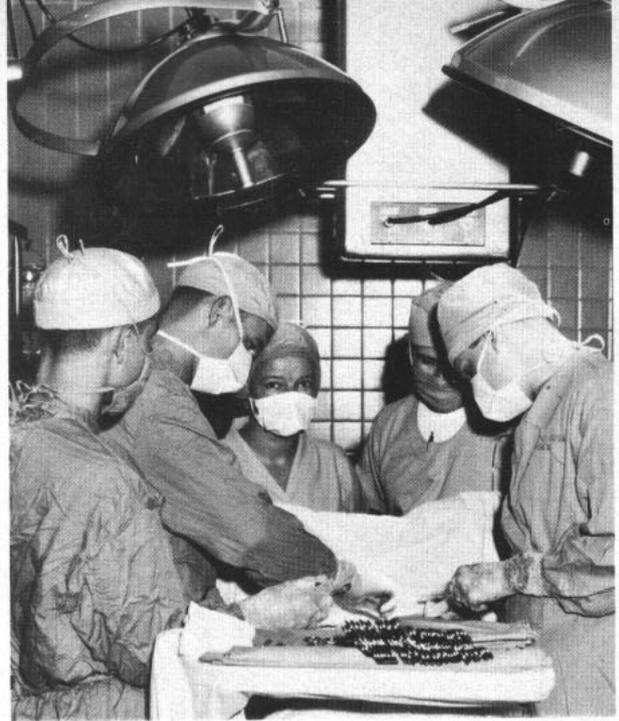
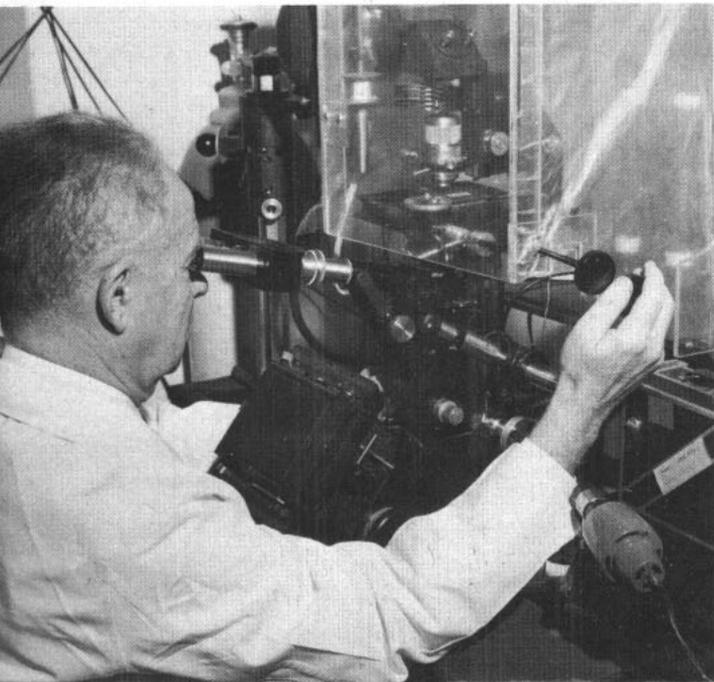
At present, the research institute is responsible for the tissue bank. Banked allografts (tissue taken from one person for grafting onto another) include cortical and cancellous bone, split-thickness skin, dura mater, aortas, aortic valves and costal cartilage.

Several methods of preserving and banking tissue are now approaching standardization, while other methods still under investigation offer possibilities for future clinical application.

The Navy Toxicology Unit

The unit provides technical and specialized services in the fields of operational toxicology and health en-

IT WORKS—Complicated gear was developed at NMRI for cultivation of malaria parasites to study infected cells.



NAVY TEAM—Navy surgeons, Navy nurses and operating room technicians perform surgery at Naval Hospital.

gineering. It is primarily concerned with the toxicity problems encountered aboard ships and in the design and use of new weapons systems.

The organization develops and provides biological data necessary for determining permissible limits so that precautionary measures, conducive to good health practices, may be prescribed.

Safety and potential toxic effects of a large number of substances have been evaluated, ranging from torpedo propellants to aerosol shaving cream cans. Hundreds of studies have been made with experimental animals in order to find the no-effect level, or the atmospheric concentration of a substance at which no biological effect can be expected in humans living and working in closed environments such as the nuclear powered submarines.

Most of the studies carried out in the unit are concerned with effects which might result from inhalation of the material in question. However, tests are also conducted to determine what might happen if a chemical came in contact with the skin or accidentally got into the eye or was ingested.

Before the advent of the nuclear submarine program and the subsequent establishment of the Navy Toxicology Unit, the majority of available inhalation toxicity data was concerned with industrial exposures, where an individual might be exposed for eight hours a day or 40 hours a week.

But when a nuclear submarine is on station, her crew obviously cannot go home at the end of the day or take a weekend off. Consequently, most of the inhalation studies at the unit are long-term, continuous exposures where the experimental animals are exposed

to relatively low levels of the contaminate continuously for three months or longer in a simulation of submarine conditions.

In addition to the activities described above, three related tenant activities are located nearby.

Armed Forces Radiobiology Research Institute

This was established in 1959 as a research laboratory for the armed forces to meet the needs of the Department of Defense in the area of radiobiology as it related to the military. The mission of the Institute is to: conduct scientific research in the field of radiobiology and related matters that are essential to the medical support of the U. S. military services, to national welfare and to the well-being of mankind.

Although the Institute's prime interest centers upon military-oriented radiology research, its investigations serve to extend knowledge in the use of controlled, safe amounts of nuclear energy for medical purposes as well as in the fields of health physics and radiation protection.

Children's Diagnostic and Study Unit

This unit is a cooperative research project between the National Institutes of Health and the Bethesda naval hospital. Situated on the grounds of the Medical Center, it serves children of military personnel eligible for care at the naval hospital.

Research is clinical in nature, concentrating on the

biomedical and behavioural aspects of mental retardation. The unit provides complete diagnostic and evaluation studies aimed at detecting mental retardation in children. In addition, it provides parent counseling and guidance and, where necessary, suggests facilities where further treatment or training may be obtained.

Naval Medical Data Services Center

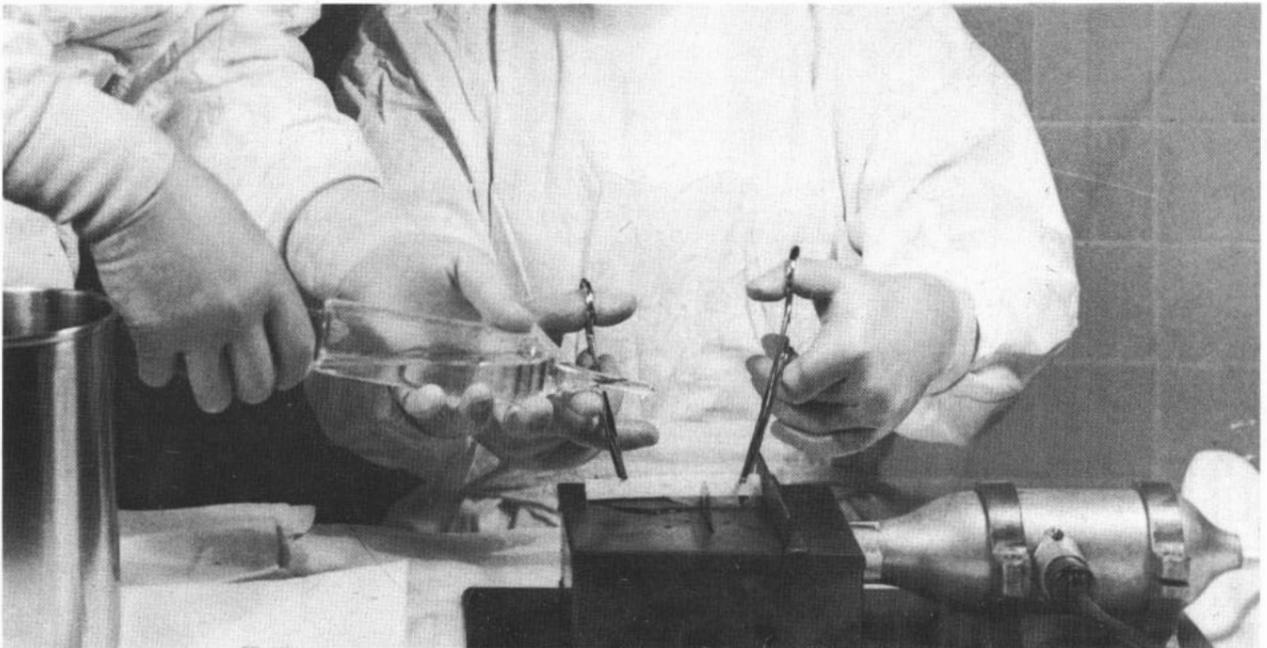
The most recent tenant activity is the data services center, established in July 1965 to provide for consolidation of automatic data processing services for the Bureau of Medicine and Surgery and other medical activities at Bethesda.

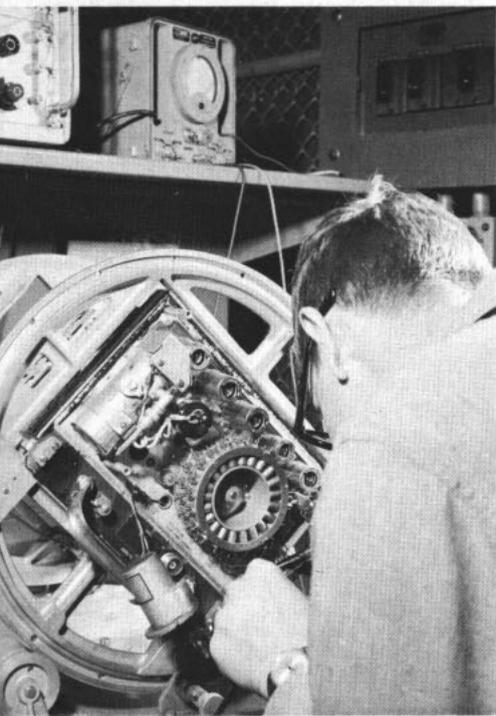
It is directing major efforts toward the development and establishment of a medical information system for processing Navy medical workload and statistical data collected from more than 300 medical facilities ashore and more than 1000 medical departments in ships at sea. The system is devised to improve record keeping, transmission of reports and retrieval of documented medical information.

In addition, the newly installed electronic computer is being used in the various medical research programs conducted at the medical center.

There you have it—the National Naval Medical Center. It is a vast complex of medical knowledge, training and care. It stands with the best in the world, and it exists for the benefit of all Navymen.

SKILLED HANDS at National Naval Medical Center, Bethesda, Md., saw and shape bone under sterile conditions.





REPAIRS are made by Aviation Electronics Technician to gear that is part of jet's navigation system. Below: Searching for a trouble spot.



SCRUTINY—Incoming gear is examined before sending for repairs.



TESTING—'Black box' is tested after repairs to ensure it is OK for reissue.

Electronic Wizards

THE IMPORTANCE to the Navy of the men and equipment in the electrical field can be well exemplified by the mission of the avionics shop of the Naval Auxiliary Air Station, Meridian, Miss.

Meridian's air station is host to two Navy jet basic training squadrons, Training Squadrons Seven and Nine. More than 120 T-2A *Buckeye* jets are used in the squadrons' program of instructing future Navy and Marine Corps pilots in flying jet aircraft. These trainers have complex electronic systems and when something goes wrong, it usually grounds the plane, which slows the pilot training program.

Avionics technicians and electricians of the avionics shop work a double-shift to keep these planes on the line.

The "techs" are responsible for the upkeep and repair of the aircraft's more sophisticated communications and navigational electronic gear. If an aircraft's radio should go out, the squadron sends it to the Supply Department which, in turn, sends it to the AV shop for repair. The same applies to navigational gear.

A piece of damaged equipment is given a thorough testing by one of

the troubleshooting technicians. After the trouble is located the equipment is repaired or, if the work to be done is beyond the avionics shop's capacity, it is sent to the overhaul and repair facility in Pensacola, Fla.

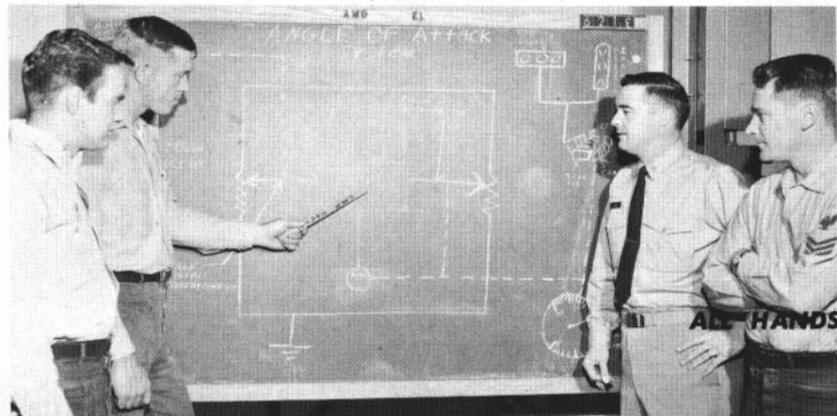
On the other side of the shop the aviation electrician's mates (AE) are at work on other electrical system parts. Instruments, AC to DC inverters, lights, ground equipment, generators and other electronics are checked and repaired. After either section of the shop finishes with a piece of equipment it is returned to the Supply Department for reissue to the squadrons.

Another responsibility of the avionics division is the upkeep of batteries. Batteries are used by the squadrons in both their aircraft and ground support vehicles.

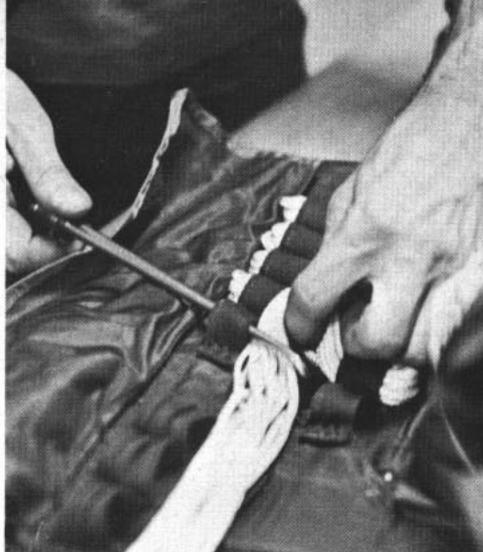
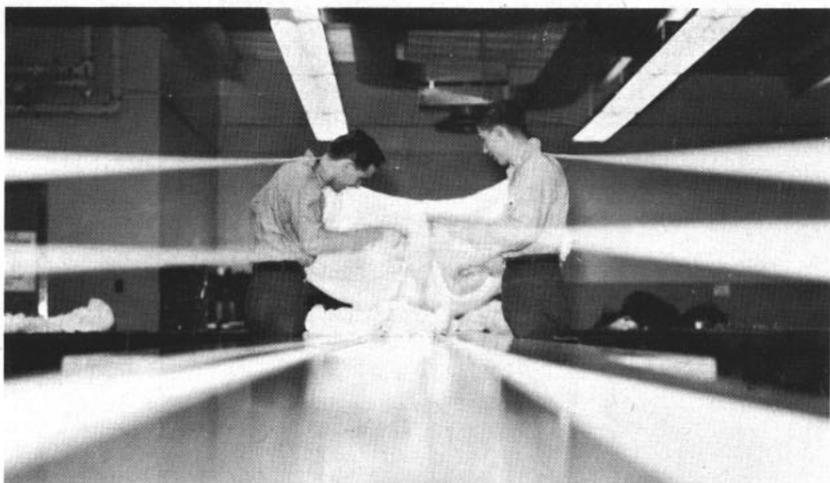
The long hours that the squadrons' jets fly daily are hard on the electrical system, which is the reason for the two-shift workday of the avionics shop.

Training in the shop is also fitted into the schedule. New electronic equipment and systems call for a constantly increasing knowledge of their job on the part of the men who keep the planes flying.

ON THE BOARD—AEs and ATs discuss problems in repairing aviation gear.



ALL HANDS



They've Got to Be **P E R F E C T**

UNLIKE MOST occupations, parachute rigging is a business in which nit-picking perfectionism will earn admiration and respect.

Ask any aviator.

The standard grim joke ("If it doesn't work, bring it back.") illustrates the very unfunny necessity for perfectionism. In recent years the need has increased. Today there is a good deal more to be perfectionistic about.

Look at any modern aircraft.

The rigger is responsible for survival clothing, shark repellants, life rafts, survival kits, life vests and other safety devices as well as parachutes. Even the rigger's designation

has become more complex—the rating is now known as Aircrew Survival Equipmentman. But the perfectionism still prevails.

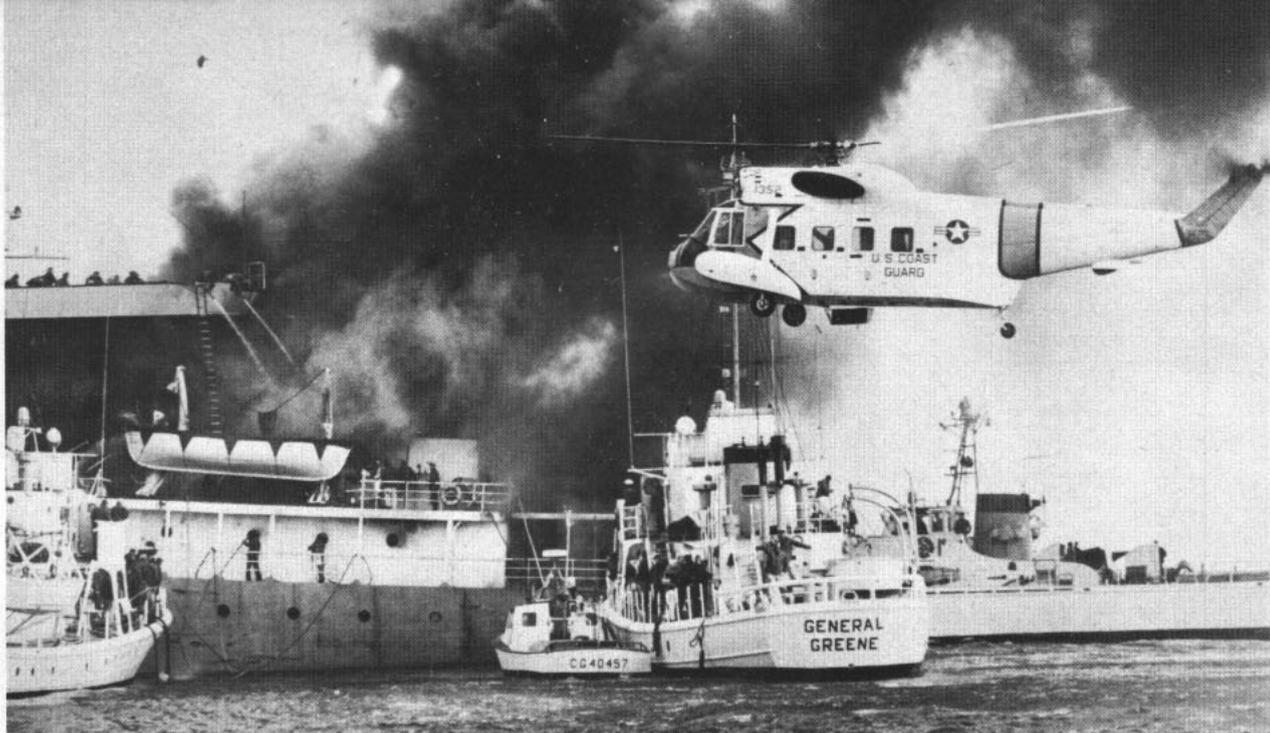
Talk to any rigger.

There is no longer a requirement for PRs to make parachute jumps before they become rated, but most jump anyway. It is proof of their commitment.

Watch any jump.

Clockwise, from top left: (1) Riggers fold chute. (2) Shroud lines are carefully packed. (3) Chute is put in container. (4) PR checks pilot's oxygen gear. (5) PRs sew chutes and canvas covers. (5) Chutes hang in drying tower.





TEAMWORK—Coast Guard rescue team of cutters and HH-52A helicopter assist merchantmen after tanker collision.

Coast Guard in the Sky

The friendship and mutual respect between the Navy and its sister service, the Coast Guard, have developed through long years of close association—and, on numerous occasions, mutual assistance.

Many Navymen have had occasion to be grateful to the Coast Guard for its important role in search and rescue. In time of war and as directed by the President, our sister sea service has operated and, if the need should arise in the future, will operate again as part of the Navy.

It is, therefore, appropriate to acquaint ALL HANDS readers with the mission and functions of this seagoing organization. Various aspects of the jobs it performs have been reported on in the past. The following is a historical account of a relatively little-known component of the U. S. Coast Guard—its air arm, now beginning its second half-century.

THE AGE of flight was 13 years old when President Woodrow Wilson, on 29 Aug 1916, signed into law an act establishing an "Aerial Coast Patrol." That was the beginning of Coast Guard aviation.

Since 1916, Coast Guard aviators have flown millions of miles on search and rescue missions, often in weather

when most aircraft were grounded. Thousands of hazardous open sea landings have been made to aid mariners in distress.

Coast Guard aviation, according to the statisticians, has been directly responsible for saving over 10,000 lives at sea.

The Coast Guard air arm owes its beginning to two young officers, Second Lieutenant Norman B. Hall and Third Lieutenant Elmer F. Stone.

ICE PATROL—HC-130B *Hercules* flies over row of icebergs off Labrador. Ice is marked and path followed.



Assigned to the cutter *Onondaga*, they convinced their commanding officer, Captain B. M. Chiswell, that what the Coast Guard needed was a "flying surfboat."

After selling Coast Guard officials in Washington on the idea, CAPT Chiswell contacted a pioneer airplane designer and persuaded him to design a suitable aircraft for rescue work at sea. The result was a triplane flying boat with a short boat-like hull and the control surfaces mounted high on the tail booms. This plane was the forerunner of the famed NC-4.

The aviation facilities provided by the 1916 law were modest. They consisted of 10 air stations along the Atlantic and Pacific coasts, the Great Lakes and the Gulf of Mexico.

The Coast Guard was authorized to send its aviators to the Naval Air Station, Pensacola, Fla., for training. That arrangement still exists, and hundreds of Coast Guard fliers have received their wings at this facility.

Second Lieutenant Charles E. Sugden and LT Stone were the first two CG graduates at Pensacola. LT Hall, because of his professional training as a naval architect, was ordered to an airplane factory to study engineering and construction.

The first Coast Guard aviators received their wings in time to serve with American forces in Europe during World War I. LT Sugden served as CO of the Naval Air Station, Ile Tudy, France, and was awarded the Legion of Honor by the French.

THE YEARS immediately following WW I were lean ones for Coast Guard aviation, but one major event stands out—the race to win the Atlantic Blue Ribbon. Since the war had spurred the development of aviation, the idea of an aerial crossing of the Atlantic did not seem improbable. An intense rivalry developed between the U. S. and England as to which would be represented on first trans-Atlantic flight.

On 17 May 1919, Americans reading their morning papers found by the headlines that three U. S. Navy flying boats (NC-1, NC-3 and NC-4) were winging their way across the Atlantic. Of the three, only the NC-4 completed the journey; it became the first aircraft to fly the Atlantic.

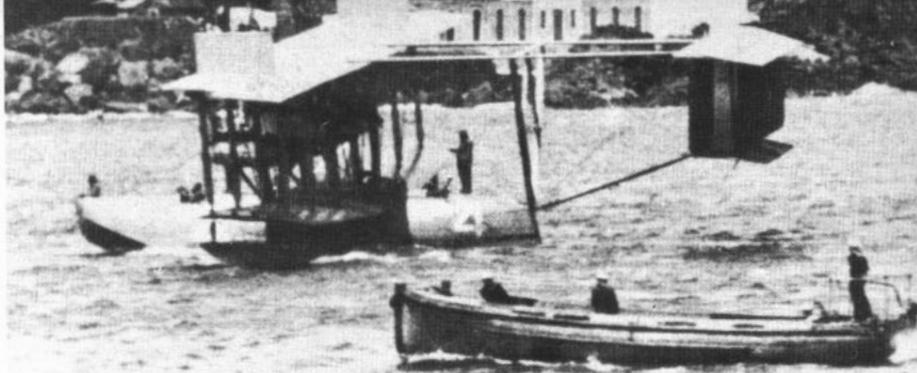
The story has been told many times. The October 1955 issue of ALL HANDS published a special supplement on the NC Division, which included Admiral (then LCDR) Richard E. Byrd, USN, as a member, flying in the NC-3.

The commanding officer of NC-4 was Lieutenant Commander A. C. Read, USN. Copilot of the plane was Lieutenant Stone, USCG.

During the 1920s, Coast Guard aviation again went into the headlines in the "Rum War"—the turbulent prohibition era when rumrunners with their swift, powerful boats challenged government authority. Coast Guard craft were no match for the smugglers' fast boats; aircraft were a must. Congress came to the rescue by providing for the purchase of five aircraft—three OL-5 amphibians and two UO-4s. They were the first aircraft the Coast Guard could call its own, since all previous equipment was on loan from the Navy.

By 1940, the Coast Guard had 50 aircraft operating from 28 stations in the continental U. S., Alaska and Hawaii.

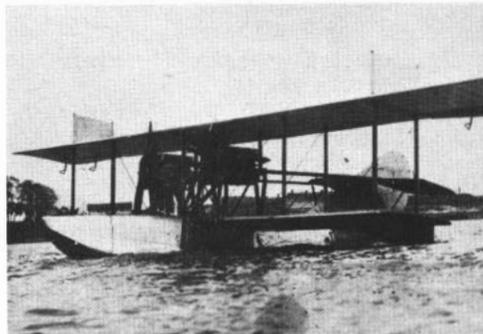
Before the U. S. officially entered World War II, Coast Guard aircraft were operating as part of the U. S. Neutrality Patrol. The mission of the patrol was to protect U. S. shipping



HALL OF FAME—Navy NC-4, copiloted by Coast Guardsman, was first to cross Atlantic. Below: These USCG planes have made marks in history.



UO-4s caught Prohibition rumrunners.



H-10 Flying Boat was one of first Coast Guard rescue aircraft.

J2F Amphibian rescued Army fliers from Greenland glacier in 1942.



Hercules was CG's first turbo-prop plane. Below: HU-16 Albatross.



Sea Birds patrolled coasts for subs. Below: Dolphins flew below engines.



New medium endurance team consists of 210-ft cutter and amphibious helicopter.





COAST GUARD PICKUP—Rescue helicopter sits in Straits of Florida as crewmen help Cuban refugees aboard for transfer to USCG cutter *Diligence*.

lanes from U-boats, and to protect strategically located Greenland.

When war was declared, Coast Guard aircraft became engaged in convoy coverage, antisubmarine warfare, and patrol and rescue activities. From 1941 to 1945 Coast Guard aircraft delivered 61 bombing attacks on enemy submarines, located 1000 survivors of downed aircraft and torpedoed surface craft and participated in the rescue of 65.

Ensign H. C. White, of Patrol Squadron 212, is credited with sinking the submarine U-166 in the Gulf of Mexico in August 1942.

ONE OF THE more daring, but little publicized, rescues of the war was carried out by a 29-year-old Coast Guard aviator, Lieutenant John A. Pritchard, in 1943. He was serving in the cutter *Northland* when communications were established with an Army *Flying Fortress* which had crashed on the Greenland icecap two weeks before. The plane's crew had been badly injured.

Northland was ordered to proceed at full speed to the assistance of the fliers, but many miles of icepack lay ahead and time was running out.

LT Pritchard suggested that he could save many hours by making a wheels-up landing on the glacier, using the pontoons on the cutter's plane for skis. When the okay was given for the attempt, the plane was stripped of all equipment not vital to flight.

LT Pritchard and Radioman Benjamin A. Bottoms flew over the 2000-foot glacier, scanning mile after mile of white waste for the downed B-17. When the wreckage was sighted, Pritchard landed the plane on the nearest stretch of smooth ice, four miles away.

Leaving his radioman to keep contact with *Northland*, Pritchard set out on foot for the rescue.

He found three of the survivors in

great pain, starving and half frozen. After administering first aid, Pritchard led and half-carried the men back to the amphibian.

Because of the plane's load limitation, the two most seriously injured airmen were taken on the first trip; the other was left for the return trip.

The takeoff down the icy slope was as hazardous as the landing. The amphibian shot forward, bouncing along until it finally attained enough speed to become airborne. This was the first time a flier had been able to land and take off from the Greenland icecap.

It was nightfall by the time the plane reached *Northland*. Guided by a narrow searchlight beam, LT Pritchard landed on the black water. His shipmates cheered as he taxied alongside the cutter.

The next day, despite radio warnings of an approaching storm out of the north, Pritchard and Bottoms took off again to rescue the third airman. The pilot landed again on the icecap, picked up the last survivor and managed to clear the ice.

However, en route to *Northland*, the tiny plane flew into a raging

END OF MISSION—Helicopter lands aboard cutter after sea search.



storm. It was never heard from again.

For their heroic efforts, both Coast Guardsmen received posthumous Distinguished Flying Crosses.

COAST GUARD aviation has grown steadily since WW II in the fields of search and rescue. The planes used are no longer the wood-and-wire crates of aviation's earlier days. The techniques now used are the most advanced in the world, and serve as a guide for other countries. In the amphibious turbine-powered helicopter, the Coast Guard has at last realized its long dream of a "flying surfboat."

It is in the use of the helicopter that the Coast Guard is making some of its greatest advances. The whirlybird, with its capability of hovering over targets, and its all-around versatility, is ideally suited for search and rescue.

This was dramatically illustrated in 1965 when Hurricane Betsy brought disaster to the southeastern United States. Flying continuously, Coast Guard helicopters rescued hundreds of stranded people from the rooftops of flooded buildings.

With the construction of the two recent classes of cutters, the 210-ft *Reliance* class and the 378-ft *Hamilton* class, both with helicopter landing pads, one of the most successful operational units in the Coast Guard—the cutter-helicopter team—has developed.

Another Coast Guard operation which has been radically changed by increased use of aircraft is the International Ice Patrol. Originally a surface surveillance of North Atlantic shipping lanes, the patrol is now carried out with long-range C-130 *Hercules* patrol planes, with cutters held in a stand-by status.

In 1956, the Coast Guard's traditional responsibility for the safety of travel on and over the water was recognized in the National Search and Rescue Plan promulgated by the Department of Defense. In the plan the Coast Guard was assigned exclusive jurisdiction as Regional Search and Rescue Coordinator for the Maritime Region.

It has been an eventful half century for the Coast Guard's airmen. But, as successful as it has been, experiments and tests are continually in progress to improve equipment and operations, so the next 50 years will also be filled with accomplishments.

—Hymen R. Kaplan



SAILING IN SAN JUAN—Navymen on the town walk down o'ld street to the museum and (rt.) visit Fort El Morro.

San Juan Holiday: Sailors Say 'Si Si'

RECENTLY THREE OPERATION SPRINGBOARD sailors were treated to a good time in San Juan, Puerto Rico. They were selected by their commanding officers to participate in the San Juan Navy League Merit Award Program. This program was initiated by the Women's Council to reward exceptional Navymen from ships visiting the area.

The three sailors honored were: Leading Seaman David Hyland, Royal Canadian Navy; Enzo Barone, SC, Italian Navy; and Personnelman Third Class Douglas Cope, USN, from *uss Arcadia* (AD 23).

They met at Fernandez Juncos pier, and started their tour in top fashion with a welcome from the mayor, Dona Felisa Rincon de Gautier. She exchanged comments on the home towns of each Navy-

man, for she had visited them all.

During the day the three visited interesting places such as the governor's home, built in 1533, the capitol building of Puerto Rico, and the Museum of Colonial Architecture that exhibited, along with many historic items, a scale model of the original Spanish fortifications of the walled city of San Juan.

Naturally their tour included a visit to Fort El Morro, the city's famed 400-year-old landmark that rises majestically 140 feet above the sea. In old San Juan they visited the old Cristo Street shops, the cathedral across from the Square of the Nuns, and toured the luxury hotel strip. Their day was climaxed with dinner and a floor show, on the house, at one of leading hotels.

—Story by Ken Ledbetter, JO1

—Photos by C. J. Wiitala, PH1



SAILORS take in view from fort.

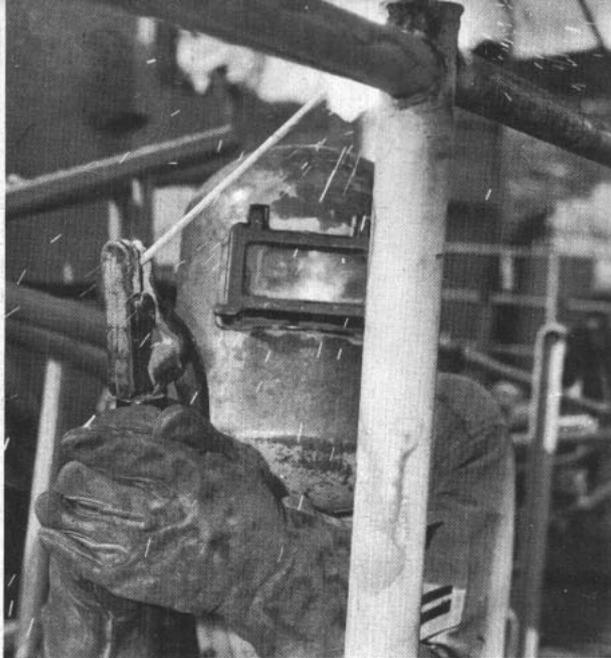
MEN OF THREE NAVIES pause on steps of capitol. Rt: The Navymen view their ships from Fernandez Juncos pier.



MAY 1967



27



KEEPING THINGS GOING—Skilled Navymen aboard USS Ajax (AR 6) mend handrail and (rt.) machine a belt.

Uss Ajax, the Roaming Tender



Uss Ajax (AR 6) is a repair vessel. She is also quite a ship. And quite busy.

During one short stay in Kaohsiung, Taiwan, the crew turned out 1400 jobs for the ships on the line in the South China Sea.

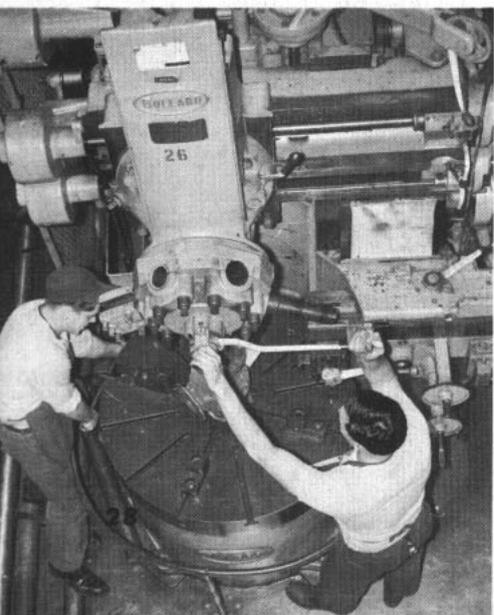
In another instance the ship received a priority order for 4000 small metal gizmos. The men in the machine shop hadn't the slightest idea what the order was for, but they had all the specifications so they manufactured gizmos until the raw material ran out.

The gizmos were bomb fuse cavity filler plugs. And they were very high priority indeed.

But Ajax noses aren't always to the official grinder and lathe.

The Navymen sponsor an orphanage in Sasebo, Japan. Each year they arrange a Christmas party, and whenever the ship is in port the crew is likely as not to invite the children aboard for food, games and gifts. And being repairmen, the Ajax sailors pitch in and fix whatever needs fixing around the orphanage in their spare time.

AJAX OF ALL TRADES—Valve housing is positioned for machining in a vertical turret lathe. Rt: Ajax is a handyman of the Pacific Fleet. Above: A fine touch adjusts the balance of a stop watch in the AR's watch repair shop.



LETTERS TO THE EDITOR

Good Guys Wear White Hats

SIR: We were aware that Pearl Harbor's Fleet Submarine Training Facility was manned by good guys but we didn't know what a good thing we had until our personnel records were checked.

The 220 enlisted men attached to the facility have received a total of 563 good conduct awards. This represents 2.56 awards for each man.

Sixteen of our officers who have had previous enlisted service, have earned 53 good conduct awards—an average of 3.3 per officer.

Over-all, 616 awards have been divided among 235 eligible men, making an average of 2.62 good conduct awards per individual in the command.

Has any other outfit in the Navy ever had it so good?—R. C. O.

• We don't know, but we are willing to bet you will find out a few issues hence.

Whether or not your percentage of good guys in white hats is equaled elsewhere in the Navy, the Fleet Submarine Training Facility at Pearl Harbor merits and receives congratulations from ALL HANDS.—Ed.

Gold Hashmarks

SIR: This is more in the nature of a comment than a question. It pertains to the wearing of gold lace service stripes.

I clearly understand Article 0654 of U. S. Navy Uniform Regulations which outlines who's eligible to wear the gold. Still, I feel that any career Navyman, although he has broken service, should be eligible to wear gold stripes, provided he meets the requirements of good conduct during the preceding 12 years' service. Otherwise, a man with broken service, after 10 years, would ultimately have to serve 22 years before he would be eligible to wear gold service stripes.—D. N. E., YN3, USN.

• This is a subject widely misunderstood in circles both within and without the Navy. The fact is, to be entitled to wear gold service stripes, an individual not only must demonstrate faithful conduct over a period of 12 years' service, but that service must be unbroken.

That's the single factor many persons do not realize about someone they see or know who wears gold.

Some individuals with broken service feel that not being able to wear gold lace service stripes reflects on

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

their conduct. Remember, good conduct is primarily reflected through the Good Conduct Medal for active duty service. Not just the color of hashmarks and rating badges.

The important difference is that someone who wears gold stripes achieved two things at once. He succeeded in completing 12 years' unbroken active duty and his conduct was impeccable.—Ed.

Father of the Navy

SIR: A discussion in our office recently concerned the Father of the American Navy. I say he was John Barry, although I've read recent publications stating this honor belongs to John Paul Jones.

What's your opinion?—P. M. C., NTC, Great Lakes, Ill.

• You've raised a highly debatable

point and, to the best of our knowledge, no "official" statement has ever been made.

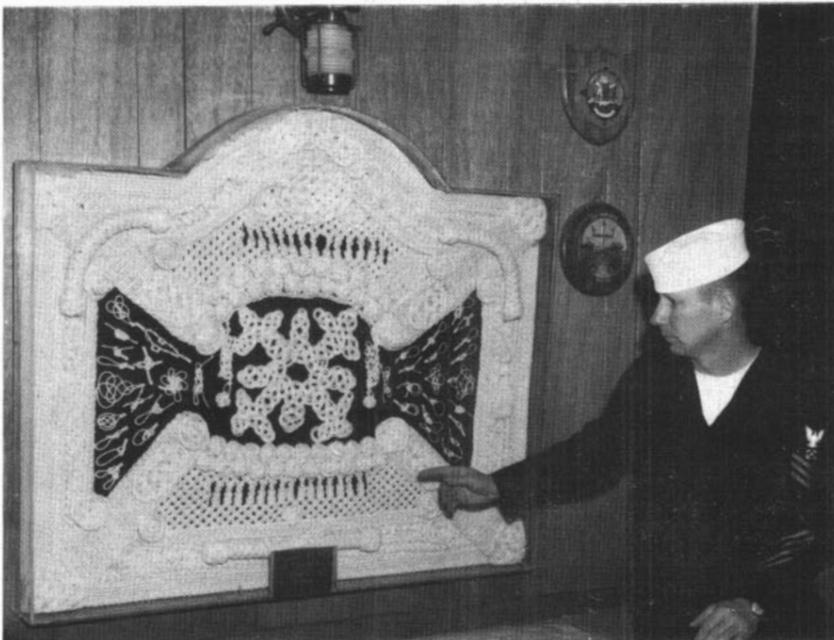
It would be rather difficult to do so. As far as we can determine, such a designation would be based upon semantics and the personal opinion of the individual making the determination. For example, if you were to believe organization and administration to be essential, perhaps John Adams would be your logical choice. If winning victories were your criterion, both John Barry and John Paul Jones are, of course, leading candidates. And, for that matter, how about the Unknown Seaman of 1776 as a nomination?

However, our opinion is irrelevant. This is what the people in the Naval History Division have to say when they are queried (which is relatively frequently) on the subject:

The idea of a national Navy during the Revolution can be traced to John Adams and to many exponents in the Continental Congress, State Legislatures, and Committees of Safety.

John Paul Jones was one of the first officers commissioned in the Continental Navy and he served valiantly throughout the Revolutionary War both as a Lieutenant and Captain. His victories not only materially assisted

HANDYMAN—Sumner F. Ellis, BM1, points to intricate work on knot board he made for PO Club at Dahlgren, Va. It has 100 knots, was made in one week.





WINNER—USS George Clymer won PhibRon Three Battle Efficiency "E."

the struggle for independence but also laid the foundations for the American Navy's fighting traditions.

This, of course, can also be said of John Barry, who commanded Alliance, the last ship of the Continental Navy. After the ratification of the Constitution in 1789, and the first ships of the United States Navy were authorized, President Washington issued Commission Number One to John Barry, naming him the senior naval officer. Barry held this place on the Naval list until his death in 1803.

Thus, it can be said that not only Jones and Barry, both outstanding fighting officers, but also other men such as Adams played a key role in the early days of our Navy.

As a result, the Navy today does not make a distinction among them. We take pride not in the fact that one or the other was the "Father," but rather in the fact that we had the services of them all.—Ed.

VRB Entitlement

SIR: There is a BM2 on my ship who wants to reenlist under the Variable Reenlistment Bonus program. Is he eligible?

Also, there's an FTG1 on board who is on his second enlistment with broken service. Since he did not receive a reenlistment bonus when he reentered the Navy, is he entitled to a VRB when he reenlists?—J. T. O., YN2, USNR.

• The answer to your first question

is simple. No. The BM rating is not an eligible VRB rating regardless of rate.

As for the FTG1, his broken service does not affect his entitlement to a VRB. If he meets the eligibility re-

Choice of Duty

SIR: When I was about to complete my initial enlistment, I extended for one year to qualify for a choice of duty upon my reenlistment. My first choice was NAS Willow Grove, Pa., and my second choice was NAF Johnsville, Pa. However, I received orders to NAF Lakehurst, N. J., which I did not accept.

Am I, therefore, obligated to serve out the remainder of the one-year extension I signed even though I did not receive an assignment of my choice?—R. P. P., AZ2, USN.

• Yes.

When you agreed to extend, you made a bargain with the Navy. Although you didn't receive one of your specific choices, your orders were to an activity within the Fourth Naval District. BuPers Inst 1306.73A states that an individual may request CONUS shore duty with naval district specified. Under this provision, NAF Lakehurst was a justifiable assignment since both Pennsylvania and New Jersey are within the Fourth Naval District.—Ed.

quirements stated in BuPers Inst 1133.18A, the FTG1 should be entitled to the bonus with a multiple of three.

In other words, a first reenlistment for which an individual receives a reenlistment bonus qualifies him for the VRB.—Ed.

Gatling Guns

SIR: The July 1966 issue of your magazine fell into my hands and awoke many memories of my service in World War II as a pharmacist's mate.

One picture in that issue was of intense interest to me. As a hobby, I collect and restore gatling guns, and the picture on Page 7 of the July issue shows a very rare model 1883 54-70 gatling, with hopper for the Accles feed. Only a few of these guns were produced, and the actual record of where they were issued has long since been lost.

As far as I have been able to ascertain in the last 20 years of restoring these weapons, only seven now are known to exist.

I would be very interested in the name of the vessel shown in your picture, and also the date the photograph was taken, as well as any other details which might be known about this subject.—H. E. F., Jr.

• The picture is of uss Boston, taken in 1888.

Gatling guns were placed aboard many Navy vessels during the late 19th century; in fact, nearly every Navy ship included gatling guns in its secondary battery.

The Navy was associated with the weapon from its earliest days. A Navy board tested it at the Washington Navy Yard in May 1863. Their conclusion was that it was a very effective arm at short range, but that the manner of rifling the barrels could be improved.

A new set of barrels was made, and the Navy board tested it again two months later. The design was approved, and Admiral Dahlgren gave permission to commanders of fleets and squadrons to order the guns.

Few were requisitioned, but it is known that Admiral David Dixon Porter obtained one for use by his Mississippi Squadron. Admiral Porter's squadron apparently used the gatling primarily to drive guerrillas from the banks of the Mississippi. They were more effective than large batteries, since they were relatively light, and could be mounted on the upper decks of the steamboats.

There is evidence that the gatling was used in an amphibious capacity, also. During training maneuvers at Hampton Roads, Va., in October 1879, sailors of uss Powhatan landed a wheeled gatling gun from a raft.

The Model 1883 gatling gun was

used extensively in the Navy. Generally they were mounted on the ship's bridge. Others were placed on the rail of the fighting top and used to rake the enemy's decks from above.

The reports of the Secretary of the Navy, especially after 1890, made frequent mention of the gatling and other machine guns in the Bureau of Ordnance section of the reports.

The Secretary's Report for 1896 lists 36 U. S. naval vessels with gatling guns aboard. Of these, 13 had four aboard, 19 had two aboard, and four had one each.

Boston had two gatlings aboard.—ED.

Balloons and Big Guns

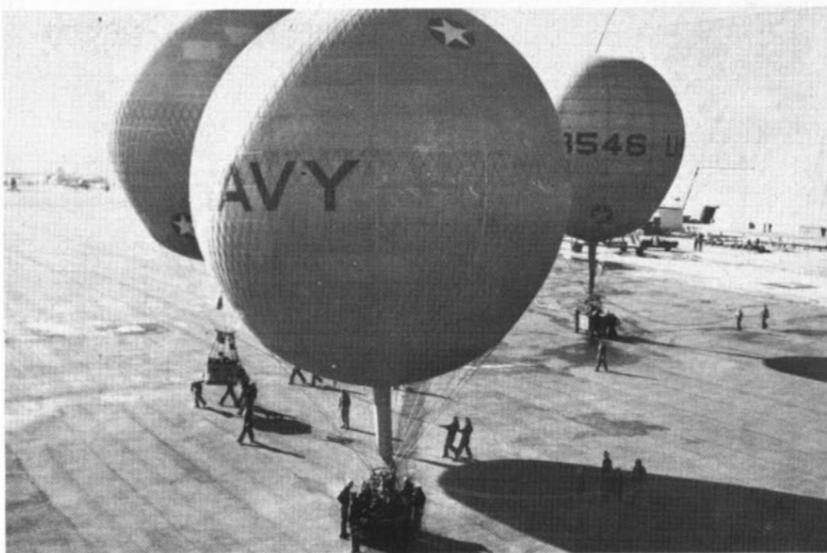
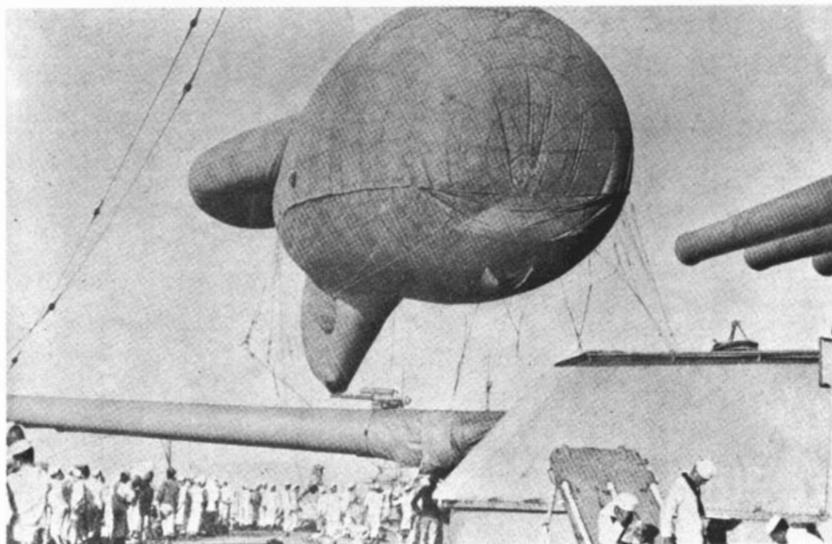
SIR: Here is a report which recalls an interesting aspect of yesterday's Navy, made available when one of the more experienced balloon spotters returned to the Navy's domain for a brief period recently.

Commander D. C. McGuire, USNR (Ret), the former main top spotter of the battleship *Oklahoma*, visited the First Fleet destroyer USS *Henderson* (DD 785), homeported at Long Beach, Calif. He was, naturally, particularly interested in the modern methods of gunnery, and how the art has changed since his Navy days, which date back to 1916.

CDR McGuire was *Oklahoma's* spotter back in the days when the battleships' big guns far outshot the range of visibility. Thus, a method of spotting the shots into the targets had to be developed to take full advantage of the guns' range. The balloon seemed to be the only solution. From the height of the balloon, the spotter could relay directions to the pointers and trainers in the gun mounts.

The balloons were so large and

BATTLEWAGON BALLOON—Kite balloon moors to USS *Pennsylvania* between jobs. Balloons carried spotters to relay directions to gunnery crews.



FIRST STEP for blimp pilots at Moffett Field was balloon training, since the lighter-than-air craft could be flown like balloons if engines failed.

bulky that they could not be carried on the deck of the ship; instead they had to be filled with gas ashore, then tied to gunboats to be transported out to the warships. There they were hauled down to the deck and communications lines were attached. The spotter would settle himself in the basket before the whole apparatus was released to a height of about 900 feet.

It was a pretty risky business. The cable could snap, sending spotter and balloon into the atmosphere; or the balloon could burst, a not unusual occurrence, causing the balloon and the spotter to drop into the sea if the men on deck could not haul the balloon down before it lost buoyancy.

Balloon spotting, for all its danger and seemingly chaotic procedure, was

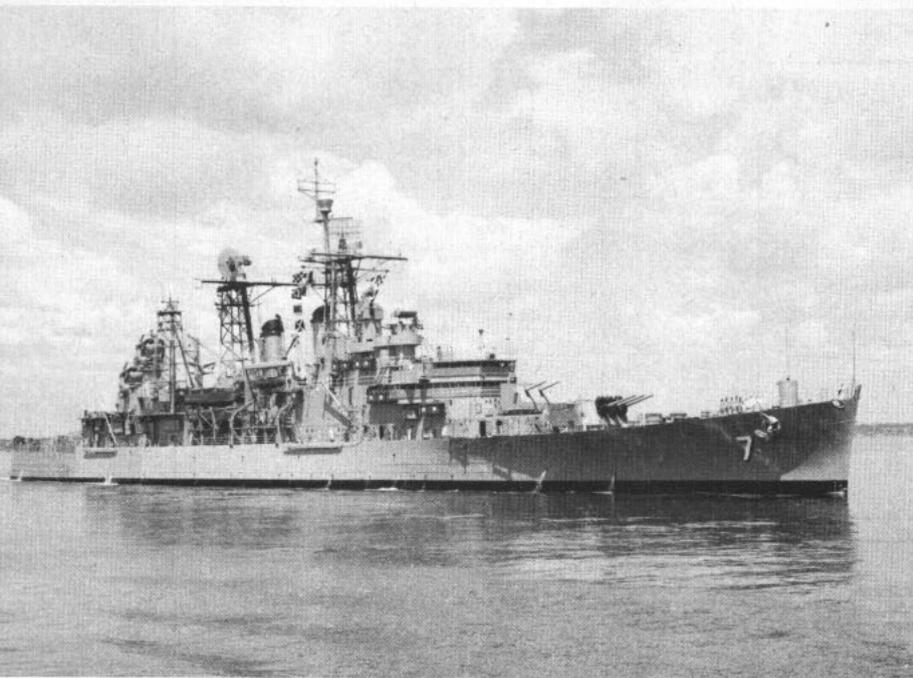
a most successful venture—not to mention a most vital aspect of gunnery. Visibility was sometimes zero, sometimes 15,000 yards, but whatever the range, the spotter was the key link in the chain.

Balloon spotting also had about it an aura of competition, and it is interesting to note that one of CDR McGuire's hottest competitors was a young officer named Duncan, *Oklahoma's* fore top spotter. That young officer was to become Admiral Duncan, Vice Chief of Naval Operations.

Incidentally, one of the purposes of CDR McGuire's tour aboard *Henderson* was to visit with a representative of the latest generation of Navymen, his nephew, Commander James Elfelt, who is the destroyer's commanding officer.

While aboard *Henderson*, he marveled at the more sophisticated weaponry now available to the Fleet, such as *Dash* (drone antisubmarine helicopter), *Asroc* (antisubmarine rocket), and the computerized methods of tracking targets, which have all but obscured the memory of the spotter's balloon. All in all, CDR McGuire was tremendously impressed, but he perhaps would not get the same thrill out of the newer methods.—John Briggs, ENS, USNR.

• Thanks to Commander McGuire and to you for recollections of the not so distant past. We are reminded also of balloon spotting during an earlier period. This was back in the Civil War days, and involved what has been called the Navy's first aircraft carrier, George Washington Parke Custis. That vessel was a coal barge which the Navy purchased and converted to its new job—serving as a platform from which a balloon could



CAPABLE CRUISER—USS *Springfield* (CLG 7) carries *Terrier* missiles on board to ward off a threat by air against cruiser or ships in her operating area.

take off to observe the actions and batteries of the rebel forces.

Perhaps others can add to the rather meager store of information about the hot-air era or gas age of the Navy balloon.—Ed.

Buoys Will Be Buoys

SIR: Permit me to be among the first to question the claims of the loyal men of PatRon 17. News buoys were in use in 1959-60 in the Atlantic Fleet and, I'm reasonably sure, long before.

During '59 and '60, various VW squadrons flying the *Argentia-Lajes* AEW barriers regularly made air drops

to the DERs manning the surface barrier. These drops normally consisted of repair parts and equipment, but often included mail, newspapers and magazines for the DER crews. During the holidays, special news buoy drops of first class mail were arranged.

Thus, the earliest news buoy drops with which I am personally familiar occurred in late 1959 on this barrier. I'm reasonably confident that other commands had made similar use of news buoys long before.—A. G. Pheasant, CDR, USN.

• It would appear that, with the help of the Fleet, we will push the origin of the news drops back in time.

NEW LOOK—*Pawcatuck* (AO 108) shows configuration after "jumboizing."



Perhaps not back to the ancient Greeks nor, for that matter, to the 19th century whalers, but there are other ships to be heard from. Thank you for your contribution to the subject of the Navy's newspaper buoys.—Ed.

Hashmarks and Pay

SIR: During an office training session, two questions arose for which no conclusive answers could be found. One deals with hashmarks (or service stripes), while the other involves special pay for Service Craft duty.

According to Article 0654, U. S. Navy Uniform Regulations, "Enlisted personnel shall wear one service stripe for each full four years of service (other than on the Retired list) in the Navy, Marine Corps, Coast Guard, Army, Air Force, Naval Reserve, or any combination thereof."

Since Reserve time in the Marine Corps, Army and Air Force as well as in the Navy counts for pay purposes, would this time count also toward the four-year service requirement for service stripes?

Now for my second question.

Service craft billets were classified as shore duty in January 1966. Therefore, is a crewmember entitled to special pay in the form of commuted rations or sea pay?—T. W. B., PN2, USN.

• With regard to service stripes, only Reserve time in the Naval Reserve, both active and inactive (other than on the retired list), may be counted when determining an individual's eligibility to wear "hashmarks."

Reserve time in other services may not be counted.

As for your special pay question: If a member is permanently assigned to a specific active service craft that is equipped with berthing and messing facilities, he is entitled to sea duty pay.

However, he is not entitled to this pay for any day he is credited with Basic Allowance for Subsistence (BAS). This might include commuted or leave rations or partial BAS.

You may find the authority for such payments in the "Navy Comptroller's Manual," paragraphs 044060-2a (item 1), and 044060-2b (item 9); and in the "DOD Military Pay and Allowances Entitlements Manual," paragraphs 10703a(1) and 10705a.—Ed.

Disabled Fleet Reservist

SIR: The *Navy Guide for Retired Personnel and Their Families* states that a Navyman with 20 years' active service, if disabled, would receive a transfer to the Disability Retired List, regardless of percentage of disability.

What would happen to a member with 19 years and six months of active duty, now in the Fleet Reserve, who could not pass the physical examina-

tion for recall to active duty? Could he lose his pension and be given disability severance pay, since he would not have the required 30 per cent disability for transfer to the disability retired list?

Also, what would happen if a man has only 19 years' service, but is receiving retainer pay by virtue of constructive time, if he acquired a disability less than 30 per cent?—R. L. L., DKC, USN.

• *If a member of the Fleet Reserve, receiving retainer pay, were to become disabled, he would be placed on the retired list at the same rate of pay. This applies no matter how he became a member of the Fleet Reserve. He would not be given severance pay.*—Ed.

Saved Pay

SIR: Since being selected for appointment to warrant officer, I have become very interested in the saved pay regulations. According to the *NavCompt Manual*, volume four, chapter four, article 044022, the following types of pay may be included in saved pay computations: basic pay, basic allowance for quarters, subsistence (including comrats), sea and foreign duty pay, proficiency pay and submarine pay.

If I elect saved pay, will it continue to include my submarine pay during my course of instruction at Newport, R. I., and until I arrive at my ultimate duty station?—D. R. T., TMC (SS), USN.

• *If you elect saved pay, you will receive the submarine pay at the same rate you were receiving as an enlisted man.*

Sub pay for an enlisted man, of course, stops when the man is detached from his submarine. That would hold true for you as well.—Ed.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, **ALL HANDS MAGAZINE**, Room 1809, Bureau of Naval Personnel, Navy Department, Washington, D. C. 20370, four months in advance.

• *uss Washington (BB 56)*—A reunion is scheduled for July 1967. Write to USS Washington Reunion Group, Box 27035, Columbus, Ohio 43227.

• *uss Canberra (CA 70) and (CAG 2)*—A reunion is scheduled for 13, 14 and 15 October at the President Hotel, Atlantic City, N. J. For further information, write to Jerry Der Boghosian, Post Office Box 161, Bradford, Mass. 01830.

• *uss Whitehurst (DE 634)*—The crew and officers who served aboard during the Korean conflict during 1950 and 1951 are invited to a reunion 27 June at Busch Gardens in Tampa, Fla. Contact Russell E. Kemper, 4727 Knights Ave., Tampa, Fla. 33611, for further details.

• *uss Wadsworth (DD 516)*—Former shipmates, who served aboard during WW II are invited to the 25th anniversary reunion in August. Contact Tony Holmes, 3255 Cicotte Ave., Detroit, Mich. 48210.

• *uss Catskill (LSV 1)*—A reunion for the ship's crew is being planned for some time in August. Contact Robert L. Beckins, 7136 Inca Way, Denver, Colo. 80221.

• *Bombing Squadron Five (VB 5)*—A reunion in commemoration of the 25th anniversary of decommissioning will be held in late June in San Diego. Former members contact John W. Trott, 4512 Pescadero Ave., San Diego, Calif. 92107.

• *Third Special Seabees*—A reunion will be held on 14, 15 and 16 July at Des Moines, Iowa. Contact Harley D. Knutson, 5991 S. E. Vandalia, Des Moines, Iowa 50317.

• *U. S. Submarine Veterans of WW II*—All former shipmates who served in submarines during WW II are invited to attend the 13th reunion at the Sheraton-Fontenelle Hotel, Omaha, Neb., 9-13 August. Write John R. Votrobek, Jr., 5010 South 41st Ave., Omaha, Neb. 68107.

• *NATC, Corpus Christi, Texas*—WW II Navy and Marine Corps aviators who were commissioned or served at this Command are invited to a reunion to be held 25-28 October at NAS Corpus Christi. Special recognition and honor is to be given those who served during 1942. For further information write to 25th Corpus Christi Yellow Peril Reunion, PAO, NAS, Corpus Christi, Texas 78419.

• *Underwater Demolition Team No. 4*—Members who served during 1944 and 1945 are invited to a reunion with time and place to be decided by mutual consent. Write to August F. Sturm, 63 Whittingham Place, West Orange, N. J. 07052.

• *U. S. Naval Hospital, Annapolis, Md.*—All those who served during 1953 and 1954 are invited to contact William Mitchell, 142 Northwood Ave., Dayton, Ohio 45405, to work out details of a planned reunion.

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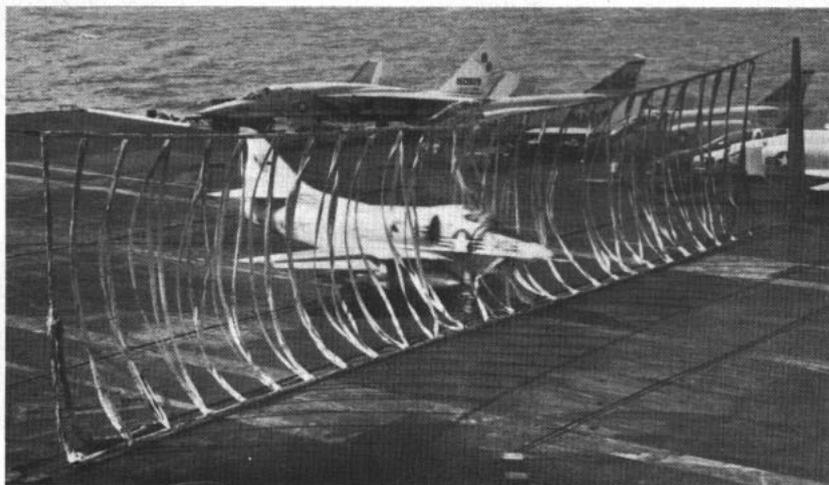
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★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



ARRESTING PICTURE—A4C Skyhawk hits nylon arresting barrier aboard USS Kitty Hawk (CVA 63) after landing gear was knocked out in bombing mission.

Strategic Warfare Office

All Navy strategic warfare activities have been placed under a central authority within the Office of the Chief of Naval Operations.

The new office, entitled Office of Director for Strategic Offensive and Defensive Systems (OP-97), will provide over-all guidance and coordination for planning, development and study of the Navy's strategic force.

Rear Admiral George H. Miller

SAYONARA—USS Oklahoma City is framed by bandsmen at departure from Yokosuka after two and a half years as Seventh Fleet flagship.



has been designated the first director of the new office. He will report to the Vice Chief of Naval Operations. RADM Miller has been Director of the Long Range Objectives Group and Chairman of the Strategic Systems Action Group in the Office of the Chief of Naval Operations.

Kitty Hawk's Barricade

Now USS Kitty Hawk (CVA 63) knows what the barricade is for. Commissioned in April 1961, she had, until not long ago, no reason to use it.

However . . .

"I had just completed my bombing run on the railroad bridge complex three miles south of Ninh Binh in North Vietnam when I felt a hard thud in the aircraft," recounted Ensign John Lockhard, a member of VA 112, attached to the carrier.

"I looked around and saw no visible damage until my instruments gave a 'fire warning' signal and I realized I had been hit.

"Deciding to stick with the plane for a while, I put out a radio call explaining my situation. It was very reassuring to hear Lieutenant Don Garrish, also of Attack Squadron 112, tell me I was alright and to keep on going."

Once out over the water and

comparative safety, both planes slowed down and gained altitude to enable LT Garrish to make a closer inspection of the damaged A-4C Skyhawk.

"I was told that I had taken a hit in the aft part of the fuselage," continued ENS Lockhard, "and that my tail hook had been damaged. We talked it over and both decided that I should radio Kitty Hawk and ask for a barricade landing.

"Upon reaching the ship I orbited until all the other aircraft had been recovered and the barricade put up. I didn't know how long the aircraft was going to hang together and not having ever made a barricade landing before, I tried to imagine what it would be like. Then I got the signal to land. I was given a radio briefing as I approached the flight deck and was told to fly it like any other pass. And that's exactly what I did.

"After it was over I was surprised to find the arrestment was much easier than the ones we normally make every day. It does give you a funny feeling, though, knowing that the first attempt has to be good and that you can't go around again as you normally would if your tail hook didn't catch when making your first pass."

LT Garrish, who had flown pick-up during the whole operation, had this to say: "John did what he was supposed to do when he had to do it. He remained calm through the whole thing. With only 300 hours in that particular type of aircraft, he handled it like a pro—which he is."

The barricade isn't used too often these days, but it's nice to have on hand. For those unfamiliar with it, it might be said that it takes from two to three minutes to rig, consists of nylon straps held vertically between two nylon load straps, approximately six inches in diameter, stretched taut across the width of the flight deck landing area.

It has proven itself many times (not on Kitty Hawk) to be a good way to stop crippled planes landing at high speeds.

—Howard U. Grais, JO1, USN.

Tug Skippers Commended

Two U. S. Navy tug skippers, Robert T. Linscome, Boatswain's Mate 1st Class, and James I. Smith, Boatswain's Mate 2nd Class, have been cited for preventing a Liberian merchantman from running aground during Typhoon Helen last fall.

The pair recently received letters of commendation from Captain Yoshiharu Ezawa, chief of the Sasebo Maritime Safety Office, in a ceremony held at Fleet Activities, Sasebo.

CAPT Ezawa commended both skippers for their disregard of personal safety in venturing out into a "killer typhoon." Their work prevented the possible deaths of 40 crewmen of ss *Dona Selina* and prevented serious damage to shipping in Sasebo Harbor.

Linscome and Smith piloted their tugs through a driving rain, located the merchantman, and held her off the rocks for over three hours in the storm. Then, teaming with a city tug, the two Navy craft relieved each other for rest periods throughout the night.

The next morning, *Dona Selina* was returned to her anchorage.

Motu, the Problem Solver

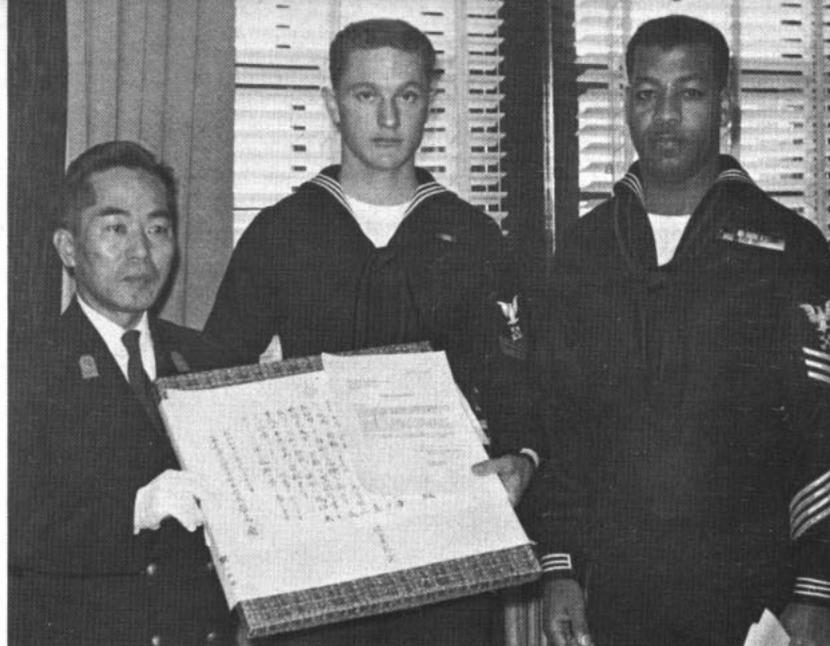
Crewmen on ships operating with the Fleet often run into difficulties with electronic gear for which they can't find the answers.

A team of puzzle solvers, known as Mobile Technical Units (MOTUs) show them how its done.

Ever since World War II, the Navy has continued to develop into an electronic Fleet. In January 1949, the Bureau of Ships (now the Naval Ship Systems Command) decided it was time to do something to counteract the problem of retaining trained technicians in the Navy. It assigned a team of 10 civilian electronics engineers to help Commander Service Force, U. S. Pacific Fleet, in electronics maintenance and the training of shipboard personnel. This team eventually developed into today's MOTUs.

There are 12 MOTUs in the Navy with seven assigned to ComServPac. The Pacific units are located in Treasure Island, San Diego, Long Beach, Pearl Harbor, Subic Bay, Yokosuka, and Sasebo.

A MOTU consists of senior enlisted men with many years of troubleshooting behind them. It includes such ratings as sonarmen, fire



THEY TUGGED ALL NIGHT—Navy tug skippers James Smith and Robert Linscome receive commendations for rescue of ship off the coast of Japan.

control technicians, gunner's mates and electronics technicians, assisted by civilian technicians.

To become a member of a MOTU, you must be in pay grade E-6 or above, have at least eight years' service, not more than three dependents, 36 months' obligated service, and be strongly recommended by your commanding officer.

MOTU services are available upon request at each unit headquarters. Each unit varies in size, with an average of about 21 men in the smaller and 51 in the larger. Each unit is under the command of an officer in charge.

When a ship is stumped by an

electronic problem, it sends a message or makes a phone call for help to the MOTU in its area.

Upon boarding, the MOTU representative is met by the ship's Electrical Maintenance, Weapons or Communications Officer who briefs him on the problem. When the MOTU expert finds the solution, the senior man in charge of the equipment is trained in the process to solve this and similar problems. It is up to this man to train the others under him.

When the work space is inadequate, or the right testing equipment isn't available, the equipment, if not too large to be moved from the ship,

LAST SALUTE—CAPT Lloyd F. Abel, DC, (l), and William E. Cannon, AFCM, (r), give last salute to colors during double retirement ceremony in Pensacola.





GOOD GUYS—Criterion for place in this picture was five or more Good Conduct Awards. Men are from Fleet Submarine Training Facility, Pearl Harbor.

is taken to the MOTU shop to be repaired. The man in charge of the equipment goes along to learn how to remedy the situation. Except on rare occasions, MOTU technicians do not repair the equipment themselves, but show the local man how it's done.

It seems that the problem of not enough skilled military technicians in the Fleet will always be present, but due in part to the efforts of MOTU, the Navy is able to carry on. —George Eldridge, JO3, USN

Most Popular Bird

The helicopter is fast replacing the turkey as the most popular American bird. In Southeast Asia, anyway.

A Seabee team working on

people-to-people projects in border villages in Northern Thailand is using helos in what they call a vertical construction operation.

Seabee Team 0909, accompanied by two Thai Border Patrolmen and an interpreter, are flown by helicopter or STOL (short take-off and landing) aircraft into remote villages located along the Thai border.

The unit spends three days at each village, helping the villagers construct small bridges, water wheel rice mills, hand-dug water wells; small schools and a variety of other construction projects.

Then the unit is flown out of the village and returned to the base camp.

Seabee Team 0909 also is involved in many projects at their base camp, including construction

WAITING FOR THE FLAG—Guided missile frigate *Biddle* spends evening hours moored at Boston Naval Shipyard while awaiting commissioning.



of an earth-filled dam, bridges, culverts, sanitation facilities for the local schools, and the improvement of a small airstrip.

The Team's operations are under the sponsorship of the United States Operations Mission to Thailand.

Fishermen Rescued

A not-so-funny thing happened to three college students fishing off the coast of San Diego one day. When they were ready to come ashore, the crank on their outboard motor broke. The boat, assisted by a fresh wind, drifted helplessly.

As luck would have it for the fishermen, however, the Navy's Utility Landing Craft 1623 passed nearby on its way from the Amphibious Base at Coronado. Frantic waving from the fishing boat attracted the attention of the Navy crew.

When the LCU came within hailing distance of the fishermen, Navymen threw them a line, lowered the ramp of the landing craft and pulled the fishing boat aboard.

The fishermen, alarmed at the rising wind and waves, were mighty glad to see the Navy on behalf of themselves and their boat which, incidentally, was brought aboard the LCU without so much as a scratch.

Ship Design Study Group

The formation of a study group to consider ship design and construction of destroyer, escort and frigate types has been announced.

The group will be formed within the Office of the Chief of Naval Operations and will concentrate primarily on the DX and DXG escorts, types which have not yet reached the drawing boards.

In January, Defense Secretary McNamara told Congress that \$30 million had been earmarked in the fiscal year 1968 budget for studying the design of these ships.

In February, a DOD report stated that the study group "will examine the missions and roles for these ships and will make specific recommendations concerning the capabilities which should be built into these ships and the number which should be built."

Head of the group will be former Commander of Naval Support Activity at Da Nang, Rear Admiral Thomas R. Weschler.

Which *Calcaterra*?

Crewmen of *USS Calcaterra*, radar picket escort ship 390, did a double-take recently in Jacksonville. While moored at the destroyer piers, *Calcaterra* was passed by another escort ship, number 390.

Their ship wasn't being replaced. The second *Calcaterra* was a scale model, out on "sea trials" in the harbor.

The model was built by a *Calcaterra* crewman, Peter D. H. Tagg, Interior Communications Technician Fireman, in his spare time. Tagg was strict in every detail of the outer construction. The craft is propelled by a battery operated motor.

The crew's delight in the model was matched by the ship's officers, who noted that Tagg is just as efficient in his Navy work as he was in the model's construction.

More Fresh Water at McMurdo

The Navy's first land-based nuclear powered desalination plant is now providing McMurdo Station in the Antarctic with fresh water.

A 23-man crew has been operating the nuclear power plant that has supplied McMurdo Station with electricity and heat since July 1962. The desalination plant was added to the nuclear power plant to provide water.

Known as a flash evaporator, the desalination unit was first operated almost a year ago. It was then shut down until the weather would permit construction of a distribution system. The desalting unit has now been operating continuously since January.

The evaporator's output, 14,000 gallons a day, is more than enough to supply the 250 Navymen and scientists who winter over and the base's 1250 summer population. A 55,000-gallon supply is stored in a heated building.

Obtaining fresh water from nuclear energy saves the Navy 4000 gallons of fuel oil per week, which would otherwise have to be shipped to McMurdo. Fuel oil had previously been used to melt snow for water needs. Snow is difficult to find near McMurdo because high winds sweep it from the barren volcanic rock in the area.

Bluebird Club Reopened

At Naples, Italy, the enlisted man's Bluebird Club has reopened.

MAY 1967



SEA TRIALS—Model *Calcaterra* takes a turn around Jacksonville harbor while men of DER 390 (in background) watch. Model was built by crew member.

It had been closed for renovation since May 1966.

Those who patronized the club before it was closed would probably not recognize it today. It has new walls, a new ceiling, new lighting, new flooring and a new raised stage.

Club facilities include the main ballroom on the ground floor, a piano bar and lounge, with an adjacent amusement room in the basement, and an Early American dining room on the second floor.

O'Brien Is Back Again

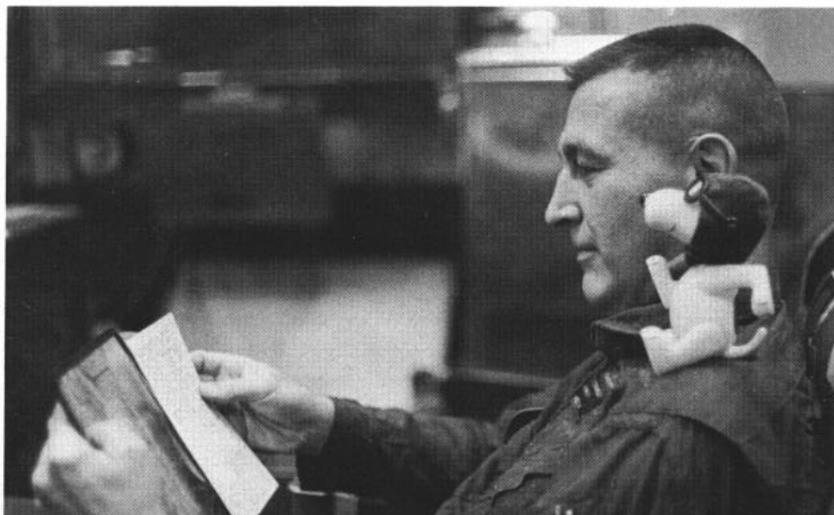
The ability to spring back to the attack after being hard hit makes a great boxer—or a great ship.

The first U. S. Navy ship to be solidly hit by communist shore batteries, the Seventh Fleet destroyer *uss O'Brien* (DD 725), is now back on station off the Vietnam coast.

The attack came on the morning of 23 Dec 1966, while the ship was steaming about three miles from shore, some 21 miles north of Dong Hoi, North Vietnam.

Two men were killed and four wounded when a shell exploded in the after port section of the ship. Damage to *O'Brien* was light, although several of the ship's systems, including lighting in one part of the ship, some interior communications cables, and part of the steering system had to be repaired. One seam

AERIAL ACES—Commander C. E. Hathaway and friend plan mission over North Vietnam. CDR Hathaway, CO of VA-195, was first *Ticonderoga* pilot to fly 200 combat missions. His friend is noted as World War I flying ace.





FLEET FLIGHT—Sea Knight helicopter prepares for landing aboard *USS Guadalcanal* during carrier suitability tests. New model features "Droop Snoot" rotor blades and more powerful engines for increased capabilities.

above the waterline was sprung by the concussion.

O'Brien promptly returned some 130 rounds of 5-inch/38 caliber ammunition against the enemy shore battery. Aircraft from *uss Kitty Hawk* (CVA 63) and *Enterprise* (CVAN 65) were launched against the position, and the enemy soon ceased fire.

O'Brien has always been where the action is. In her first combat assignment after being commissioned in February 1944, *O'Brien* was hit by German shore batteries while shepherding a fleet of landing ships into Omaha Beach on D-Day.

Although hit in the after part of the bridge, *O'Brien* kept up her fire about three and a half hours, and furnished a smoke screen for *uss Texas* (BB 35) which had been hit, probably saving the battlewagon from more injury from shore.

Only then did she go to England for temporary repairs, and afterward to the United States for major repairs.

Later, in the Pacific War, *O'Brien* joined in the pre-invasion bombardment in the Lingayen Gulf. While she was escorting minesweepers and demolition teams in small boats around the gulf, *O'Brien* came under a Japanese suicide attack and

was hit in her port side by a single engine plane which exploded, opening up a large hole in the destroyer's side.

Damage control parties stuffed mattresses and odd bits of lumber against the gaping hole, and *O'Brien* stayed on the job until invasion troops took over two days later. Then she returned to Leyte for repairs.

But she lost little time getting back to the action.

On 27 Mar 1945, another kamikaze skimmed out of Okinawa's low clouds and hit *O'Brien* just aft of the

bridge, exploding a magazine.

Although casualties were heavy, devotion to duty by the crew helped *O'Brien* survive and, after receiving temporary repairs at an advance base, she finally returned to Mare Island for major repairs.

Once again, *USS O'Brien* has returned to the action, this time in the Tonkin Gulf. Her new enemies, like her old ones, have discovered that this destroyer always comes back for more.

Connie's Ordnance

While operating in the Tonkin Gulf, *Constellation* has an ammunition unrep every few days. During unreps, the ordnancemen struggle to get the ammunition below quickly as it piles up on the hangar deck. The bomb handlers use fork lifts, 21 bomb elevators, pushcarts, and plenty of muscle to store the weapons in 150 magazines located throughout the ship.

Ordnance control personnel keep track of all ordnance brought aboard the ship. When the Strike Center calls for ordnance, it's their job to get the right bomb to the right aircraft.

Requirements are passed to ordnance shops throughout the ship for rockets, bombs, or missiles. A requirement for a bomb is relayed to either of two bomb assembly areas, which serve normally as mess decks when the ship is not in combat. As the bombs are brought up from the magazines they are put together by the assembly crews. Here, fins are attached, along with mounting lugs.

From assembly, elevators take the bombs to the "roof," as the ord-

Telex at Oakland Speeds Service

By talking with a typewriter to points throughout the United States and in foreign countries, the telex system recently installed at the Naval Supply Center, Oakland, Calif., will save time and money in ordering from suppliers and filling requisitions. Oakland is now the continental focal point for most material moving to Southeast Asia.

Telex is a teleprinter exchange service which gives the Center direct communication with some 25,000 foreign and domestic firms. It also provides for more efficient communication with other firms

and private individuals.

Orders or requests for prices are typed on the telex keyboard and printed in the offices of both the sender and the recipient. This allows the immediate correction of any errors and confirmation of the accuracy of quotations sent or received.

Savings come from the reduction of long-distance telephoning and telegraphing, the elimination of much dictation and typing, and savings in general clerical expenses. It also enables the Center to order material more quickly.

nancemen call the flight deck. On the flight deck bomb handlers maneuver the bombs to the planes for mounting, fusing and arming.

The bombs are lifted to the bomb racks on the planes, and the fuses installed. Moments before launch, the bombs are armed to explode either on impact, or at a specific time after they are dropped.

Okinawa Goes West

The amphibious assault ship *USS Okinawa* (LPH 3) has gone West to serve with the Pacific Fleet Amphibious Force. Her home port is now San Diego. Since her commissioning, *Okinawa* had been homeported in Norfolk.

The transfer of *Okinawa* from the Atlantic Fleet Amphibious Force makes a total of five helicopter carriers in the Pacific. *uss Iwo Jima* (LPH 2) and *Tripoli* (LPH 10) are homeported in San Diego; *uss Princeton* (LPH 5) and *Valley Forge* (LPH 8) are homeported in Long Beach.

The 602-foot *Okinawa* can carry 2000 troops and operate 24 transport helicopters. *Okinawa* was built at the Philadelphia Naval Shipyard, where she was commissioned in April 1962.

Deep Diving Sub

An entirely new deep-diving submarine is under construction at the Portsmouth Naval Shipyard, N. H.

The mission of *Dolphin* is primarily experimental, to serve as a platform for underwater research.

It will have one torpedo tube, designed for weapon evaluation.

Dolphin will be 152 feet long and be capable of submerged speeds in excess of 12 knots. Its displacement will be 900 tons, with the capability of supporting a payload of 12 tons.

During surface operations *Dolphin* is a diesel-electric propelled vehicle. While submerged it will be propelled by electrical power from silver zinc batteries.

Dolphin will be manned by three officers, 15 enlisted men and four civilian scientists.

Safety Score

Training Squadron 27, based at NAS Corpus Christi, has logged more than 55,000 accident-free flight hours and is still going strong.

The 55,000th accident-free flight hour was flown after 19 straight months of completely safe operation. During this period the squadron



SERIOUS DAY—Officers and men of *USS Oriskany* (CVA 34) stand at attention after receiving medals for heroism during carrier's fire last October.

logged almost 150,000 landings (of which about 4000 were carrier arrested) and more than 20,000 student training flights.

Since early 1965, when the squadron's long string of safe hours began to accumulate, almost 400 students have completed the unit's multi-engine advanced flight training program.

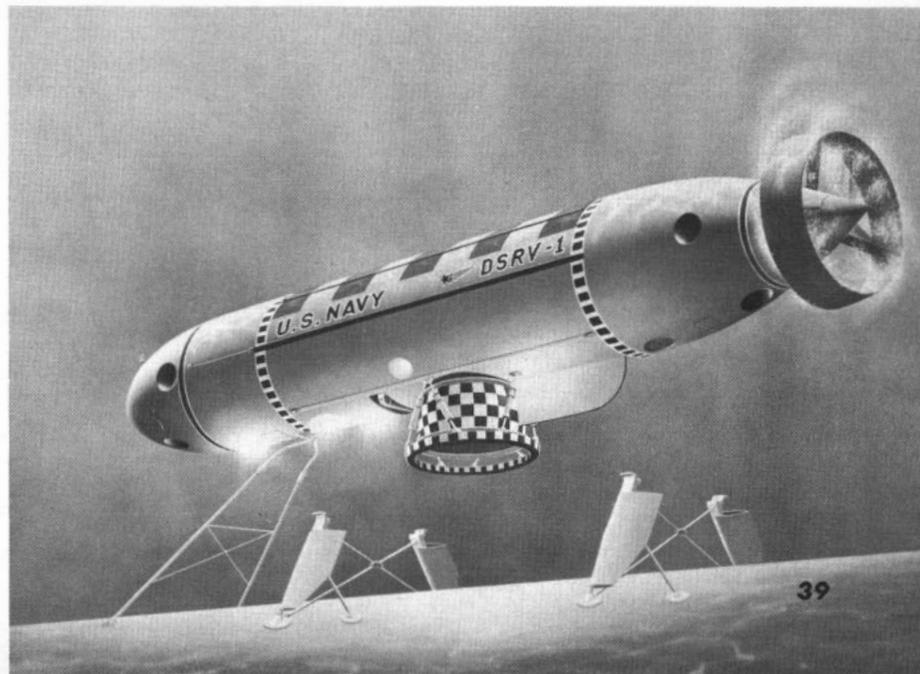
MEL's Titanium

The Marine Engineering Laboratory, in cooperation with one of the leading titanium producers, has developed a corrosion resistant titanium alloy for marine structures.

In late 1964 it was discovered that under certain test conditions some titanium alloys suffered a form of stress-corrosion cracking in sea water. MEL made a study of the metallurgical factors involved. A new composition was developed that is stress corrosion resistant, is capable of being welded, and possesses the toughness required for marine structures.

Because of its light weight and relative strength, the alloy is being considered for deep submergence hulls. It may also be used as structural material for high speed surface ships.

TO THE RESCUE—Artist's conception shows Deep Submergence Rescue Vehicle under construction. Here, it attaches for piggyback ride on sub.





SWIFT BOAT—Hydroplane *Volador*, world record holder and national champ in its class, is named for Navy sub and piloted by sub's ex-skipper (below). Boat is characteristic of namesake—it sinks. (Photo by Don Stough)

Fast Man With a Boat

Beginner's luck turned out to be pretty good for Commander Glenn M. Brewer, usn. In his rookie year as a hydroplane pilot, he has been named the 1966 U. S. National Champion in the 145-cubic-inch Inboard Hydroplane Class by the American Power Boat Association.

Early in 1966, CDR Brewer fulfilled a lifelong desire when he teamed with veteran boat racer Rod Maurer, of San Diego, and bought a hydroplane.

Since CDR Brewer was commanding *uss Volador* (SS 490) at the time, the boat was named *Volador*. The APBA cooperated with the skipper by assigning hull number S-490 to the craft.

The boat's initial Operational Readiness Inspection, a race at Lake Yosemite, Calif., ended when the boat hit a piece of debris in the water and sank.

Not to be set back by such goings-on, CDR Brewer began a winning streak which included the 145 Class trophy at the APBA Limited Inboard Hydroplane National Championship Regatta in Seattle, a new Union of International Motorboating (UIM) World Straightaway speed record of 93.532mph in his class, first place in points in the APBA's Western Division and second place in national standings in his 160-boat class.

The latest laurel to come his way



was his nomination as Rookie Driver of the Year by the Southern California Speed Boat Club of Los Angeles.

To remind himself of the good and bad aspects of his first year of hydroplaning, CDR Brewer has made two additions to his boat. Since winning the national championship in Seattle, the boat has been decorated with an efficiency "E" on its side.

The craft also has a horn, which CDR Brewer installed so he can dive in true submarine fashion if he hits another piece of debris.

Pt Mugu Has Big Year

The past year was a big one for many naval commands. The Pacific Missile Range Headquarters at Point

Mugu, Calif., was particularly busy.

While all the major commands in the Point Mugu complex had a busy year, one of the most active was the Naval Missile Center.

With the Vietnam conflict still holding the spotlight as the number one news story of the year, the Naval Missile Center continued with its primary mission—the testing and evaluating of missiles and rockets for military use.

Point Mugu-tested missiles received continued use in Vietnam during 1966 with a high level of success. Among them were the *Sidewinder*, *Bullpup*, and *Sparrow*.

Other Naval Missile Center missile programs during 1966 were *Phoenix*, *Walleye*, *Hydra Iris*, and *Shrike*.

In mid-September the *Phoenix* missile received its first full test over the Pacific Missile Range. In the test, an A3A *Skywarrior*, equipped with a *Phoenix* missile and guidance control system, located a high-speed jet target drone over the ocean by radar, locked on at long range, and intercepted it.

The Navy's technical evaluation of the *Walleye* missile also was conducted at the Missile Center during 1966. *Walleye* is a project of the Naval Air Systems Command and is described as a "television guided glide weapon."

In mid-January, a scale model of



NIGHT FLIGHT—Helicopter from *USS Mars* (AFS 1) carries cargo to *USS Canberra* during midnight underway vertical replenishment off coast of Vietnam. *Right*: *Sea Knight* helicopter picks up another load for *Canberra*.

an air-to-air missile was fired in a test named "Tiger Tail."

The test vehicle was launched from a tower at Point Mugu and caught in a net. The Tiger Tail technique was developed to retrieve test vehicles and missiles intact. The recovered vehicles can then be used for other tests.

Another technique to flight-test missiles also was developed during 1966 at the Missile Center.

This method, designed to ensure the recovery of the vehicle and all its instrumentation, was named the "Captive Launch Test" by its inventors. It reportedly can be used on almost all air-launched missiles.

It is similar in most respects to the conventional restrained firings used in tests of rocket motors. However, the missile is permitted a brief period of unrestrained movement.

A *Hydra-Iris* rocket probe, fired early in June from the Pacific Ocean off the coast of Acapulco, Mexico, carried a scientific payload to an altitude of 100 nautical miles.

The operation, conducted at sea about 450 miles southwest of Acapulco, was part of the Missile Center's continuing investigation of the ballistic dynamics and other characteristics of water-launched vehicles.

A secondary purpose for the flight was the collection of data concerning X-ray emissions from the clouds of Magellan Nebulae and from the star Alpha Centauri.

The final missions in the *Gemini* program were all successfully completed during 1966, and Pacific

Missile Range aircraft and personnel were assigned the tasks of monitoring frequencies, recording telemetry and other electronic data, and providing voice relays from the capsule to the Manned Spacecraft Center in Houston, Texas.

Point Mugu's newest facility, the Barking Sands Tactical Underwater Range, was well underway early in 1966, and is scheduled to become operational this year.

The range is located on the western coast of Kauai, Hawaii. It consists of a 50-square-mile ocean area some 15 miles offshore, instrumented with hydrophones connected with data processing and communications equipment ashore.

During Fiscal Year 1966, the Pacific Missile Range completed 13,155 operations, which made it the biggest year of operations in its eight-year history.

ROUND THE BEND, FAST—Navy bobsledders Paul Lamey and Bob Huscher enter icy curve on way to North American two-man title at Lake Placid.



Brief news items about other branches of the armed services.



TOPSIDE STATION—Air Force Stratotanker refuels flight of F-105 Thunderchiefs on way to strike over Vietnam.

SMALL CRAFT BUFFS now have available to them up-to-date nautical charts of the Atlantic and Gulf coasts, and certain sections of the Caribbean. The charts were prepared by the Environmental Science Services Administration (ESSA), Coast and Geodetic Survey, Department of Commerce, in Washington.

Also available are conventional or everyday charts of the coasts and Caribbean area which includes Puerto Rico and the Virgin Islands.

The charts are contained in catalogs resembling accordion folders. Each chart is listed by number, the area it covers and the scale. In addition, the catalogs include names and addresses of authorized nautical chart sales agents for each state, Puerto Rico and the Virgin Islands.

Small craft chart numbers and the outline of the area covered are shown in green, while the conventional nautical charts are indicated in magenta (a deep purplish red) and blue. The catalogs also include a list of tide tables, coast pilots (sailing directions), current tables and tidal current charts.

The catalogs are available from the sales agents, or may be obtained in person or by mail from C&GS chart distribution centers at these locations:

- 121 Customhouse, San Francisco, Calif. 94126.
- 602 Federal Office Bldg., 90 Church St., New York City, 10007.
- 1125 Commerce Building, Washington, D. C., 20230.

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THE ARMY is testing a new armed helicopter, the AH-1G *Hueycobra*, which it will use as a bridge between the armed UH-1B now in use and the AH-56A advanced aerial fire support system which is being developed.

As might be expected, the *Hueycobra* is better than the system it replaces and not as advanced as that being developed. *Hueycobra* is definitely something to avoid in a dark alley. Here are some reasons why:

The craft is armed with interchangeable 7.62-mm miniguns and 40-mm grenade launchers. The minigun fires from 1300 to 4000 shots a minute and the grenade launcher, 400 shots per minute. There are also two

2.75-inch rocket pods—one carrying seven rockets, the other 19.

The *Hueycobra* is a two-place tandem helicopter with an all-metal, single main rotor. The design features a wing which carries small stores and the crew seats are armored. Crew vision range is wider in the *Hueycobra* than in the armed UH-1B and the crew has a greater field of fire. The chopper cruises at 130 knots.

Prototypes of the aircraft are now undergoing weapons testing. The AH-1G is the first helicopter specifically designed and developed for an armed role in warfare.

★ ★ ★

A FLOATING nuclear power station was put into operation recently by the Army.

The power plant is mounted in the hull of a modified 10,000-ton World War II Liberty ship, and it theoretically can be towed to any port in the world to support military operations, or provide electric power to communities hit by disaster. Known as *Sturgis*, the plant is now being tested extensively.

Sturgis can produce 10 million watts of electricity for one year without refueling. A diesel power plant would use more than 160,000 barrels of fuel to produce this much electricity.

Sturgis' reactor core is a little larger than an oil drum, and consists of 32 fuel elements containing low enriched uranium dioxide pellets.

A 46-man military crew will be responsible for operation and maintenance of the nuclear system. When *Sturgis* is under tow, its reactor will be shut down and a crew of 15 men can service and maintain the vessel.

Sturgis' primary or heat producing system, consisting of the reactor and a steam generator, is housed inside an eggshaped, 350-ton, steel container located amidships. The secondary, or steam-electric conversion system, is located just forward of the primary system. Most of the power plant equipment is installed in a

AIRBORNE ARMY artillerymen fire howitzer at Cong.





READY FLIGHT LINE—Air Force F-102 fighters stand ready to defend against enemy air attack in Southeast Asia.

new 212-foot long midsection that was inserted between the bow and stern sections of the Liberty ship *Charles H. Cugle*.

About 880 tons of concrete and some 600 tons of lead and polyethylene shielding surround the primary system container to protect the operating crew while the nuclear reactor is in operation. Thickness of the concrete ranges from eight inches to four feet. Added protection has been provided by strengthening *Sturgis'* inner bottom in the area of the reactor, and by constructing a special barrier designed to protect the reactor in the event of collision with another vessel.

The vessel carries all equipment required for refueling operations, storage facilities for new and used reactor fuel elements, and the latest nuclear monitoring devices to ensure the health and safety of all personnel aboard.

Sturgis also has living quarters for its 15-man towing crew, a galley, dining room, sick bay, laundry, recreation room, repair and maintenance shops, and a sewage disposal system.

★ ★ ★

SMOKE-FILLED AIR can be a problem in other places besides our busy freeways. Like in a helicopter flying over Vietnam.

The problem of gunsmoke and missile propellant fumes in the Army's newer, more heavily armed helicopters is being attacked jointly by Army-Air Force scientific teams in Project WEST, a Weapons Exhaust Study.

Crews evaluating the new helicopters have complained of nausea and dizziness after inhaling thick concentrations of fumes during firing tests. These fumes are particularly heavy in recently developed and modified aircraft with a larger number and variety of weapons.

The Air Force Rocket Propulsion Laboratory (AFRPL) at Edwards AFB, Calif., and the Army's Aeromedical Research Unit at Fort Rucker, Ala., are examining the exhaust gases produced by various types of munitions to determine their exact chemical com-

position and degree of toxicity. The AFRPL has considerable experience in capturing and analyzing the exhaust products of rocket propellants, many of them highly toxic.

Employing the same equipment and techniques used to evaluate rocket fuels, Project WEST engineers are testing gases produced by both gunpowder and missile propellants burned under laboratory conditions.

A new series of tests, to begin shortly in the Mojave Desert in California, will be conducted under field conditions, more closely simulating actual service operations.

Using machine guns and rockets provided by the Army, laboratory researchers will fire .50-caliber, 7.62mm ammunition and 2.75-inch rocket motors into a test area. A small chamber surrounding the weapon's muzzle will trap the burning powder fumes and feed them into instruments which will analyze the fumes. The test data then will be relayed to the Army Aeromedical Research Unit, where other information from in-flight tests is being assembled and evaluated.

SCREAMING EAGLES of 101st Airborne Division and Vietnamese villagers watch as AF supply chutes drop.



THE WORD

Frank, Authentic Career Information Of Special Interest—Straight from Headquarters

• **GOLD STARS**—A gold star lapel button has been authorized for the next of kin of U.S. armed forces members who died while serving with United States or friendly forces during World Wars I or II or subsequent periods of armed hostilities.

The button consists of a gold star on a purple disc with a wreath of gold laurel leaves.

The gold stars will be issued upon request to eligible widows (or widowers), parents, children, brothers, sisters, half-brothers or half-sisters of those who died in the following military actions: World War I—6 Apr 1917 to 3 Mar 1921; World War II—8 Sep 1939 to 25 Jul 1947; Korean conflict—27 Jun 1950 to 27 Jul 1954; Berlin—14 Aug 1961 to 1 Jun 1963; Congo—14 Jul 1960 to 1 Sep 1962 and 23 to 27 Nov 1964; Cuba—3 Jan 1961 to 31 Dec 1962; Dominican Republic—28 Apr 1965 to 21 Sep 1966; Laos—19 Apr 1961 to 7 Oct 1962; Lebanon—1 July to 1 Nov 1958; Quemoy and Matsu Islands—23 Aug 1958 to 1 Jun 1963; Taiwan Strait—23 Aug 1958 to 1 Jan 1959; Thailand—16 May to 10 Aug 1962; Vietnam—1 Jul 1958 to a date to be announced.

Those qualifying as next of kin of Navymen who died in these periods may request their gold star from the Chief of Naval Personnel (Pers-E), Washington, D.C. 20370, provided the application is made

within one year from date of death. Applications made after one year should be addressed to Center Manager, National Personnel Records Center, GSA (Military Personnel Records), 9700 Page Boulevard, St. Louis, Mo. 63132.

Applications should be made on DD Form 3 which can be obtained through commandants of the naval districts in which the applicants reside.

Complete details concerning the gold star lapel button are in SecNav Inst 1650.27 of 10 Feb 1967.

• **RATING TITLE CHANGE**—The rating title of Machine Accountant (MA) has been changed to Data Processing Technician (DP).

The reason for the change, which became effective 22 February, is to reflect the technological developments in the area of data processing. It was felt that the change would reflect a more significant and definitive meaning to the rating.

• **TELETICKETING**—To avoid delay and confusion, the Bureau of Naval Personnel is now using an airline teleticketing machine which provides on-the-spot airline tickets to Navy travelers with official orders who make their travel arrangements through the BuPers Traffic Branch.

The innovation is more convenient than the transportation request system, but those who will benefit

most are Navy dependents who live in areas where it is difficult to obtain travel reservations and to exchange TRs for tickets.

• **CARTOON CONTEST**—The 12th All-Navy Comic Cartoon Contest is underway, and ALL HANDS Magazine extends its annual invitation to Navy cartoonists. This year's contest, as in the past, is open to all active duty Navy personnel and their dependents.

Entries must be in black ink on 8- by 10½-inch white paper or illustration board. They must be gag or situation cartoons in good taste, suitable for general use and have a Navy theme or background.

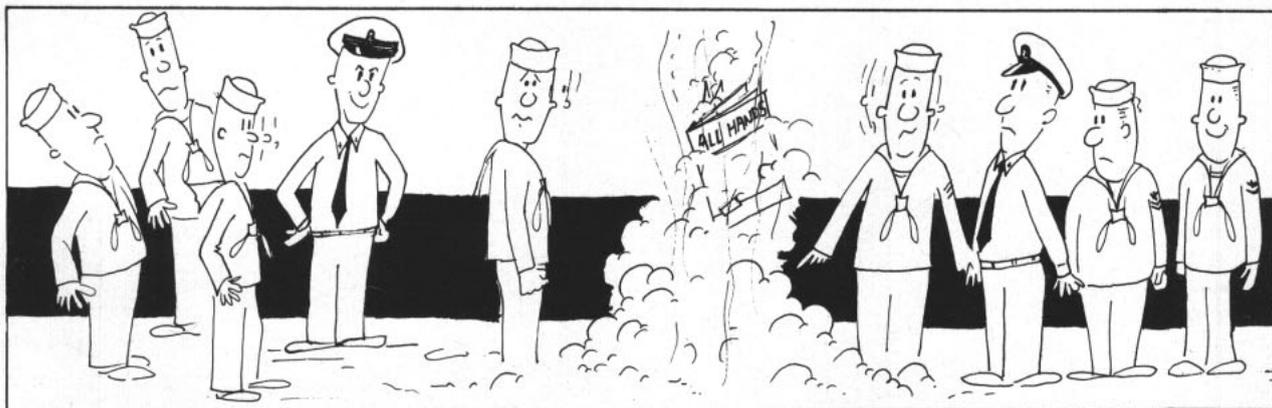
Contestants may enter as many cartoons as they wish, provided the following information and statements are securely attached directly to the back of each entry: The name of the originator; his rate or grade; service/file number; his duty station; the name of his hometown newspaper(s); his command recreation fund administrator; and a brief statement that cartoon is original.

The following statement must also be included: "All claims to the attached entry are waived, and I understand the Department of the Navy may use as desired." This should be signed by the contestant.

Beneath this statement should be written "forwarded" with the signature of the contestant's commanding officer or his designated representative.

Entries from dependents of active duty Navymen should bear this statement: "I am a dependent of _____, rate, grade, etc."

Deadline for submission is 1 July. BuPers Notice 1700 of 21 February has the details.



DONT PULL a disappearing act with ALL HANDS . . . remember there are nine other shipmates waiting to read it.

New Rotation Schedule for Corpsmen

A new rotation plan for hospital corpsmen (excluding corps-Waves) has gone into effect.

The plan is designed to provide corpsmen for duty with Navy and Marine Corps units in Southeast Asia while maintaining rotation equity.

Involving shore tours of from 18 to 30 months, the new rotation system will first affect hospital corpsmen who complete tours of 12 or more consecutive months' duty in Southeast Asia.

To qualify for 30-month shore duty assignments corpsmen must have served in a shore-based activity in Vietnam; with combat forces of the Fleet Marine Force deployed in Vietnam on a full rotational tour; or aboard a ship which was continuously deployed to Southeast Asia in support of Vietnam operations. These ships are listed in OpNav Inst 4600.16.

To qualify for the 30-month tour, these corpsmen are also required to be eligible for Seavey or must have spent less than 24 months ashore before their Vietnam tour began, or must have completed four months TAD in South Vietnam during the year before their present Southeast Asia tour began.

Corpsmen who have completed at least 12 months' consecutive service in Southeast Asia but lack the other qualifications will be given at least 18 months ashore. Shore duty completion dates for men with less than 18 months of obligated service will coincide with the expiration of their active obligated service.

HMs with 90 days or less of obligated service, however, will normally be separated from the service upon authorization from BuPers. Procedures for submitting such requests may be found in Article C-10306 of the *BuPers Manual*.

BuPers is assigning Class A Basic Hospital Corps School graduates to facilities where they can receive inpatient care training.

After at least two months of inpatient training, hospitalmen with the most training experience will probably be assigned to fleets, and ultimately to Vietnam, before returning ashore.

Corpsmen who complete 18 to 30 months of shore duty after 1 March

will be made available for assignment to Fleet duty. Those who reported for shore duty before 1 March, however, will be made available for Fleet duty after 24 months ashore.

If need be, corpsmen completing 15 or more months in the fleets will be reassigned to Vietnam tours. Priority will be given to men who have served the longest in the Fleet, thereby achieving a balance of rotation and experience among all Navy corpsmen.

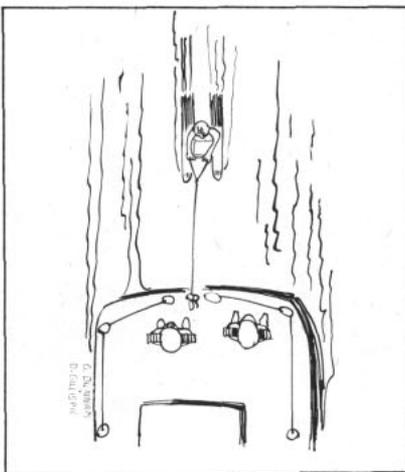
Nobody, of course, will be assigned two consecutive Vietnam tours, nor will anyone be transferred as noted above within three months after returning from an overseas deployment of four or more months.

EPDOPAC will handle reassignment and transfer of corpsmen to Southeast Asia after they have completed at least 15 months in the Atlantic Fleet. EPDOLANT will provide names of corpsmen who are eligible.

Here again, consecutive unaccompanied tours will be avoided as will transfers which would occur within three months after return from overseas deployments of four or more months.

Since the new rotation system causes shorter shore duty tours for some corpsmen, sea duty commencement dates will not be advanced (Seavey A-67: October 1964) until the new rotation system can be evaluated.

G. Dunnam and
Donald W. Gillispie



"I think the morale officer has gone a little bit too far."

In the meantime, corpsmen who qualify for transfer from Southeast Asia will be assigned to shore activities for between 18 and 30 months.

After completing this 18- to 30-month tour ashore, HMs will normally be assigned to a Fleet billet for a minimum of 15 months. They will then be rotated to unaccompanied tours in Southeast Asia to complete their regular sea tours—thus completing the rotation cycle.

The new plan is expected to achieve three basic goals: It will permit maximum use of hospital corpsmen; provide both Fleet and shore activities with more experienced corpsmen; and afford equal opportunity for all corpsmen to serve a one-year unaccompanied tour in Southeast Asia.

• **AWARDS TIME LAG**—If you have received by delegated authority a medal and temporary citation for service in Vietnam or the Dominican Republic, there's no need to worry about the time lag you may experience in receiving your permanent citation.

You won't help matters by writing a letter of inquiry. The headquarters staff in Washington is simply bogged down with a multitude of similar requests and your letter will mean more administrative work for them.

Here's the situation:

All permanent citations for naval personnel are prepared by the Citations Branch of the Navy Department Board of Decorations and Medals. Although the staff has been more than doubled in recent months, the large number of awards relating to Vietnam has resulted in a large backlog.

The present policy is to work with the oldest awards first, although all awards for an individual are processed when his record is under review.

As the men who have qualified for awards under delegated authority have actually received the medal and a temporary citation, it has been decided to accept the delay in preparing the permanent citations rather than to further expand the headquarters staffs' office force on a temporary basis.

A similar policy is being followed by the U. S. Marine Corps Decorations and Medals Branch in respect to Marine Corps personnel.

THE BULLETIN BOARD

Pointers for Navymen Traveling by Air on Leave or Liberty

IF YOU TRAVEL commercially when you go on leave or liberty, the following information should be of interest.

To begin with, almost all air carriers will offer you—as a serviceman—a 50 per cent discount off the price of a regular ticket if you wish to travel in a standby status. To qualify as a standby passenger, you must be on active duty; travel at your own expense on authorized leave, liberty or under orders; and wear your uniform both at the time you purchase a standby ticket and while you're traveling.

You must also have in your possession a Military Standby Authorization for Commercial Air Travel (DD Form 1580). This new form replaces NavPers Form 4632/1 (10-66) of the same title which was first issued last November.

Normally, you are issued at least five copies of DD 1580 at the time you receive your leave papers on board your ship or station. Make sure you have both leave papers and air travel forms when you attempt to purchase your ticket, because the carrier will require a copy of the DD 1580 at that time.

If you anticipate making a number of standby transfers during your trip, it would be wise to have enough copies of DD 1580 so that you may keep a duplicate of each copy you surrender to ticket issuing agencies.

These authorization forms will be validated with the date and time by the airline on which you plan to travel when you first arrive at the check-in desk at the airport. You may not register as a standby until you appear at the airport ready for departure.

Since standby travel is on a first-come-first-served basis, the time stamp is important. Should you be unable to obtain space on the flight you have chosen, then check other airline schedules going to or near your destination. The time stamped on your DD 1580 and on tickets will be honored by other airlines.

There are three standby priorities used by airline carriers to determine when you will board a flight. Should you happen to be on emergency leave, you'll board first. Those military standbys on convalescent and combat leave board second, followed by individuals on regular leave, liberty and those who have been discharged from service within seven days.

The importance of the time stamp cannot be overemphasized. Here again, travelers within each standby category will be boarded in order of their check-in time. In any event, you will be boarded ahead of other types of standbys, such as students, who do not hold reservations.

When planning to travel on a standby basis, you would do well to remember that it is on a space available basis. No advance reservations. This factor is important during holidays, when flight space is, in general, difficult to obtain.

Another point: Before you board a plane, be sure you have assurance from the carrier that you have been cleared either to the point of your destination or to a point acceptable to you. If the destination to which you are cleared is not where you want to go, you might prefer to

wait for another flight which will take you closer to home.

On the other hand, once you've been cleared either to your destination or to an intermediate point, you will be treated as a full-fare passenger. You will not be removed to accommodate other passengers short of the point to which you are cleared.

As a military standby traveler, your baggage will be subject to the same rules required for a full-fare passenger, both in terms of volume and weight. Should any of your baggage be mishandled by the carrier, it will be treated in the same manner as that of a full-fare passenger.

If your flight is one on which meals are served, you should receive the same meal service as full-fare travelers. Occasionally, there may be a shortage of meals on an aircraft. Should this occur, you will receive a complimentary meal voucher to cover meal expenses at your destination. The best thing to do in the meantime is tighten your belt.

There are many airlines which offer reduced rates other than the usual 50 per cent standby rate for military travelers. These fares are usually higher than the standby figure but they offer one important feature standbys don't—confirmed reservations.

Since these reservation discounts vary among the carriers, it would be wise to check the cost of reserved seats for military travelers with your local JAMTO (Joint Airline Military Ticket Office) or the ticket office of the airline with which you plan to fly.

Additional aid may be sought through the Travelers' Aid Society and at military information desks which are operated at major air terminals from coast to coast.

These desks are relatively new and at present there are only eight located across the nation. They are located at the following terminals:

Jeremiah H. Paoli, IC2, USN



"... And after I become a fighter pilot, I'd like to go in for UDT... and then..."

- O'Hare International Airport, Chicago, Ill.
- National Airport, Washington, D.C.
- Imeson Airport, Jacksonville, Fla.
- Atlanta Airport, Atlanta, Ga.
- Lambert Field, St. Louis, Mo.
- Love Field, Dallas, Tex.
- San Francisco International Airport.
- John F. Kennedy Airport, New York, N.Y.

From the information desks at these locations you can receive assistance in selecting alternate airlines or alternate destinations. Perhaps you wish to continue your travels by train or bus. The people at the information desk should be able to advise you which means would best suit your situation.

If it's local bus, taxi or rent-a-car information you seek, or perhaps the whereabouts of and services available at the USO and YMCA or any number of other nice-to-know locations, visit the military information desk. They also will give you aid in contacting your duty station should you be unable to return on time.

In addition to military information desks, you can always count on assistance from local recruiting offices and military installations.

If you prefer to travel by train, you will find all rail travel offered to members of the military service at reduced rates, both one-way and round-trip.

Here again you must be in uniform, travel at your own expense and have leave papers in hand. Fares are about 50 per cent of one-way or round-trip fares and are good only for coach travel.

You may buy your tickets any time of the year, but you must use round-trip tickets within 90 days of purchase and within 45 days for one-way tickets.

Train travel also offers reduced family plan rates between many points in the western and eastern areas of the U.S. For example: On a one-way trip you pay one full fare as the head of the household while your wife and any children between the ages of 12 and 21 pay one-half of the fare. Fares for children between ages 5 and 11 are only one-quarter of the regular cost.

There is no charge for children under five years old.

Round-trip family plans are similar in cost formula: The head of the family pays the full fare, wife and children 12 to 21 years old pay full one-way fares, children between ages 5 and 11 pay one-half of one-way fare, and children under five ride free.

As another alternative, you may wish to take advantage of the low fares offered by the overland bus

systems. Bus carriers offer reduced fares to military leave travelers on round trips between most major cities.

In general, "Furlough Fares," as reduced rates are commonly referred to in bus terminals, are offered at 10 to 25 per cent savings on round-trip tickets.

To qualify for "Furlough Fares" you must be in uniform, in possession of leave or liberty papers or official orders directing your trans-

HOW DID IT START

Nuclear Power in the Navy

Nuclear powered ships have interested the Navy for many years. As early as 1939 a group of Navy scientists met with physicist Enrico Fermi, the 1938 Nobel Prize winner, to discuss his theories on controlled nuclear fission. World War II took precedence over the Navy's work in this area, however, and it was not until 1946 that the Navy's nuclear power interest was reactivated.

In 1948 the Atomic Energy Commission contracted for a land-based experimental reactor which would meet specifications for ultimate installation in a submarine. Construction of this prototype plant commenced in 1950 at the AEC's Nuclear Reactor Testing Station in Idaho.

In the meantime, design of the first nuclear submarine began. On a sunny day in June 1952, in Groton, Conn., President Harry Truman signed the keel plate of the ship which would become USS Nautilus (SSN 571).

Nautilus was commissioned in January 1955. As her designers had predicted, she met with immediate success. On her first extended voyage (from New London to San Juan, Puerto Rico) she broke every existing submarine record for speed, endurance and range. Since then new atomic submarines, first attack types and later Fleet ballistic

missile subs, have gone to sea regularly.

To date there are three nuclear-powered surface ships and a fourth (Truxtun) is under construction. Task Force One, consisting of USS Enterprise (CVAN 65), USS Long Beach (CGN 9) and USS Bainbridge (DLGN 25) has completed Operation Sea Orbit, a historic around-the-world cruise. The trip from the Med east to the eastern coast of the U. S. took just 65 days, covered 30,565 miles at speeds averaging 25 knots, and did not require replenishment of any type.

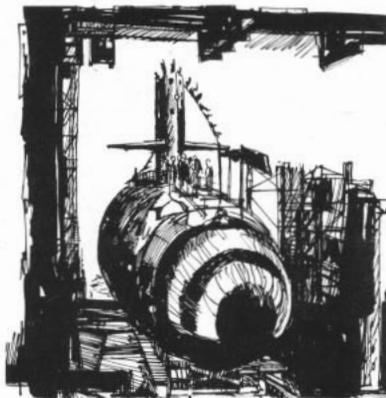
In the Navy's shipboard nuclear power plants, nuclear fission serves the same basic function as the boiler aboard fossil-fuel ships: It provides heat for the generation of steam.

Because of the radiation factor, however, atomic power plants require two circulatory systems instead of the one in conventional ships. The primary system is a circulating water cycle through which pressurized water is fed into the reactor for heating. At a later stage in the process the heat is transferred from the primary system to a secondary system to generate radiation-free steam which is used to power the vessel.

The reactor itself is surrounded by shielding, as is the primary circulatory system. A crew-member of a nuclear submarine receives less radiation during an underwater cruise than he would receive from natural sources ashore.

Several characteristics of nuclear power plants make them ideal for shipboard use. Among the most obvious is their ability to operate almost indefinitely without requiring additional fuel and the consequent release of fuel stowage space for the stowage of other supplies.

No step in the generation of steam from an atomic power plant requires the presence of oxygen. As a result, a nuclear submarine may operate completely independent of the surface for extended lengths of time (oxygen for the crew can be stored and carbon dioxide removed from the atmosphere to extend the periods of submerged operation).



THE BULLETIN BOARD

fer to a new duty station, or be returning home upon discharge.

Bus lines are now offering one-way military rates at 50 per cent of the round-trip "Furlough Fare" only from these cities: Boise, Idaho; Columbus, Ga.; Oceanside, San Clemente and San Diego, Calif.; Columbia, S. C.; and Savannah, Ga. Columbia and Savannah do not offer the special rates between 1 November and 3 January.

Many of the reduced rates mentioned here are the result of intensive study and close cooperation between DOD and commercial passenger carriers.

Therefore, you are encouraged to report any commercial carrier *deficiencies* so that the Navy can help either to maintain or improve transportation services for military personnel traveling at their own expense.

Should you encounter problems with commercial carriers while traveling as a military leave traveler, you may make a report of all circumstances to the Military Traffic Management and Terminal Service (MTMTS).

MTMTS prefers you use special form DD 1341, entitled Report of Commercial Carrier Passenger Service, when submitting your report. However, if the form is not available, a letter report identifying the carrier, origin, destination, flight number (if applicable) and dates, may be sent to Commander, Military Traffic Management and Terminal Service, Attn: MTMTS-PTN, Washington, D.C. 20315.

Postgraduate Work Offered On Pilot Basis at Academy

A graduate educational program which will enable some Naval Academy midshipmen to complete their requirements for a Master's degree in minimum time has been approved on a pilot basis.

The pilot program, which will last one year, will begin following the graduation of the 1967 class and will be conducted at the Naval Postgraduate School, North Carolina State University and at the Georgia Institute of Technology.

Fifteen midshipmen have been nominated for a graduate mathematics program at the Naval Postgraduate School; ten June 1967

graduates will study engineering mechanics at Georgia Institute of Technology; 10 will pursue graduate study in aeronautical engineering at the Naval Postgraduate School; and five are scheduled for aeronautical engineering at the North Carolina State University.

The Immediate Master's Degree Program is designed to be a powerful incentive program for midshipmen. It is anticipated it will provide the Navy with officers qualified early in their careers with a subspecialty at a minimum expenditure of time and funds.

List of New Motion Pictures

The list of recently released 16-mm feature movies available from

the Navy Motion Picture Service is published here for the convenience of ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

Modesty Blaise (C): Melodrama; Monica Vitti, Terence Stamp.

The Counterfeit Constable (C): Comedy; Robert Dhery.

Contest Girl (C): Drama; Ian Hendry, Janette Scott.

Bullets Don't Argue (C): Action Drama; Rod Cameron, Dick Palmer.

Trunk to Cairo (C): Action Drama; Audie Murphy.

Murder Party: Mystery Drama; Magali Noel, Harry Meyen.

A Covenant with Death (C): Drama; George Maharis.

Airline Military Leave Discounts

All discounts are approximate. To qualify, uniform, leave orders and military ID cards are required.

Carriers	Discounts and Conditions		Reserved seat Discount
	Unreserved seat, Standby basis	Reserved seat on emergency leave with certification from CO or Red Cross	
Alaska	x	x	
Allegheny			33 1/3
Aloha	x	x	
American	x	x	
Bonanza			40
Braniff	x	x	
Central	x	x	
Continental	x	x	
Delta	x	x *	
Eastern	x	x *	
Frontier	x	x	33 1/3
Hawaiian	x	x	
Lake Central	x	x *	
Mohawk	x	x *	
National	x	x *	
New York Airways	x	x	
North Central	x	x *	
Northeast	x	x *	
Northwest	x	x	
Ozark			33 1/3
Pacific	x	x *	
Pacific Northern	x	x	
Pan American	x	x	
Piedmont	x	x *	
San Francisco-Oakland			
Helicopter	x	x	
Southern	x	x *	33 1/3
Trans Texas	x	x *	
Trans World	x	x	
United	x	x	
West Coast	x	x	
Western	x	x	

*Reserved seat on going trip only.

Return to Guantanamo Bay - A Report for the Navy Family

IF YOU HAVE ever sailed with the Atlantic Fleet, you probably have been to Guantanamo Bay, Cuba. That's a fairly safe bet, because it is the headquarters of the Fleet Training Group, and nearly every ship in the Atlantic Fleet has sharpened its skills here at one time or another.

But what is it like to have permanent duty at Guantanamo? The following report should give you a pretty good idea. For details and base regulations, you should, of course, write to the base commander.

Although its official title is U. S. Naval Base, Guantanamo Bay, Cuba, it has long been unofficially known as "Gitmo" by residents and visitors.

A major command of the 10th Naval District, Gitmo's primary job is Fleet support and training. By its location, it is also one of the key military installations in the Western Hemisphere. Its strategic importance became clear during the Spanish-American War.

After the conclusion of that war, Congress authorized the leasing of the naval reservation from Cuba, and the base was established on 10 Dec 1903 as a coaling station.

It became a naval operating base in 1941, and during World War II it grew in size and responsibility, providing logistic services and support to units of the Atlantic Fleet. In 1952, the operating base was reestablished as a naval base.

For those unfamiliar with the Caribbean area, Cuba is the largest of the West Indies Islands. The average width is about 50 miles, and it is 780 miles long. The island is southeast of Florida, about 80 miles from Key West.

Guantanamo Bay is on the southern coast of Cuba, near the eastern tip of the island in Oriente Province.

Cuba's warm dry climate is one of the most pleasant in the tropics and is best described as semi-tropical, even though it is located south of the Tropic of Cancer. During the winter months, the average temperature varies from 84 degrees at noon to 69 degrees at

night. From April through September the average is a high of 88 and a low of 73 degrees. Yearly extremes are about 62 degrees in winter and 95 degrees in summer.

The Guantanamo Naval Base is, as far as Navymen and their dependents are concerned, an island within an island. Leave and liberty in Cuba are not authorized.

The base is located in a semi-arid area with 15 to 20 inches of rainfall per year. Unlike many tropical areas there are no prolonged periods of high humidity or dampness.

The 45-square-mile base has a population of about 10,000. Approximately 4000 of these are military personnel, and there are about 3000 dependents.

The base is actually split into two parts, separated by the entrance to Guantanamo Bay. The east side of the base contains the major base

facilities, while the opposite side, called Leeward Point, includes the airfield. Regular ferry service is available between the two areas.

The majority of family quarters are located on the Windward side of the Bay, although there are some quarters on Leeward Point. The commissary store is on the Windward side, so quarters on Leeward Point are furnished with a deep freeze.

Leeward Point has a complete and well-equipped medical clinic, as well as a small Navy Exchange, a hobby shop, a swimming pool, recreation building, tennis courts, bowling lanes, and horseback riding facilities.

Leeward's chapel offers Protestant and Catholic services and a Sunday School.

Housing

Family quarters at Guantanamo are available to eligible Navymen

WHAT'S IN A NAME

Underwater Shelters

When the Sealab project began and Navy aquanauts first took up temporary residence beneath the sea, the experts predicted the event would mark the beginning of a large scale invasion of the continental shelves. In the future, they maintained, portable underwater shelters would serve as headquarters for underwater engineers and explorers.

Already there are indications they knew whereof they spoke. The Office of Naval Research is seriously considering the possibilities of an extensive exploration program aimed at

the continental shelves. And of the two proposals for life-support systems studied so far, both rely heavily upon experience gained during the three Sealab operations.

Among other discoveries, Sealab proved men could live under relatively high pressures for long periods of time. Consequently, it is possible to conduct underwater activities without lengthy decompression after each trip into the sea.

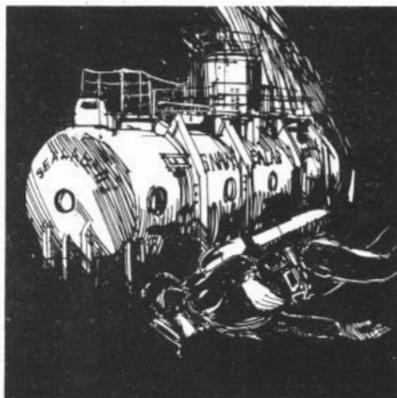
One of the proposed exploration systems calls for a non-propelled vessel, much like the Sealab living quarters, which would permit six men to live and work for as long as two weeks at depths as great as 300 feet. The vessel would be cylindrical, nine feet in diameter and about 40 feet in length. Easy access to the sea would be provided.

It would be towed from site to site by a support ship.

The second possibility also involves keeping the divers at a constant pressure to avoid daily decompression, but the method of doing so is quite different.

The aquanauts would live in a pressurized space aboard a surface barge and travel to the bottom in a pressurized submersible delivery capsule.

They could remain on the bottom as long as six hours at a stretch.



who are authorized transportation for dependents and household effects at government expense.

Waiting lists for housing vary according to the time of year you arrive. The waiting period is only two weeks at certain times of the year, but can go as high as four months during busy periods.

Unless you are specifically authorized by the Base Commander to bring your dependents with you, you will have to sweat out the waiting list alone.

If you are authorized concurrent travel with your dependents, you will have to live in temporary quarters until permanent housing becomes available.

Usually you must remain on the waiting list until quarters become available before your dependents may enter the base. Your name is placed on the list the day you actually report aboard the base for duty.

There are approximately 186 married officers' quarters and 701 married enlisted men's quarters available for assignment as public quarters, and about 117 rental housing units available for lower rated enlisted men. All quarters except rental housing are furnished.

Officers' family quarters consist of two- and three-bedroom houses, two- and three-bedroom duplexes, and two-bedroom apartments. Eligibility for the three-bedroom quarters is determined by seniority, size of family and age and sex of children.

Family quarters for enlisted men consist of one-, two-, and three-bedroom duplexes, four-apartment units, and three-bedroom houses.

The defense housing rental project consists of 117 two-bedroom bungalows of wood frame construction. These cost about \$40.00 per month plus utilities. They are unfurnished, but government furniture may be rented at a modest cost.

Medical and Dental—The U. S. Naval Hospital at Gitmo is a completely air-conditioned unit with a 100-bed operating capacity. The hospital includes medical, surgical, dependents' and officers' wards, a modern operating suite, a pharmacy, an X-ray department, and other auxiliary services and departments.

Medical service includes surgery, pediatrics, internal medicine, dermatology, obstetrics, and optical care.

Patients requiring special care beyond local capabilities are transferred to the United States by air for further treatment. No house calls are made. Emergency care is available.

The dental clinic has facilities for the routine dental care of military personnel and dependents, and emergency care for all base residents. If your dependents require major dental treatment, they should have it before leaving for Gitmo, as orthodontic care is not provided and prosthetic treatment is limited. A civilian dentist has been authorized to enter the base twice monthly to treat those who are not entitled to routine treatment at the Navy dental clinic.

Commissary and Exchange—There is one commissary on the base. Prices average slightly lower than stateside supermarkets and slightly higher than stateside commissaries.

Perishables arrive every two weeks by commercial ship. Stocks are generally good on most items, and sufficient quantities of basic foods are available to insure a well-balanced diet.

The Navy Exchanges display a large stock of items, including Caribbean craft items and a few European imports. Prices are very reasonable. The Navy Exchange also operates a general store, laundry, dry cleaning shop, cobbler shop, tailor shop, beauty parlor, seamstress and piece goods shop,

gas station, garage, television and radio repair shop, sports shop, and barber shops. An ice cream truck makes the rounds of the housing areas. Special order desks are maintained for items not normally carried in stock.

Education—The Naval Base School provides free educational facilities from the first grade through high school. Nursery school and kindergarten are supported by tuition charges.

The school is well equipped, and is accredited by the North Central Association of Colleges and Secondary Schools. Books are furnished, and transportation is by Navy buses. The school year commences in late August and terminates in late May.

College extension courses, administered by the Old Dominion College of Norfolk, Va., are available to all base residents.

Recreation—There are excellent recreational facilities in Gitmo. A fine golf course tops the list, which includes tennis, roller-skating, swimming, bowling, miniature golf, horseback riding, archery, sailing, boating, gymnastics, deep-sea fishing, bay fishing, and skin diving.

Some athletic gear is available on a check-out basis. If you want to buy your own, you'll probably find it at the exchanges. Hobbyists will find Gitmo Hobbyland, with its facilities for woodworking, ceramics and photography, much to their liking.

What to Bring

All government public quarters are equipped with essential furniture, including electric stoves and refrigerators. Much of the furniture is tropical rattan or light-colored hardwood.

Curtains, drapes and rugs are not provided, so if you want these items you should bring them with you. Fans, floor lamps, and table lamps are also useful items to bring.

It is also advisable to bring your own throw rugs, pictures, and knick-knacks to personalize your home. Washing machines and sewing machines are not furnished. Although all quarters are furnished with one refrigerator, a freezer or additional refrigerator may be useful.

As has been stated, the commissary and two exchanges on the base

Robert V. Brown, BUR2, USN



"Coming up! One pheasant under glass."

have a good variety of merchandise. However, certain items are not available at all times or are available only in limited quantities and sizes.

You might want to bring an adequate supply of children's shoes, including half a size larger than the ones they now wear. It is a good idea to establish a shoe record with a children's store, especially if your child is hard to fit.

Other limited items are boys' trousers, socks, sweaters, cotton pajamas, and slippers.

In addition, there will undoubtedly be many items which you may want that are not available in the exchange, but which can be ordered from mail order companies, so bring your favorite catalog. The exchanges provide a special order section. You may find it advantageous to keep your charge accounts open at some of your favorite stores.

Automobiles

Though not a requirement, private transportation is desirable at Gitmo because the base is quite large. Married men will particularly find a family car invaluable. Most streets and roads of the base are paved and in good condition.

You can either bring your own, if you are eligible, or you can arrange to buy a used car from someone who is leaving. Privately owned vehicles may be turned in to the Naval Supply Center at Bayonne, N. J., Norfolk, Va., or at Charleston, S. C., depending upon your point of embarkation, for further transportation to Gitmo.

Two certified copies of your orders are required with your application for shipment of your automobile. Normally there is a backlog of automobiles waiting shipment at shipping points, and it is advisable to take your automobile to the point of shipment as early as possible.

Be sure that your car is in first-class condition before you ship it. While replacement parts normally can be bought on the base for the common makes of cars, occasionally they may not be available.

Base regulations require every owner of a private motor vehicle to have effective insurance with standard coverage before permission will be granted to operate the vehicle on the base. Arrangements

for insurance should be made before stateside departure.

The vehicle must pass a safety inspection before a base license plate will be issued. No vehicle may be operated without a base license plate.

Each operator of a motor vehicle must have a base driver's license. Dependents should bring a valid driver's license from the United States as an aid in obtaining a base driving permit.

Ordinary domestic pets may be brought to Gitmo, but a permit must be obtained from the base provost

marshal upon arrival. Monkeys and birds of the psitticine family, such as parrots and parakeets, are prohibited.

Cats and dogs over six months old must be inoculated annually against rabies at the cost of the owner. All pets must be kept on owner's premises or be on a leash. Except where the animal appears diseased, a quarantine period is not required. There is no veterinarian on the base. No pets may be transported on MAC aircraft.

You might wish to have your hometown newspaper mailed to you,

WAY BACK WHEN

Pearl Harbor Has Changed With the Years

It is difficult today for a Navyman to picture Pearl Harbor as it was in 1916. The terrain was low, flat and, in some places, swampy. There were a few buildings of corrugated steel, a big three-story Marine barracks and a partially completed drydock. More than anything else, there were a lot of open spaces.

There were differences in status, too. Pearl Harbor in the early years of the century was only a naval station. Rear Admiral C. J. Boush, USN, was its commander. In 1916, however, Pearl Harbor was to become the headquarters of the 14th Naval District and Captain G. R. Clark, USN, was its first commandant.

Despite the increased responsibilities and prestige, the new naval district had a population of only 299 Navy men and Marines, and only Hawaii and Midway were included in its sphere.

Major problems included control of mosquitoes (the medical officer feared they would carry yellow fever to the Orient) and the completion of an unfinished drydock. (An earlier attempt had been wrecked by underground pressure.)

There were also minor problems which arose

principally because of insufficient staff. Office help was, in fact, so scarce that the captain was his own typist, clerk and factotum.

With his small staff, the commandant operated the nearly defunct coaling station at Honolulu, which was being replaced by a new station at Pearl Harbor. He also administered a temporary submarine base, a hospital and a growing number of shipyards.

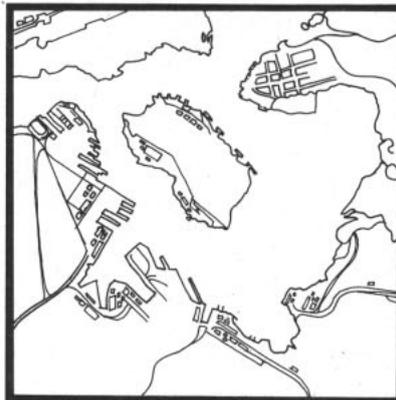
The United States entry into World War I provided added burdens. Pearl Harbor got its feet wet shortly afterward. The German gunboat *Geier* and her collier *Locksun* had been interned in Honolulu. The German ships were seized by the U. S. Government, repaired at Pearl Harbor and later commissioned under the United States flag.

World War I gave Pearl Harbor and the Fourteenth Naval District the push they needed to achieve their present importance and size. Growth continued until World War II when steady increase became an explosion. By 1944 there were more than 81,000 Navy men and Marines serving in the District which included Johnston, Fanning, Washington, Christmas and Canton Islands, and French Frigate Shoals.

Hundreds of ships were repaired by the yard force and millions of tons of supplies were sent to war through Pearl Harbor. The same story was repeated during the Korean conflict and now with Vietnam.

Most long-time Navy men have seen Pearl Harbor at least once and know how it looks. Every Navyman, regardless of where he is stationed or how long he has been in the Navy, knows how important Pearl Harbor and the 14th Naval District are to the Navy.

From a standpoint of size, responsibility and facilities, the changes that occurred between 1916 and 1967 would amaze even the most farsighted of those who first saw the wide open spaces around Pearl Harbor in Pre-World War I Hawaii.



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inasmuch as no stateside papers are available in Gitmo on their publication date. Base newspapers include an English language mimeographed paper with wire service coverage, as well as local schedules, ads, and notices. It is delivered to housing six days a week.

Bring your radio and television with you. WGBY radio (AM and FM) and television operate seven days a week. These facilities are manned and operated by naval base military personnel, with some featured radio and television programs presented by volunteer military personnel and their dependents. WGBY radio and television are affiliated with the Armed Forces Radio and Television Service.

Transportation

Air transportation to Guantanamo Bay (Military Airlift Command) is normally available for military and civilian personnel and their dependents four times monthly from the MAC terminal, Naval Air Station, Norfolk, Va.

Unaccompanied military personnel may also be assigned transportation on naval ships and cargo aircraft making operational trips to Gitmo.

Entry into the Guantanamo area by civilians, including dependents, is subject to the specific approval of the Naval Base commander. Where concurrent travel is authorized in transfer orders, the command from which you are transferring should send a letter or message to COMNAVBASE GTMO requesting entry approval for you and your family and indicating the size of family and ages of children.

Where concurrent travel is not authorized, you should proceed and report to Gitmo as ordered; then upon arrival, you should apply to the housing office for public quarters and entry approval for dependents.

Dependents are required to complete immunization before departing from the United States, and must furnish a certificate issued by a medical officer 48 hours before embarkation, showing freedom from infections or communicable diseases.

Naval activities overseas and in the continental U. S. are invited to forward to ALL HANDS up to date information on living conditions in their area.

Correspondence Courses for Officers, Enlisted Personnel

Several revised correspondence courses are now available. Two are for the use of officers, three are for enlisted men and one, a Medical Department publication, is designed for both.

All of the revised courses are unclassified.

- OCC/ECC, *Control of Communicable Diseases in Man*, NavPers 10772-A1, supersedes NavPers 10772-A. There are seven assignments. (For special ordering instructions, see below).

- *Aviation Structural Mechanic S 3 & 2*, NavPers 91364-A (Supplement).

- ECC, *I. C. Electrician 1 and C*, NavPers 91531-1, supersedes

NavPers 91531-C. There are five assignments.

- ECC, *Construction Electrician 1 and C*, NavPers 91571-1E, supersedes NavPers 91571-1D. It has eight assignments.

- OCC, *Logistics*, NavPers 10902-B, supersedes NavPers 10902-A2. There are nine assignments.

- OCC, *Naval Orientation*, NavPers 10900-A, supersedes NavPers 10900. The course has 16 assignments.

Navy men who wish to order *Control of Communicable Diseases in Man* must submit their request, via appropriate channels, on a Form 922. The form must be altered to read: To the Commanding Officer, U. S. Naval Medical School, National Naval Medical Center, Bethesda, Maryland 20014.

NOW HERE'S THIS

Some of These Problems Take Long Time To Go Away

Icebergs in the North Atlantic constitute a problem to shipping which, if ignored long enough, will go away.

However, many of them are sufficiently large problems so that they take much too long to resolve. That's the reason for the International Ice Patrol, which the U. S. Coast Guard has maintained for 53 years.

According to Coast Guard estimates, approximately 7500 sizable bergs break off from thick glaciers along the west coast of Greenland each year. These usually spend the first winter in the vicinity of Melville Bay, Greenland.

Then they traverse Baffin Bay to the Canadian Arctic coast line, where those still afloat spend the second winter in the neighborhood

of Cape Dyer. A few reach the Grand Banks the following spring, after a journey of some 3000 miles.

An average of 400 icebergs drift south of the 48th parallel. After approaching the Gulf Stream, where the sea temperature rises to above 60° F., the bergs usually melt within two weeks.

Icebergs have withstood all efforts of man to destroy them. They have defied fire-bombs, gunfire and chemicals to induce rapid melting. Use of conventional explosives or combustibles on the mountains of ice has been unsuccessful.

Theoretically, the demolition effects of more than 1900 tons of TNT are required to break up an average size berg of 7,000,000 cubic feet. Calculations indicate it would require the heat generated by burning 2,400,000 gallons of gasoline to melt such a piece of ice. Such solutions are not considered practical.

Those who are in a position to know say that some of the bergs breaking off the bottom of the centuries-old Greenland icecap are of ice at least 32,000 years old. This ice is blue in color and actually effervesces when put in water.

The size of Greenland icebergs occasionally reaches 300 feet above the waterline and 1500 feet in length and breadth. Such bergs may represent 1,500,000 tons of ice. The tallest ever recorded was found in 1957 by USCGC *Eastwind* (WAGB 279). It measured 550 feet high. And only one-tenth of the berg's actual size was above the surface of the water.



For Navymen Overseas— Where Else Can You Find This Interest in Savings?

Navymen who have money to save after their allotments are deducted would do well to investigate the benefits provided for them under the new Savings Deposit Program enacted by Public Law 89-538 of 14 Aug 1966.

The law provides for a whopping 10 per cent interest on deposits of unallotted pay and allowances made by active-duty Navymen serving overseas. You may also deposit other funds in this account such as reenlistment bonuses, payments for travel allowance on discharge and for unused leave. Money other than pay and allowances, may not be deposited.

Ten thousand dollars is the limit on which 10 per cent interest is paid. (Any amounts deposited in excess of \$10,000 do not draw interest.)

If deposits are made on or before the 10th of the month, your money

LT Melville C. Murray, SC, USNR



"Man to man now, Chief . . ."

will draw interest from the first of the month. Deposits made after the 10th, however, will not draw interest until the first of the following month. Interest is computed on the basis of your average quarterly balance and is compounded quarterly.

You are considered to be overseas for the purpose of this program if you are assigned outside the United States, the Virgin Islands, the Canal Zone, Guam, American Samoa or Puerto Rico. Your assignment must also be for more than 90 days. It makes no difference whether you are under PCS, TAD or TDY orders, or if you are serving with a deployed ship or unit.

When you return to the United States on a permanent change of station, your account will be closed. Your interest will be computed and repayment made.

While you are overseas, the money which you have deposited can be withdrawn only in a bona fide emergency involving you or your family. The existence of the emergency must be certified by your commanding officer. Both deposits and emergency withdrawals must be made in multiples of five dollars.

Any disbursing officer of any of the uniformed services is authorized to accept deposits from overseas Navymen.

Many Hidden Advantages Are Yours When You Put Money in Savings Bonds

Some extra money salted away is, as most will agree, useful for taking care of foreseeable needs—a child's education, a little extra for retirement—any one of a hundred reasons. It is, of course, easier to talk about saving money than to put a saving plan into effect. Nevertheless, there is a relatively painless method—payroll deductions for U. S. savings bonds.

There are a number of reasons for buying U. S. savings bonds which come instantly to mind, but let's examine some advantages which are frequently overlooked.

There are tax advantages to be considered. Income from U. S. savings bonds, like other income, is subject to federal income tax. However, unlike most other income, you can postpone paying taxes on savings bond interest until you cash the bonds or until they reach final maturity.

This makes it possible for you to cash your bonds in a year when your income is lower than usual. For example, if you cash your bonds after you retire, your taxable income

probably will be less than it is while you are working. You will, therefore, save yourself some money in federal income taxes.

If you wait until after you are 65 to cash your bonds, you will have the added benefit of double exemption which, under some circumstances, might completely eliminate your tax liability.

There are also tax advantages to buying bonds for a child's college education. For example, you can buy series E bonds in your child's name designating yourself as beneficiary (*not* co-owner).

In effect, the bonds become an outright gift from you to your child. To avoid taxation, you file a federal income tax return in your child's name at the end of the first year of bond purchases, listing the increase in bond value as his income. No tax will be due if the interest plus other income comes to less than \$900.

No further returns need be filed—just keep a copy of the first return for proof in later years that the interest has been reported.

Savings bonds interest is also free

from state or local income taxes and local or municipal estate and inheritance taxes—factors to be remembered in quite a few states these days.

When you cash in your bonds, you will have no brokerage fees to pay and you know exactly what you will receive. If, for some reason, you can't hold your bonds to maturity, they can be cashed without penalty and the interest rate is still good (an average of three per cent for the first year and 4.15 per cent for each year thereafter).

On 21 February, the Treasury Department announced a new security called freedom shares. Freedom shares, which became available 1 May, are sold in combination with series E bonds and are available through a regular purchase plan such as payroll savings or the bond-a-month plan offered by banks. The interest rate is high—4.74 per cent, when held four and one-half years after issue.

Freedom shares can be purchased in four denominations: \$25 for which you pay \$20.25; \$50 for

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which you pay \$40.50; \$75 for which you pay \$60.75; and \$100 which costs \$81.00. Unlike savings bonds, which can be cashed 60 days after purchase, freedom shares must be held for one year before they can be redeemed. In combination, savings bonds and freedom shares will yield 4.39 per cent if held to maturity.

For Navymen, the payroll deductions are relatively painless. A \$20.25 freedom share plus \$18.75 for a bond makes a total purchase price of \$39.00. The maturity value of the combination is \$50. Half is paid in four and one-half years when the freedom share matures; the other half in seven. A single allotment of \$6.50 will pay for the combination in six pay days.

The safety of U. S. savings bonds is almost legendary. There are all kinds of stories about it: The bond that fell behind the kitchen sink—the bond was replaced without having to tear out the wall to retrieve it. A bond chewed up by a power lawn mower two minutes after arrival—the bond was replaced. Bonds which were burned or stolen—bonds were replaced. There are hundreds of stories similar to these.

For the Navyman, the regular purchase of U. S. savings bonds provides an easy method of investment which is safe.

As an added convenience for

NESEP SELECTIONS

Names of 341 enlisted Navymen who have been provisionally selected for participation in the Navy Enlisted Scientific Education Program have been announced. They will enroll in 22 colleges and universities participating in NESEP in the fall of 1967.

NESEP had its beginning in 1956, when the Navy began selecting enlisted men with high academic and leadership potential for four years of intensive college study to meet the need for officers and petty officers with physical science and engineering backgrounds.

The performance of its selectees, both while in school and when serving with the Fleet, has been so gratifying that all NESEP graduates are now commissioned as ensigns, USN, after completing Officer Candidate School.

Navy bond purchasers, the Navy Finance Center at Cleveland, Ohio, will retain your bonds for you and give you an accounting upon request. All you have to do is indicate your desire to have your bonds retained when you make out your allotment form.

When you want the bonds sent to you or if you want to know how many you have, just write to the Commanding Officer, Navy Finance Center, Cleveland, Ohio.

You'll do well from a standpoint of ease, safety, and financial return.

DOD Cost Reduction Action Involves Certain Navy Units

The Defense Department recently announced cost-reduction actions which will produce annual savings of \$47.4 million, without impairing the nation's defense capability. About one third of the actions involve Navy units.

Operational aircraft of seaplane (P-5) patrol squadrons will be reduced significantly in fiscal year 1967, and phased out completely in fiscal year 1968.

With the phasing out of the seaplanes, the seaplane tenders USS *Currituck* (AV 7), *Pine Island* (AV 12), and *Salisbury Sound* (AV 13) and various seadromes will be deactivated. The resultant annual savings is expected to be \$20.8 million.

The Naval Supply Center, Bayonne, N. J., will be disestablished. Current supply support workload will be reassigned to the Naval Supply Center, Norfolk, Va., and the Naval Supply Depot, Newport, R. I.

A small supply facility at Bayonne will be continued to provide support for activities in the immediate New York area, and for Navy ships in New York harbor. The International Logistics Department of the Center will be established as a separate activity and remain at Bayonne, with employee augmentation from other center departments.

Ownership of the Naval Supply Center real estate and related house-keeping responsibilities will be transferred to the Army Military Ocean Terminal now located there. Annual savings of \$3.5 million are expected.

Here are the installations affected, with action to be taken:

• Dutch Harbor, Alaska.—Excess land at the Naval Operating Base

will be released for other use by June 1967.

• San Diego, Calif.—The seadrome at NAS North Island will be deactivated by July 1968.

• Boston, Mass.—Headquarters First Naval District will be consolidated with the Headquarters Third Naval District at New York, N. Y., by January 1968.

• Bayonne, N. J.—Naval Supply Center will be disestablished and the facility will be transferred to the Army by October 1967. Navy Clothing and Textile functions will be relocated to the Army laboratory at Natick, Mass., by December 1967.

• Brooklyn, N. Y.—Maintenance and repair shop of the Military Sea Transportation Service at Brooklyn Army Terminal will be closed by June 1967.

• Philadelphia, Pa.—Headquarters Fourth Naval District will be consolidated with Headquarters Fifth Naval District at Norfolk, Va., by January 1969.

• Seattle, Wash.—Headquarters Thirteenth Naval District will be consolidated with Headquarters Twelfth Naval District at San Francisco, Calif., by January 1970.

All shore operations associated with seaplanes will be discontinued and operation of seaplane tenders and associated support at all affected bases will end by July 1969. This will result in the closing of seaplane facilities at North Island, San Diego, Calif., and Whidbey Island, Wash., and reductions at Ford Island, Hawaii, Patuxent River, Md., and Corpus Christi, Texas.

NRS EDUCATIONAL LOANS

The deadline for submission of Navy Relief Society Educational Fund loans has been extended to 15 June. Those interested and having a need should request application forms from the Navy Relief Society, 1030 Munitions Building, Washington, D. C. 20360.

To be eligible for post-high school education and training, dependents must be under the age of 23. Sponsoring parents, either Navy or Marine Corps personnel, must be on active duty, must have completed 20 years' active service, or have been retired on physical disability.

Recent Listings of Medals for Service in Antarctic & Cuba

EVER SERVE A TOUR in the Antarctic? Were you involved in the Cuban operation? If so, and if the name of your ship or unit is cited below, you may well be entitled to receive the Antarctica Service Medal or the Navy Expeditionary Medal.

This is one of a series of lists of the names of ships and units, with dates of eligibility, included in SecNav Inst 1650.1C, Change 3, dated 9 Nov 1966. It is being published here for the benefit of those Navy-men who have since left the ships and units listed as recipients of the award.

Eligibility dates of those ships and units listed in the August 1966 issue of ALL HANDS are not repeated here. This is a supplement to that list. Eligibility dates of the Antarctica Service Medal are listed here for the first time.

In earlier issues, ALL HANDS has published the names of those ships and units, with dates of eligibility, which were awarded the Vietnam Service Medal and the Armed Forces Expeditionary Medal for services in Vietnam.

In future issues, ALL HANDS will publish the names of those ships and units, with dates of eligibility, that are eligible for the Armed Forces Expeditionary Medal for operations in Berlin, Taiwan, Cuba, the Dominican Republic, Laos, Lebanon, Congo and Quemoy-Matsu.

The implementing instruction, SecNav Inst 1650.1C, also includes a list of ships and units eligible for the Navy Unit Commendation during the period from World War II to Vietnam. This NUC list will not

be printed, nor will the Marine Corps Expeditionary Medal list, which may be found in Change 2 of the instruction.

Partial lists of ships and units eligible for the AFEM for operations in Vietnam, Berlin, Congo, Taiwan, Quemoy, Laos, Lebanon and Cuba were published in the July 1964, October 1965 and August 1966 issues of ALL HANDS.

Note: This current series of reports includes only those ships and units to be found in the latest addition to SecNav Inst 1650.1C (Change 3 of 9 Nov 1966). If your ship or unit is not included, check the above mentioned issues of ALL HANDS or the SecNav Notices of 2 March, 3 March and 23 March 1966. Also check the other listings in the SecNav Instructions or Notices of the 1650 series.

Additional lists will be printed from time to time as further information becomes available to ALL HANDS.

To qualify for the Antarctica Service Medal, you must meet any one of conditions set forth below:

- As a member of the armed forces of the United States, or civilian citizen, national or resident alien of the United States who, as a member of a U. S. expedition, participated in scientific, direct support or exploratory operations in the Antarctic continent.

- Any category of individuals listed above who participated in a foreign Antarctic expedition on that continent in coordination with a U. S. Antarctic expedition and who were under the sponsorship and ap-

proval of competent U. S. government authority.

- Any member of the U. S. armed forces who participated in flights as a member of the crew of an aircraft flying to or from the Antarctic or within the Antarctic continent in support of operations on that continent.

- Any member of the U. S. armed forces who has served in a U. S. ship operating south of latitude 60° south in support of U. S. operations in Antarctica.

- Any person not fulfilling the qualifications above but who participates in a U. S. Antarctic expedition on that continent at the invitation of a participating U. S. agency, provided the commander of the military support force considers that he has performed outstanding and exceptional service and shared the hardships and hazards of the expedition.

No minimum time limits are prescribed. No person is authorized to receive more than one award.

The Navy Expeditionary Medal is awarded to naval personnel who have actually landed on foreign territory and engaged in operations against armed opposition, or operated under circumstances which are considered to merit special recognition and for which no campaign medal has been awarded.

To the list of authorized expeditions, found in Annex II, List 4, of SecNav Inst 1560.1C, the expeditions to Cuba from 3 Jan 1961 to 23 Oct 1962 and to Thailand from 16 May 1962 to 10 Aug 1962 have been added.

Antarctica Service Medal

The following ships and units participated in expeditions below 60° South Latitude after 1 Jan 1946 during the periods indicated, and are eligible for the Antarctica Service Medal.

Arneb (AKA 56)
15 Dec 1955-10 Feb 1956; 20 Dec 1956-20 Feb 1957; 13 January-4 Feb 1958; 8 January-4 Feb 1959; 10 Dec 1959-19 Feb 1960; 14 February-22 Mar 1961; 9-23 Dec 1961; 12-28 Jan 1962; 13 February-5 Mar 1962; 17 Dec 1962-13 Jan 1963; 9 February-7 Mar 1963
Atka (AGB 3)
10 January-24 Feb 1955; 15 Dec 1956-1 Mar 1957; 25 Nov 1957-5 Feb 1958; 12 Dec 1959-14

Mar 1960; 6-24 Dec 1961; 9 Nov 1963-5 Mar 1964; 14 Nov 1965-10 Mar 1966
Brough (DE 148)
12 Oct 1956-25 Feb 1957; 29 Sep 1957-18 Feb 1958; 28 Sep 1958-11 Jan 1959
Brownson (DD 868)
26 Dec 1946-1 Mar 1947
Burton Island (AGB 1)
3 Feb 1946-9 Mar 1947; 15 Dec 1947-26 Feb 1948; 22 Dec 1957-1 Mar 1958; 10 February-8 Mar 1960; 12 Nov 1961-25 Feb 1962; 10 Nov 1963-3 Mar 1964; 10 Nov 1965-31 Jan 1966
Cacapon (AO 52)
24 Dec 1946-1 Mar 1947
Calcaterra (DER 390)
20 Sep 1965-10 Feb 1966

Canisteo (AO 99)
24 Dec 1946-10 Mar 1947
Currituck (AV 7)
23 Dec 1946-12 Feb 1947
Curtiss (AV 4)
15 January-15 Feb 1957
Durant (DER 389)
15-21 Sep 1962; 6-20 Oct 1962; 30 October-16 Nov 1962; 28 November-27 Dec 1962; 7-18 January 1963; 3-16 Feb 1963
Edisto (AGB 2)
16 Dec 1947-26 Feb 1948; 15 Dec 1955-24 Feb 1956; 15 January-1 Mar 1959; 22 Dec 1960-9 Apr 1961; 12 Nov 1962-13 Mar 1963; 12 January-1 Mar 1965
Elkhorn (AOG 7)
9-23 Jan 1962; 9-24 Feb 1962
Eltanin (T AGOR 82)

25 Sep 1963-15 Apr 1964
Forster (DER 334)
21-31 Jan 1963; 16 February-4 Mar 1963
Glacier (AGB 4)
10 Dec 1955-15 Apr 1956; 20 Oct 1956-20 Feb 1957; 25 Nov 1957-15 Mar 1958; 20 Oct 1958-1 Mar 1959; 10 Dec 1959-10 Mar 1960; 1 Dec 1960-29 Mar 1961; 12 November-16 Dec 1961; 15 January-2 Mar 1962; 5 November-8 Dec 1962; 25 Dec 1962-26 Jan 1963; 19 February-13 Mar 1963; 11 Nov 1963-15 Mar 1964; 3 Nov 1964-12 Mar 1965; 10 Nov 1965-12 Apr 1966
Merrick (AKA 97)
15 Dec 1946-16 Feb 1947
Mills (DER 383)

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23 Sep 1964-7 Mar 1965
Mizar (T AK 272)
12 November-11 Dec 1961
Mount Olympus (AGC 8)
30 Dec 1946-1 Mar 1947
Nespelen (AOG 55)
20 Dec 1955-17 Feb 1956; 1 Dec 1956-21 Feb 1957; 23 Dec 1957-6 Feb 1958; 20 Dec 1958-6 Feb 1959
Peterson (DE 152)
30 Sep 1959-17 Feb 1960
Philippine Sea (CV 47)
24 Jan 1946-3 Feb 1947
Pine Island (AV 12)
24 Dec 1946-10 Mar 1947
Sennet (SS 408)
28 Dec 1946-7 Feb 1947
Staten Island (AGB 5)
20 January-17 Feb 1957; 1 Dec 1958-9 Mar 1959; 11 Dec 1960-14 Apr 1961; 5 November-26 Dec 1962; 9 January-7 Mar 1963; 10 Nov 1964-8 Mar 1965
Thomas J. Gary (DER 326)
16 Oct 1965-5 Mar 1966
Tombigbee (AOG 11)
13-26 Jan 1963
Vance (DER 387)
19 September-10 Oct 1961; 24 October-10 Nov 1961; 21 November-12 Dec 1961; 20-21 Dec 1961; 5-13 Jan 1962; 19 January-6 Feb 1962; 18-26 Feb 1962
Wilhoite (DER 397)
30 Sep 1960-1 Mar 1961
Yancey (AKA 93)
29 Dec 1946-15 Feb 1947

Units

Air Development Squadron 6 (VX

6) and Detachments
20 Dec 1955 to present
Antarctic Support Activities and Detachments, and Naval Nuclear Power Unit, Detachment McMurdo
On a continuing basis
Naval Air Transport Squadron 3
18 February-22 Sep 1959; 26 Oct 1959-12 Jun 1960; 25 Jun 1960-10 Apr 1961
Naval Antarctic Support Activities and Detachments
1 Oct 1958 to present
Naval Cargo Handling Battalion 1
15 Dec 1956-1 Mar 1957; 25 Nov 1957-7 Feb 1958; 20 Dec 1958-1 Mar 1959; 18 January-15 Feb 1960; 25 Dec 1960-10 Feb 1961
Naval Cargo Handling Battalion 1 (Detachments)
6 Dec 1963-28 Feb 1964
Naval Cargo Handling Battalion 1 (Detachment Mike 2)
16 Dec 1964-14 Feb 1965; 13 Dec 1965-25 Feb 1966
Naval Cargo Handling Battalion 3 (Detachment Bravo)
20 Dec 1955-20 Feb 1956
Naval Construction Battalion Reconnaissance Unit
1 Oct 1957-1 Mar 1958; 1 Oct 1958-1 Mar 1959
Naval Helicopter Combat Support Squadron 1 (Detachment 41)
10 Nov 1965-31 Jan 1966
Helicopter Combat Support Squadron 4 (Detachment 87)
14 Nov 1965-10 Mar 1966
Helicopter Combat Support Squad-

ron 4 (Detachment 88)
10 Nov 1965-12 Apr 1966
Naval Helicopter Utility Squadron 1
20 Oct 1956-20 Feb 1957; 25 Nov 1957-15 Mar 1958; 20 Oct 1958-1 Mar 1959; 10 Dec 1959-10 Mar 1960
Naval Helicopter Utility Squadron 1 (Detachment 41)
10 Nov 1963-3 Mar 1964
Naval Helicopter Utility Squadron 1 (Detachment 43)
10 Nov 1964-8 Mar 1965
Naval Helicopter Utility Squadron 2
20 Oct 1956-20 Feb 1957; 25 Nov 1957-15 Mar 1958; 20 Oct 1958-1 Mar 1959; 10 Dec 1959-10 Mar 1960
Naval Helicopter Utility Squadron 2 (Detachment 69)
10 Dec 1955-15 Apr 1956
Naval Helicopter Utility Squadron 4 (Detachment 81)
10-29 Jan 1964; 4 Oct 1964-8 Mar 1965
Naval Helicopter Utility Squadron 4 (Detachment 86)
12 January-1 Mar 1965
Naval Helicopter Utility Squadron 4 (Detachment 88)
11 Nov 1963-15 Mar 1964; 3 Nov 1964-8 Mar 1965
Naval Mobile Construction Battalion 1
15 Dec 1956-1 Mar 1957; 25 Nov 1957-7 Feb 1958; 1 Apr 1961-1 Mar 1962
Naval Mobile Construction Battalion 6
23 Oct 1964-6 Mar 1965
Naval Mobile Construction Bat-

talion 6 (Detachment Whiskey)
18 Oct 1965-26 Feb 1966
Naval Mobile Construction Battalion 8
24 Sep 1962-16 Feb 1963; 15 Oct 1963-11 Mar 1964
Naval Mobile Construction Battalion Special
10 Dec 1955-15 Feb 1957
Naval Mobile Construction Battalion Special (Detachment Bravo)
1 Oct 1956-1 Jan 1958
Naval Nuclear Power Detachment McMurdo
1 Feb 1964-open
Naval Snow Compaction Team from Construction Battalions Pacific
10 Oct 1960-26 Feb 1961
Naval Support Unit III, Antarctica
1 Oct 1957-1 Dec 1958
Project Magnet
22-23 Oct 1960; 31 October-3 Nov 1960
Staff and Detachments, Commander Naval Support Force, Antarctica (TF 43)
15 Dec 1955-open
Staff, Commander Naval Task Force 39
15 Dec 1947-26 Feb 1948
Staff, Commander Naval Task Force 68
24 Dec 1946-10 Mar 1947
Underwater Demolition Team 14 (Only those members attached to unit and serving on board USS Mount Olympus (AGC 8)
30 Dec 1946-1 Mar 1947

Navy Expeditionary Medal Cuba

(Water area between 12°N and 28° N latitude and 66° W and 84° longitude.)
(Including any embarked staff or unit regularly assigned.)
Ashland (LSD 1)
19 January-9 Feb 1962; 11-15 Feb 1962
Barton (DD 722)
4 June-27 Jul 1961
Boxer (LPH 4)
24 July-3 Aug 1961; 21 March-6 Apr 1962; 16-27 Apr 1962; 30 April-3 May 1962; 28-30 Jun 1962; 25-27 Jul 1962
Camp (DER 251)
30 September-26 Oct 1961
Chikaskia (AO 54)
22 March-14 Apr 1961; 16 April-5 May 1961
Chilton (APA 38)
17-29 Apr 1961; 5-12 Jun 1961; 6-29 Sep 1962; 21-23 Oct 1962
Clamagore (SS 343)
23 January-23 Feb 1962
Courtney (DE 1021)
1 May-30 Jun 1961
Eaton (DD 510)
29 June-22 Jul 1962
English (DD 696)
30 April-28 May 1961; 16-22 Jun 1961; 18-23 Oct 1962
Farragut (DLG 6)
31 March-10 May 1961; 18 May-4 Jun 1961
Fort Snelling (LSD 30)
3 January-1 Mar 1961; 4-18 Jun 1961; 24 July-3 Aug 1961; 18 Nov-9 Dec 1961
Fred T. Berry (DD 858)

29 Dec 1961-6 Feb 1962
Galveston (CLG 3)
1-17 Mar 1961; 29-31 Mar 1961
Grenadier (SS 525)
3-13 Jul 1961; 16 July-3 Aug 1961
Hermitage (LSD 34)
5-18 Jun 1961; 25-28 Jun 1962
Hoist (ARS 40)
1 October-2 Nov 1961
Hyades (AF 28)
14-22 Oct 1962
James C. Owens (DD 776)
20-31 Dec 1962
Lorain County (LST 1177)
6-31 Aug 1961; 1-31 May 1962; 10-14 Aug 1962
MacDonough (DLG 8)
28 April-19 May 1962; 31 May-4 Jun 1962; 19-21 Sep 1962
Mazama (AE 9)
1 February-9 Mar 1962; 1-23 Oct 1962
Mosopelea (ATF 158)
28 September-27 Oct 1961; 31 October-10 Nov 1961; 14-17 Nov 1961; 14 June-5 Jul 1962; 10-13 Jul 1962; 12-20 Oct 1962
Mountrail (APA 213)
10-27 Feb 1962
Northampton (CC 1)
1-10 Jun 1961; 12-19 Dec 1961; 5-24 Jan 1962
Notable (MSO 460)
21 January-5 Feb 1962
Peregrine (Ex-EMSF 373)
20-25 Jun 1962
Randolph (CVS 15)
20 April-11 May 1961; 15-31 May 1961; 9-15 Jun 1961

Rankin (AKA 103)
19-22 Feb 1961; 7-18 Jun 1961; 24 July-3 Aug 1961; 12-23 Nov 1961; 27 November-1 Dec 1961; 11-13 Mar 1962; 26-28 Jul 1962; 10-16 Aug 1962
Requisite (AGS 18)
5-17 May 1962
Sabine (AO 25)
27 January-16 Feb 1962; 19 February-2 Mar 1962
Sablefish (SS 303)
1-31 Mar 1962
Sandoval (APA 194)
11-26 Feb 1962
San Marcos (LSD 25)
16 March-16 Apr 1961
Sea Leopard (SS 483)
20-21 Oct 1962
Sea Lion (APSS 315)
8-12 Nov 1962; 25-29 Nov 1962
Shangri La (CVA 38)
3-11 Jun 1961; 14-18 Jun 1961
Spiegel Grove (LSD 32)
3 January-1 Mar 1961; 8 February-5 Mar 1962; 10-14 Mar 1962; 24-27 Jul 1962
Spikefish (AGSS 404)
7-13 Jan 1961; 15 January-2 Feb 1961; 19 April-18 May 1961; 3-31 Jan 1962; 22 April-23 May 1962; 5-20 Jul 1962
Steinaker (DDR 863)
1-16 Dec 1961
Storms (DD 780)
27 January-3 Feb 1961; 16 February-3 Mar 1961; 7-25 Mar 1961
Thomas J. Gary (DER 326)
23 February-7 Mar 1961; 7 Feb-

ruary-16 Mar 1962; 9-18 Apr 1962; 17 May-10 Jun 1962
Threadfin (SS 410)
18-29 Apr 1961
Vogelgesang (DD 862)
2-30 Jul 1961
Wahkiakum County (LST 1162)
18-25 Apr 1961
Yellowstone (AD 27)
7-30 Apr 1961

Units

Air Antisubmarine Squadron 30, Det 14
22-23 Oct 1962
Air Antisubmarine Squadron 39 (VS 39)
17-23 Oct 1962
Air Antisubmarine Squadron 715 (VS 715)*
4-30 Jun 1962
Air Antisubmarine Squadron 831 (VS 831)*
1 November-13 Dec 1961
Air Antisubmarine Squadron 837 (VS 837)*
25 April-21 Jul 1962
Air Antisubmarine Squadron 861 (VS 861)*
11 Dec 1961-1 Feb 1962; 1 Mar 1962-21 Jul 1962
Air Antisubmarine Squadron 915 (VS 915)*
12 March-22 May 1962
Air Antisubmarine Squadron 935 (VS 935)*
1 February-11 Mar 1962
Airborne Early Warning Squadron 4 (VW 4)*
3 Jan-1961-23 Oct 1962

Air Development Squadron 1 (VX 1) 29 Sep 1961-23 Oct 1962	Carrier Antisubmarine Air Group 56 Det 14* 3 Jan 1961-23 Oct 1962	(VR 40)* 8-23 Oct 1962	Minesweeping Boat 7 21-23 Oct 1962
Air Development Squadron 1 (VX 1) Det 14 22-23 Oct 1962	Fighter Squadron 3 (VF 3) 3 Jan 1961-23 Oct 1962	Fleet Tactical Support Squadron 832 (VR 832)* 5-18 Nov 1962	Minesweeping Boat 10 21-23 Oct 1962
Air Transport Squadron 22 (VR 22) 31 Jan 1961-23 Oct 1962	Fighter Squadron 32 (VF 32)* 19-23 Oct 1962	Heavy Attack Squadron 62 (VAP 62)* 3 Jan 1961-23 Oct 1962	Minesweeping Boat 11 21-23 Oct 1962
Amphibious Construction Battalion 2 Det PhibTralex (3 62) 2-22 Oct 1962	Fighter Squadron 41 (VF 41)* 8-23 Oct 1962	Helicopter Antisubmarine Squadron 1 (HS 1)* 22-23 Oct 1962	Minesweeping Boat 43 21-23 Oct 1962
Atlantic Fleet Mobile Photographic Group 1 July-23 Oct 1962	Fighter Squadron 101 (VF 101)* 3 Jan 1961-23 Oct 1962	Helicopter Antisubmarine Squadron 9 (HS 9)* 3 Jan 1961-23 Oct 1962	Minesweeping Boat 44 21-23 Oct 1962
Attack Squadron 35 (VA 35)* 18-23 Oct 1962	Fighter Squadron 161 (VF 161)* 17 May-9 Jul 1961	Light Photographic Squadron 62 (VFP 62) Det 60* 1 February-30 Apr 1962	Patrol Squadron 24 (VP 24)* 3 Jan 1961-23 Oct 1962
Carrier Airborne Early Warning Squadron 33 (VAW 33)* 16 Oct-1961-23 Oct 1962	Fighter Squadron 162 (VF 162)* 5-16 Jun 1961	Fleet Air Reconnaissance Squadron 2 (VQ 2)* 3 Jan 1961-23 Oct 1962	Patrol Squadron 674 (VP 674)* 15 Dec 1961-15 Jan 1962; 15 April-15 May 1962
	Fleet Tactical Support Squadron 40	Minesweeping Boat 6 21-23 Oct 1962	*Only those members of air crews who actually conducted flights into Cuban waters during periods indicated.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs, BuPers Instructions and BuPers Notices that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; BuPers Instructions and Notices apply to all ships and stations.

Instructions

No. 1210.13A—Discusses the criteria to be used in the identification of unrestricted line officers qualified in subspecialty areas, and described the manner in which they will be identified.

No. 1331.3E — Describes the courses offered at the U. S. Naval Test Pilot School, the USAF Aerospace Research Pilot School and the British Empire Test Pilot School.

Notices

No. 1130 (13 February)—Provided instructions for recommendations for reenlistment for those ineligible to reenlist because of status or a disqualifying factor.

No. 1500 (15 February)—Emphasized the need for strict compliance with the established criteria for those ordered to Nuclear Power School and Basic Enlisted Submarine School.

No. 1650 (13 February)—Announced the names of ships and units which have been recently awarded the Navy Unit Commendation.

No. 4632 (13 February)—Pre-

scribed a standard form for authorization of military standby commercial air travel to be issued active duty military personnel.

No. 1520 (17 February)—Discussed the scope of the Navy Post-graduate Educational program presently planned for the academic years 1968-69, and provided instruction for submission of curricula preference.

No. 1700 (21 February)—Announced the 12th All-Navy comic cartoon contest.

No. 4600 (24 February)—Discussed some of the various tariffs, rules and regulations governing the travel of military personnel at their own expense while in a leave or delay en route status when traveling within the continental United States.

No. 1306 (9 March)—Announced the sea duty commencement cutoff dates which establish the eligibility of enlisted personnel for Seavey Segment B-67.

No. 1510 (9 March)—Announced
LT Melville C. Murray, USNR



"Hey, Sarge, you'll never believe this, but . . ."

the names of those active duty naval personnel who have been provisionally selected by the NESEP selection board for entrance into the program.

New MAC Channel Begins 16-Hour Flight Between Vietnam and California

The inauguration of a Military Airlift Command (MAC) flight between Da Nang and Norton Air Force Base, Calif. was good news to Navy men scheduled to leave Vietnam. The new MAC channel puts only 16 hours between the homeward bound Navyman and the United States. One stopover—about one and a half hours—at Okinawa eliminates the possibility of being stranded somewhere along the route.

The flight is made aboard a commercial jetliner which has been chartered by the Military Airlift Command. Movies are not shown on board but, immediately after takeoff from both Da Nang and Okinawa, the stewardesses give a fetching demonstration of how to struggle into a life jacket which makes the task seem both easy and graceful.

Inasmuch as the flight crosses the international date line, the jetliner, according to the calendar and the clock, lands at Norton AFB before it took off from Da Nang.

An on-the-spot means of purchasing air, rail or bus tickets is available to servicemen at Norton AFB (near San Bernardino, Calif.) which makes further travel easier on commercial carriers. Economical bus transportation is also available between Norton Air Force Base and Los Angeles International Airport, train and bus depots.

HEROES and LEADERS



"For extraordinary heroism . . ."

★ **BURNAND, Robert W., Jr.**, Lieutenant, USNR, while serving as plane commander of an armored search and rescue helicopter during a series of related rescue missions in Southeast Asia from 12 through 16 Oct 1966. LT Burnand was vectored to an inland area of Vietnam on three separate search and rescue flights in attempts to rescue a downed Navy pilot. Although he encountered severe enemy ground fire, he persisted in his attempts to locate and rescue the survivor. During the final search, an accompanying helicopter was riddled by intense enemy automatic weapons fire which completely disabled one of its engines and forced the craft to retire toward the sea. Observing the action, and realizing that it was mandatory that the operation continue in the same location, LT Burnand and his crew decided to expose themselves to enemy fire to thwart the North Vietnamese and complete their mission. By executing evasive maneuvers and effectively directing accurate counterfire at the enemy, he and his crew suppressed enemy resistance enough to complete the mission.



"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

★ **ELLIS, William E.**, Vice Admiral, USN, as Commander Sixth Fleet, from May 1964 to May 1966. Under his command, the responsiveness, training and morale of his forces were refined and enhanced despite increased difficulties in the logistic, personnel and material areas, as shown by the rapid reaction and efficiency with which he responded to the request for Navy assistance in the recovery of a bomb lost off the coast of Spain.

★ **REED, Allan L.**, Rear Admiral, USN, as Chief of Staff, Defense Intelligence Agency, from June 1964 to June 1966. RADM Reed carried out executive level management for the planning, organization and coordination of the operations of the agency. He also made

significant contributions in the planning and organization of the Defense Attache System and in the establishment and guidance of the Intelligence Position and Qualifications Board.

★ **SMITH, Allen, Jr.**, Rear Admiral, USN, as Chief of Naval Air Technical Training from August 1963 to April 1966. Responsible for the training of virtually all naval aviation personnel other than pilots, RADM Smith attacked the problems associated with providing the operating forces with larger numbers of technically trained personnel in a shorter training period. He made marked improvements both in efficiency of training procedures and in management practices throughout his command.



"For conspicuous gallantry and intrepidity in action . . ."

★ **ANDERSON, Richard E.**, Commander, CEC, USN, while serving as Commanding Officer, U. S. Naval Mobile Construction Battalion Nine, near Da Nang, Vietnam, on 27 and 28 Oct 1965. When his battalion's camp was suddenly struck by enemy mortar and automatic weapons fire, CDR Anderson courageously moved from his covered position at his living area to the battalion command post. In so doing, he was wounded in the leg by fragments from a mortar explosion. Ignoring his wounds and the incessant fire, he continued on to the command post and took direct control of the execution of his effective defensive plan. As the battle progressed, he boldly moved about the camp, directing the care and evacuation of the wounded and encouraging his men. He resolutely rejected treatment of his wounds until all other known wounded had been treated.

★ **BARRAUD, Wesley L.**, Hospital Corpsman 2nd Class, USN, on 18 Dec 1965, while serving with U. S. Marines during operations against insurgent communist (Viet Cong) forces in the Republic of Vietnam during Operation Harvest Moon. Petty Officer Barraud was accompanying the command group on a march in the vicinity of Trung Phan when the company was

attacked by heavily armed Viet Cong forces. When the company commander and his radio operator were critically wounded and lay helpless in the field of fire, Barraud left his protected position and moved across the fire-swept area to aid them. Though wounded in the leg in this heroic effort, he administered first aid to the wounded Marines, calmly disregarding the intense enemy fire. When joined by another corpsman, he skillfully advised him on treating the wounded and on their priority of evacuation. Although he was wounded a second time while waiting for the helicopter, Barraud continued to advise and encourage those around him until he was evacuated.

★ **CARPER, Loring W., Jr.**, Hospitalman, USN, posthumously, as a hospitalman for a 20-man reconnaissance platoon in the Hue Phu Bai area, Republic of Vietnam, on the afternoon of 17 May 1966. During an attack by enemy forces, one of the Marines was critically wounded. Disregarding his own safety, Hospitalman Carper, in the midst of the firefight, answered the call for help and maneuvered forward. As he reached the side of the wounded Marine, he was hit by small arms fire. In a final act of uncommon heroism, Carper placed his body upon that of the wounded man, protecting him from further fire. Hospitalman Carper gallantly gave his life in the service of his country for a fallen comrade.

★ **CHEWNING, Milton J.**, Commander, USN, while leading a flight of A4E Skyhawks on an armed reconnaissance mission in North Vietnam on 3 Jun 1966. CDR Chewning's plane suffered a direct hit from the intense enemy anti-aircraft fire. Though severely wounded in the right arm, he attacked a nearby road target, then courageously returned his plane to uss *Ranger* with only the use of his left arm. With dogged determination, he completed his mission under extreme duress and saved a valuable airplane.

★ **COUNCE, Donald E.**, Hospitalman, USN, while serving as a corpsman with U. S. Marines in action against Viet Cong forces in Vietnam on 28 Feb 1966, during Operation New York. Two Marines were seriously wounded while racing across a fire-raked, open terrain to make a daring assault on an enemy machine gun position. Hospital-

man Counce hurried to their aid. After treating the first Marine, he crawled 30 yards under fire to reach the second man. His aggressive action motivated others to pursue the attack and eventually overcome the enemy force.

★ DANIELS, Dennis S., Lieutenant (jg), USNR, as second pilot of a helicopter during the rescue of a downed airman in North Vietnam on 2 May 1966. While under enemy fire from a ridge, LTJG Daniels assisted the pilot in hovering the helicopter and calmly performed his assigned duties. Though wounded by splinters from the helicopter's airframe, which was hit by enemy fire, he completed his duties and helped in the rescue of the downed airman, who otherwise would have been killed or captured within a few minutes.

★ FREDETTE, Bradford T., Hospitalman, USN, while serving as a corpsman with U. S. Marines in Vietnam during Operation Harvest Moon on 10 Dec 1965. His company was assigned the mission of assaulting a fortified insurgent communist position. When his platoon began sustaining casualties from automatic weapons and mortar fire, Fredette, ignoring the intense fire, went to the aid of his fallen comrades. He performed a tracheotomy on one Marine who had received a puncture wound in the throat, thus saving the man's life. When his company sustained several more casualties, he persisted in his efforts, moving from man to man, rendering aid and comfort. Again demonstrating his seemingly inexhaustible energy, he established a temporary aid station for the further treatment and evacuation of the wounded. Fredette was responsible for saving the lives of and reducing the suffering of many Marines.

★ JOHNSON, Lawrence E., Hospital Corpsman 3rd Class, USN, posthumously, while serving with U. S. Marines on 4 Mar 1966 during Operation Utah in Vietnam. Casualties mounted when his platoon was subjected to heavy enemy mortar and automatic weapons fire shortly after the company had secured the high ground dominating the right flank of the battalion's zone of action. Johnson, under fire, moved from one casualty to another, rendering aid and comfort and supervising the evacuation. When one of the squad leaders was seriously wounded, Johnson attempted to keep the man alive by administering mouth-to-mouth resuscitation while moving the man 300 yards under fire to the evacuation point. During a later enemy counterattack, Johnson saw another wounded Marine to his front and, de-

spite the onrushing enemy, attempted to reach the victim, but was struck down by enemy fire.

★ MACHEN, Billy W., Radarman 2nd Class, USN, posthumously, while serving as a point man for a Seal fire team in the Rung Sat Special Zone, Vietnam, on 19 Aug 1966. Petty Officer Machen led the team through Viet Cong territory in search of two camouflaged sampans reported by friendly elements. Upon reaching a clearing in the dense jungle, he halted the patrol and proceeded into the clearing alone. Spotting an enemy ambush, he chose to expose himself to hostile fire by firing his weapon on the enemy positions rather than to retrace his steps and thereby compromise his teammates' position. By this courageous act he enabled his comrades to seek cover, form a hasty defensive perimeter and escape unharmed after suppressing the enemy fire. Machen was fatally wounded by the initial enemy fusillade.

★ SHAW, John D., Commander, USN, during a combat mission over North Vietnam on 7 Nov 1965. CDR Shaw led a flight of five aircraft in a highly successful strike against a surface-to-air missile site. Despite intense enemy fire, CDR Shaw visually located the missile site, led the other members of the strike group to it, then dived to fire his rockets into the central control area, causing a fire which further marked the target for the other aircraft.

★ SMITH, Gordon H., Commander, USN, as flight leader of two divisions of propeller-driven attack aircraft on 6 and 7 Nov 1965. Responding to a call for help to search for several downed
SILVER STAR was given to Ralph E. Powers, BM2, for gallantry with a patrol craft division in Vietnam.



U. S. Air Force airmen, CDR Smith led his flight to the scene, transiting missile envelopes and known anti-aircraft positions. Despite approaching darkness and heavy enemy fire, he remained in the area and led a rescue helicopter to the exact position of one of the airmen. During the rescue, he suppressed all enemy activity in the area by cannon fire. Low on fuel, and flying through severe thunderstorms during his return to the carrier, he landed with less than five minutes of fuel remaining. The next morning, he returned to the area, re-established contact with another airman and, when the rescue helicopter was severely damaged by enemy fire, directed it to a suitable landing site on a mountain top.

★ SMITH, John C., Jr., Lieutenant, USNR, while serving as flight officer of an F4B Phantom aircraft on 17 Jun 1965. LT Smith engaged four and possibly six enemy aircraft, accounting for one confirmed kill and contributing to another, which diverted the remaining enemy planes from their threat to U. S. striking forces. With heavy anti-aircraft fire bursting throughout the patrol area, he maintained his vigil and attacked, seeking out and destroying the opposing enemy aircraft. He thus prevented damage to friendly strike aircraft in the area.



"For exceptionally meritorious conduct in the performance of outstanding service to the government of the United States . . ."

★ ADAMS, Frank M., Commander, USN, as Commanding Officer, USS *Swordfish* (SSN 579), during three related missions conducted from 8 Oct 1963 to 23 Jul 1965.

★ ANDERSON, Richard E., Commander, CEC, USN, as Commanding Officer, Naval Mobile Construction Battalion Nine, in Vietnam, from June 1965 to February 1966. The Combat Distinguishing Device is authorized.

★ BARBOUR, Henry S., Captain, USN, as Plans and Capabilities Officer for Commander in Chief, U. S. Pacific Fleet, from 1 Jul 1964 to 15 May 1966.

★ COCHRANE, Richard L., Captain, USN, as Commander Amphibious Ready Group, U. S. Seventh Fleet (Commander Task Group 76.5) from 7 April to 29 Jul 1966.

★ DYBDAL, Victor A., Captain, USN, as Chief of Staff to Commander U. S.

Seventh Fleet from August 1964 to December 1965.

★ FOREHAND, Paul W., Commander, CEC, USN, as Chief and Deputy Chief, Base Development Branch, Engineer Division, Officer of the Assistant Chief of Staff, J4, and Deputy Chief, Engineering and Base Development Division, Construction Directorate, U. S. Military Assistance Command, Vietnam, from 16 May 1965 to 15 May 1966.

★ GILL, Samuel C., Jr., Captain, CEC USN, as Public Works Officer, Headquarters Support Activity, Saigon, Vietnam, from 12 Dec 1964 to 31 Dec 1965.

★ HERING, Alexander C., Captain, MC, USN, as Senior Medical Officer of the Naval Station Hospital, Headquarters Support Activity Saigon, from 25 February to 30 Mar 1966.

★ HOLDER, Billy D., Captain, USN, as Operations Officer for Commander Carrier Division Nine from 2 July to 5 Nov 1965.

★ HOPKINS, Lewis A., Captain, USN, from 21 Aug 1963 to 30 Apr 1966, as Director, Programs and Budget Division, Bureau of Naval Weapons and Naval Weapons Support Activity, and from 1 May 1966 to 31 Jan 1967 as Director, Programs and Resources Division, Naval Air Systems Command.

★ HUFF, Kenneth P., Captain, USNR, as Commanding Officer, U. S. Naval Support Activity, Da Nang, from 23 Jul 1965 to 5 Feb 1966.

★ MINER, John O., Rear Admiral, USN, as Deputy Director for Operations, National Military Command System, from 26 Aug 1963 to 4 Aug 1965, and as Chief, Western Hemisphere Division, Plans and Policy Directorate, Organization of the Joint Chiefs of Staff, from 5 Aug 1965 through May 1966.

★ MAURER, John H., Rear Admiral, USN, as Commander Middle East Force from 17 Jul 1964 to 26 Apr 1966.

★ PALMER, Charles F., Captain, SC, USN, as Chief of the Supply Management Division, Supply Operations Directorate, Defense Supply Agency, from 17 Sep 1965 to 30 Sep 1966.

★ SHOWERS, Donald M., Rear Admiral, USN, as Assistant Chief of Staff for Intelligence, Commander in Chief, U. S. Pacific Fleet, from August 1962 to June 1966.

★ SWANSON, Charles A. L., Commander, USN, as senior Operations Staff Officer, U. S. Navy, in the Combat Operations Center of Headquarters,



MOTHER'S THANKS—James D. McCandless, BT3, receives thank-you for rescue of Colleen Gillen from debris-laden waters of Truxton River.

U. S. Military Assistance Command, Vietnam, from July 1964 to March 1965.

★ TRUM, Herman J., III, Captain, USN, as Assistant Chief of Staff for Operations on the staff of Commander in Chief, U. S. Pacific Fleet, from 1 Aug 1964 to 15 Apr 1966.

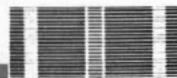
★ WHITMAN, William A., Captain, USN, from 7 Sep 1965 to 31 Aug 1966, as a member of the Vietnam Support Expediting Task Force.

Gold Star in lieu of Second Award

★ OSTROM, Carl A., Captain, DC, USN, from June 1959 to July 1966, in the Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md., and in the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

Gold Star in lieu of Third Award

★ AURAND, Evan P., Rear Admiral, USN, as Commander Antisubmarine Warfare Task Group, U. S. Seventh Fleet, from 23 Sep 1965 to 17 Feb 1966.



DISTINGUISHED FLYING CROSS

"For heroism or extraordinary achievement in aerial flight . . ."

★ BURNAND, Robert W., Jr., Lieutenant, USNR, as a helicopter pilot on a search and rescue mission in North Vietnam on 9 Oct 1966. LT Burnand, though hampered by heavy flak and MIG fighters, continued to brave enemy fire in a gallant effort to retrieve the pilot of a downed aircraft, but he was forced to retire when faced with a critical fuel reserve.

★ CHEWNING, Milton J., Commander, USN, as division leader of a flight of four A4E *Skyhawks* on an armed reconnaissance mission on 31 Jan 1966. CDR Chewning, despite low ceilings and limited visibility, led his division on low-altitude bombing and rocket attacks on the ferry landing south of Dong Hoi, North Vietnam, which inflicted heavy damage and started numerous secondary fires. Intense anti-aircraft artillery fire in the target area resulted in major damage to one aircraft in the flight and the loss of the section leader's aircraft. Disregarding his own safety, CDR Chewning conducted numerous low-altitude searching passes in the area until the pilot was rescued after nearly an hour in the water.

★ DE CAMP, Dwight E., Commander, USN, in combat with the enemy on 10 Feb 1965. After planning the tactics and briefing the pilots for a night armed road reconnaissance mission against enemy vehicular traffic, CDR DeCamp led his flight with flawless navigation along his assigned route. Upon sighting lights, which under flare illumination proved to be enemy truck convoys, he led his flight into five rocket and strafing attacks. Eleven enemy trucks were destroyed.

★ ENDO, Norio B., Lieutenant Commander, USN, as a pilot in a large striking force launched against two bridges in North Vietnam on 23 Apr 1965. After repeated failures of the other aircraft to inflict major damage to the bridge, he dropped the center span on his first run, thus playing a major part in denying the enemy use of the primary supply route.

★ GOTTSCHALK, Gary L., Lieutenant (jg), USNR, during an air rescue mission deep in North Vietnam on 6 Nov 1965. In an attempt to rescue several downed U. S. Air Force men, LTJG Gottschalk, while subjected to intense anti-aircraft and small arms fire, flew for an extended period within surface-to-air missile envelopes. Through his alert actions in calling anti-aircraft fire, he saved his flight leader from being hit. Despite the hazards of low-level flight at night in rugged, mountainous terrain, he boldly elected to continue the search after darkness. When the position of one survivor was established, he made repeated passes at dangerously low altitudes in order to determine the optimum approach for the rescue helicopter. After the location of another downed airman had been established, he remained on the scene, despite a dangerously low fuel state, to point out the exact location of the survivor to relieving aircraft.

★ HARRIS, Jack H., Commander, USN, posthumously, during the air strike against Bach Long Vi Island in North Vietnam on 29 Mar 1965. In order to permit strike aircraft to destroy important military targets on the island, CDR Harris attacked and silenced enemy antiaircraft gun positions. During his second attack, his aircraft sustained a critical hit and he was forced to eject over enemy waters. He was rescued shortly thereafter.

★ JOHNSON, William A., Lieutenant (jg), USN, posthumously, during operations over hostile North Vietnamese territory on 12 Aug 1966. LTJG Johnson was the wingman in a two-plane section of aircraft which had been assigned routine surveillance over a large tanker. As the section approached the tanker, it was discovered that the four large POL barges which had been alongside it were now under tow by a large tugboat, which was making its way toward the shelter of the nearby islands. Having determined that the barges were within striking distance from the tanker, the section leader, followed by LTJG Johnson, initiated a dive-bombing attack. A direct hit on the third barge by LTJG Johnson resulted in an explosion which created a large fireball, spread burning fuel over the stricken craft and ignited the two adjacent barges. The resulting loss in petroleum is considered to have contributed materially to the reduction in the flow of men and materials to the insurgent forces in South Vietnam.

★ KNOIZEN, ARTHUR K., Commander, USN, during the air strike against Bach Long Vi Island, North Vietnam, on 29 Mar 1965. As flight leader of a 10-plane A1H strike element, CDR Knoizen led his flight under extremely poor weather conditions and conducted a successful attack on assigned targets. He personally scored a direct hit on the barracks buildings. Although several preceding jet attack aircraft had been shot down by the intense antiaircraft fire, he led his flight in a second attack to insure target destruction. The mission resulted in secondary explosions which continued for hours after the strike. Upon completion of the attack, he led four planes in a search for downed pilots.

★ MARCH, DANIEL P., Lieutenant, USN, while conducting a rescue mission in North Vietnam on 17 May 1965. After locating an Air Force pilot who was downed in the jungle, LT March provided protection to the airman from intense enemy fire for an hour while his wingman flew through extremely poor

weather to bring search and rescue helicopters to the scene. During the rescue mission, LT March provided protection for the pilot and helicopters by making repeated strafing and rocket attacks on enemy forces in the immediate area. Although his aircraft was hit by enemy fire, he maintained his attacks and insured the success of the rescue.

★ MUKA, JOSEPH A., JR., Lieutenant Commander, USN, as Officer in Charge, Light Photographic Squadron 63, Detachment Delta, on 19 and 22 Aug 1965. Assigned the task of searching for suspected surface-to-air missile sites in the Hanoi-Plu Ly and the Hanoi-Haiphong complexes, LCDR Muka flew unarmed and unescorted. The assigned search areas were saturated with intensive antiaircraft artillery installations, and came within the "kill envelopes" of several known surface-to-air missile sites, and were close to enemy fighter bases. Maneuvering his aircraft at low altitude throughout his search areas, LCDR Muka exposed himself to heavy ground fire and the missile threat for over 40 minutes. The photographic results of these flights yielded vital intelligence information.

★ NOTTINGHAM, ROBERT P., Commander, USN, as leader of a flight of 13 aircraft on 5 Aug 1964, assigned to find and destroy motor torpedo boats at their bases in North Vietnam. CDR Nottingham led his flight through 300 miles of adverse weather, then pinpointed the targets and led a coordi-



SEAL OF HEROISM—LTJG William R. Pechacek receives Bronze Star and Purple Heart for action with SEAL Team One against the Viet Cong.

nated rocket attack on the enemy vessels. His own rockets, delivered at close range in the face of heavy antiaircraft fire, severely damaged one of the motor torpedo boats. Only 10 hours earlier, CDR Nottingham had led another flight through darkness, heavy rain and thunderstorms to provide air support for two U. S. destroyers besieged by North Vietnamese motor torpedo boats in the Gulf of Tonkin. His skill in locating the destroyers and positioning his flight for their support contributed materially to the over-all successful effort of air and surface units in repulsing the attack on U. S. forces.

★ PARODE, HARLAN D., Commander, USN, while conducting a search for a downed pilot in North Vietnam on 10 Sep 1965. CDR Parode led his Rescue Combat Air Patrol flight in a search at altitudes of 50 to 500 feet in the vicinity of Vinh, an area known to have one of the heaviest concentrations of antiaircraft artillery in North Vietnam, for more than an hour. The flight remained over the scene until flak damage to the planes forced a retirement. He accomplished a thorough visual search in an extremely narrow valley and returned to his carrier with less than 300 pounds of fuel.

★ PECK, PAUL A., Commander, USN, in the air strike on Chanh Hoa Army Barracks, Dong Hoi, North Vietnam, on 11 Feb 1965. CDR Peck, as division leader of a flight of A4C aircraft, navigated through low cloud ceilings and restricted visibility to his coastal entry point. Despite hazardous conditions presented by marginal weather, low altitude maneuvering complicated by heavily loaded aircraft, and intense ground fire, he led his division in a devastating attack with cannon fire and low-level bombing.

★ SCHNEIDERS, JOSEPH M., Commander, USN, as strike leader and coordinator for a massive aerial attack against military installations on Bach Long Vi Island, North Vietnam, on 29 Mar 1965. Despite very poor visibility in the target area, and intense antiaircraft fire, he persisted in maneuvering his aircraft close aboard the island. From this vantage point he was able to direct and coordinate repeated attacks. Discovering that the A1H squadron had missed the island because of poor visibility, CDR Schneiders promptly made contact with those aircraft and vectored them to the target. He also made rocket attacks against antiaircraft batteries on the island. He contributed greatly toward the destruction of radar sites and other military installations on the island.



NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ AYRE, Donald, Lieutenant, USN, while serving as Command Duty Officer of *uss Forrest Royal* (DD 872), anchored in the open sea off Rhodes, Greece, on the night of 26 Dec 1965. When he was notified that the coxswain

and leaped overboard in a rescue attempt. Swimming to the side of the panic-stricken victim, Meaney subdued and towed the man to the *YTL 428*, where both men were lifted to safety.

★ PATE, Dwight W., Lieutenant (jg), USN, on 5 Feb 1966, after being involved in a helicopter crash in the Gulf of Tonkin, South China Sea, with 10 shipmates. LTJG Pate, in pounding seas and high winds, helped a man with a deflated life jacket to the floating, inverted helicopter. Though almost

ive Officer of *uss Oriskany* (CVA 34) during combat operations in Southeast Asia from 30 June to 26 Oct 1966. As Operations Officer, CDR Brown developed and established realistic policies and procedures which have been vital to the over-all combat success of the ship and the air wing. His ability to plan and execute the complex combat effort of the carrier resulted in tremendous damage to enemy installations and material. As Executive Officer, CDR Brown was able to coordinate the endeavors of all departments for maximum productivity and to channel all efforts to *Oriskany's* primary mission of combat support. Remaining completely current in all aspects of air warfare in North Vietnam, he served the command and the flag as a trusted advisor and technical expert in every phase of Task Group combat operations. When a devastating fire struck the ship, his organization and supervision of fire and rescue parties were of inestimable importance in saving the ship and reducing casualties.

★ EDRIS, Richard J., Commander, USN, posthumously, as Force Operations Officer, Staff, Commander U. S. Naval Forces, Vietnam, from 23 February to 1 Nov 1966.

★ GALLEGOS, EDDIE M., Hospitalman, USN, while serving with U. S. Marines in the Republic of Vietnam, in connection with operations against the Viet Cong on 14 May 1966. When his platoon came under heavy mortar and small arms fire, Hospitalman Gallegos ran through an exposed area from the rear to the front of the platoon to assist the casualties. Although he was seriously wounded in his right thigh while administering aid to a comrade, he continued to render medical assistance to the wounded by crawling from man to man. While performing his lifesaving duties, Gallegos sustained a head wound and lay helpless on an exposed flank until a group of Marines moved him to safety. With undaunted courage, he refused evacuation and gave instructions to Marines on the proper care of the wounded. The Combat Distinguishing Device is authorized.

★ MARKILLIE, JOHN R., Hospital Corpsman 3rd Class, USN, posthumously, in connection with operations against Viet Cong forces while serving with U. S. Marines in Vietnam, on 16 Jun 1966. During a mission to rescue outpost personnel trapped in the vicinity of Tam Ky, Petty Officer Markillie rushed into an onslaught of heavy enemy automatic weapons fire to render assistance to a wounded Marine. Despite the intensity and accuracy of the hostile fire, he



of the ship's boat had fallen into the heavy seas without a life jacket and was rapidly being swept away from the ship, LT Ayre plunged into the turbulent waters, swam to the boat and took charge of it. After the victim was located, attempts to maneuver the boat near the man were unsuccessful because of the heavy seas. Plunging into the water a second time, LT Ayre swam to the side of the almost unconscious coxswain and managed to tow him to the ship's boat, where both men were lifted to safety.

exhausted after this action, he immediately swam to another survivor, who had no life jacket, and kept him afloat until a rescue craft lifted both men to safety.



BRONZE STAR MEDAL

"For heroic or meritorious achievement or service during military operations . . ."

★ ADKINS, William J., Lieutenant, USN, while serving as Senior Naval Advisor, Vietnamese Coastal Group 25, from 22 April to 8 Jul 1965. In addition to insuring maximum effective use of the Vietnamese Naval Forces by participating in joint Army/Navy/Air Force planning conferences, LT Adkins participated in several combat operations, during which he was subjected to enemy fire. He significantly improved the capabilities of the unit and contributed greatly to the counter-insurgency effort. The Combat Distinguishing Device is authorized.

★ BROWN, Francis T., Commander, USN, as Operations Officer and Execu-

★ CHAVEZ, Rudolph, Airman Apprentice, USN, for saving the life of the driver of a flaming, overturned automobile. Chavez, a passenger in the car, was severely injured arm because of the accident, but he managed to pull the pinned driver from the burning vehicle, which was in imminent danger of exploding.

★ MEANEY, Rodger G., Seaman, USN, while trying to free *YTL 428*, which had run aground in strong winds and heavy seas, on 28 Jan 1966. Meaney, a crewman of Pusher Boat No. 18, sighted a man in the breaking surf

continued to move toward the casualty and had managed to reach the man before he received serious wounds. The Combat Distinguishing Device is authorized.

★ PERALTA, JOHN R., Hospitalman, USN, while serving with U. S. Marines during Operation Starlite near Chu Lai, Republic of Vietnam, on 18 Aug 1965. His company sustained numerous casualties when taken under heavy small arms and mortar fire from a numerically superior enemy force in well-entrenched positions. Hospitalman Peralta fearlessly exposed himself to the enemy fire to administer aid to an estimated 45 Marines throughout the day. He saved the lives of many of the men and made a significant contribution to his company's success. The Combat Distinguishing Device is authorized.

★ PICKERING, GARY W., Lieutenant, USN, as a patrol ship advisor to the Vietnamese Navy Sea Force from 1 Oct 1964 to 24 Aug 1965. LT Pickering participated directly in 13 combat patrols totaling over 200 days. He frequently came under enemy fire. The Combat Distinguishing Device is authorized.

★ PITZ, PETER E., Ensign, USNR, as Boat Group Commander aboard USS *Point Defiance* (LSD 31), during Operation Dagger Thrust at Vaung Mu, Republic of Vietnam, on 2 Oct 1965. When his boat, leading the first wave to Red Beach, was fired upon as it approached the surf line, ENS Pitz ordered the hostile fire returned and continued down the boat lane. After crossing the surf line, he ordered his boat to the flank of the boat lane to act as traffic control and light salvage vessel. ENS Pitz twice led a wave of amphibious vehicles (LVTs) to Green Beach at Vaung Mu, both times under heavy hostile fire. During the night, as wave guide for the backloading of amphibious vehicles from Green Beach, he took his boat close to shore to insure recognition from the LVTs, despite heavy fire from the beach. The Combat Distinguishing Device is authorized.

★ PORTER, DONALD H., Lieutenant, USN, as Senior Advisor to a Vietnamese junk division on 24 Jan 1965. After volunteering for a combat operation to rescue four American enlisted men believed captured by the Viet Cong, LT Porter, in the face of enemy fire, led a small force from a grounded LCP through 100 meters of waist-deep water and set up positions to block any movement of Viet Cong elements. Observing a helicopter in apparent trouble, he exposed himself to enemy fire, assisted the helicopter and, after it left

the area, returned to his original position. Later, working in darkness and against the rising tide, LT Porter risked his life to recover a fallen comrade whose body had been located in hostile waters. The Combat Distinguishing Device is authorized.

★ REILLY, ROBERT "K", Lieutenant, USN, while serving as an advisor to the Vietnamese Coastal Force, First Naval Zone, from 4 Jun 1964 to 5 Jul 1965. LT Reilly participated in over 20 combat operations against the Viet Cong. He was instrumental in raising the overall efficiency and morale of the units he advised and gave advice which resulted

minimize combat losses to A1 aircraft while inflicting maximum damage upon the enemy.

★ THOMAS, Gary A., Hospitalman, USN, while serving as a corpsman with U.S. Marines in Vietnam on 14 May 1965. The reconnaissance patrol of which Thomas was a member was ambushed by enemy forces. The point Marine was seriously wounded by the initial burst of enemy fire and was unable to move. Thomas left his covered position and moved 20 meters through intense enemy automatic weapons and small arms fire to the wounded man. With the aid of another member of the pa-



in the saving of lives and material. The Combat Distinguishing Device is authorized.

★ RHODES, FRANCIS E., JR., Lieutenant Commander, USN, as Senior Naval Advisor, Fourth Naval Zone, Vietnam, from 17 Feb 1964 to 12 Feb 1965. LCDR Rhodes was responsible for, and directly supervised, operations of the Vietnamese Naval Sea, River and Coastal Forces in the large Delta region of Vietnam. During this period he accompanied elements of the Vietnamese Navy on many combat operations and he directed the curfew plans and river patrols. The Combat Distinguishing Device is authorized.

★ SMITH, Gordon H., Commander, USN, as Commanding Officer of Attack Squadron 152 from 29 June to 26 Oct 1966. During this period CDR Smith vastly improved the effectiveness of A1 aircraft in both the search and rescue and armed reconnaissance environments in North Vietnam. In the field of armed reconnaissance, CDR Smith's analysis of light attack operations led to the development of tactics designed to

control, he moved the wounded man to safety. The Combat Distinguishing Device is authorized.

★ TOWNSEND, Grant R., Jr., Lieutenant (jg), USNR, during a mission against enemy forces in North Vietnam on 28 Jul 1965. During his second run in a flak suppression mission, LTJG Townsend's aircraft was rocked by an explosion. The plane burst into flames, forcing him to eject into enemy territory. Formulating a plan to evade immediate capture while his parachute descended into a thicket 100 yards from the enemy, he quickly assembled the necessary survival gear, moved through the underbrush to the crest of a hill and selected a hiding spot. During his wait, he listened to his pursuers forging up the hill and, as they drew closer, he used his survival radio to direct attacks by *Skyraider* pilots who formed the rescue combat air patrol to drive the enemy troops back. The attacks were coordinated between LTJG Townsend and the *Skyraider* flight leader for 90 minutes, until a rescue helicopter arrived. The Combat Distinguishing Device is authorized.

TAFFRAIL TALK

THE *Big Kahuna* (Hawaiian for medicine man) aboard USS *Coral Sea* (CVA 43) is, as you might expect, a hospital corpsman. This kahuna got the name, not for his mysterious herbal medicines, but for the morale-boosting chatter he dispenses over the ship's radio.

To those who know him personally, he is "Doc" Kennedy, officially Hospital Corpsman Second Class James R. Kennedy. This jovial, cigar-chewing medic became known among his shipmates through the medium of the ship's closed circuit two-channel radio system, KCVA.

Doc began his radio career, specializing in jazz, in August 1966. One of his early listeners tagged him as the "Big Kahuna". He was still a fledgling jazzman when a new station manager with civilian experience in radio took over.

Recognizing Doc's latent talent, the station manager tutored him in the many facets of radio announcing.

The Kahuna's progress was quick. His popularity soared, his fans increased at an astonishing rate. The time had come to try him out with rock and roll. Doc was given one hour of prime time in the early evening on channel one. He was a hit.

Due to popular demand of the crew, his show is now broadcast for two hours every evening, seven days a week, simultaneously over both channels.

Apparently, the *Big Kahuna's* medicine is good.

★ ★ ★

The Naval Ship Research and Development Center at Carderock, Md. has acquired a new ship model which has nothing in common with the type small boys sail in bathtubs. The new acquisition is a submarine scale model for study of structural design features.

You say you never heard of NSRDC? That's the new name which resulted from the merger of the David Taylor Model Basin with the Marine Engineering Laboratory, at Annapolis, Md.

The naval center has plans which will keep its new model busy for at least five years. During this time, researchers expect to gather considerable information which will advance future submarine design.

The David Taylor sub is one of the largest structural scale models of a complete submarine in the world. During the winter months, it will be housed at the Model Basin in Carderock for installation of instrumentation. Later, vibration-in-air tests will be made.

In the spring, it will be given deep-pressure tests at the Underwater Explosions Research Division of the Model Basin located at Norfolk, Va.

From there, the model will be sent for further testing to the Model Basin Field Station at Bayview, Idaho.

Getting back to the Research and Development Center: It will face an exciting future, according to its mission. This includes "performing research, development, test and evaluation work in hydrodynamics, structural dynamics, aerodynamics, acoustics, vibrations, mathematical analysis and computer techniques, and marine engineering." And that's a mouthfull!

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, solicits interesting story material and photographs from individuals, ships, stations, squadrons and other sources. All material received is carefully considered for publication.

Here are a few suggestions for preparing and submitting material:

There's a good story in every job that's being performed, whether it's on a nuclear carrier, a tugboat, in the submarine service or in the Seabees. The man on the scene is best qualified to tell what's going on in his outfit. Stories about routine day-to-day jobs are probably most interesting to the rest of the Fleet. This is the only way everyone can get a look at all the different parts of the Navy.

Research helps make a good story better. By talking with people who are closely related to the subject material a writer is able to collect many additional details which add interest and understanding to a story.

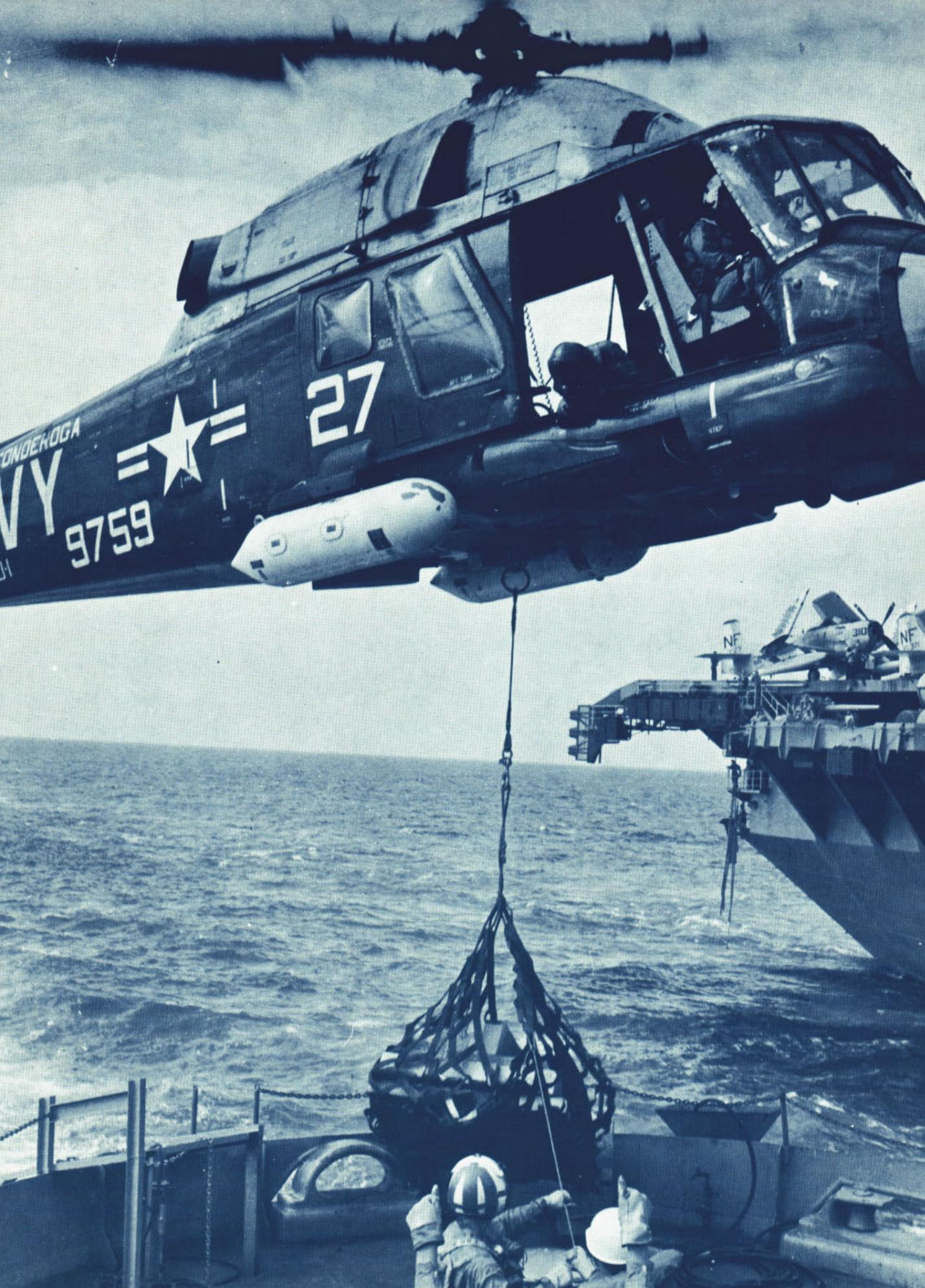
Articles about new types of unclassified equipment, research projects, all types of Navy assignments and duties, academic and historical subjects, personnel on liberty or during leisure hours, and humorous and interesting feature subjects are all of interest.

Photographs are very important, and should accompany the articles, if possible. However, a good story should never be held back for lack of photographs. ALL HANDS prefers clear, well-identified, 8-by-10 glossy prints, but is not restricted to use of this type. All persons in the photographs should be dressed smartly and correctly when in uniform, and be identified by full name and rate or rank when possible. Location and general descriptive information and the name of the photographer should also be given. Photographers should strive for originality, and take action pictures rather than group shots.

ALL HANDS does not use poems (except New Year's day logs), songs, stories on change of command, or editorial type articles. The writer's name and rate or rank should be included on an article. Material timed for a certain date or event must be received before the first day of the month preceding the month of intended publication.

Address material to Editor, ALL HANDS, 1809 Arlington Annex, Navy Department, Washington, D.C. 20370.

● **AT RIGHT: GOING UP** — Supplies are vertically lifted to deck of USS *Ticonderoga* (CVA 14) from USS *Castor* (AKS 1) during at-sea replenishment in the West Pacific.



NAVY FLATTOP...



A WORLDWIDE VIEW