This magazine is intended for 10 readers. All should see it as soon as possible. PASS THIS COPY ALONG

OCTOBER 1960
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CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor

Associate Editors
G. Vern Blasdell, News
David Rosenberg, Art
Elsa Arthur, Research
French Crawford Smith, Reserve
Don Addor, Layout

**FRONT COVER:** SAIL AHOY!—Cruisermen of Sixth Fleet man the rails as their ship begins 21-gun salute during international naval review at Sagres Point, Portugal. Review in which Sixth Fleet ships participated was part of ceremonies for Prince Henry the Navigator of the 15th century.

**AT LEFT:** FLAGSHIPS MEET—USS Des Moines (CA 134), flag ship of Sixth Fleet, and USS Northampton (CLC 1) flag ship of Second Fleet, met in Palma Harbor in the Med. The rendezvous came after air-sea exercises between the Sixth and Second Fleets, earlier this year.

**CREDITS:** All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.
FOUR NAVY OFFICERS were taking a break from the rigors of war in a friendly game of bridge. The place—somewhere in the South Pacific in mid-World War II. One of the officers commanded an aircraft carrier, the second a group of submarines, the third a battleship, and the fourth was a destroyer squadron commander. Suddenly a loudspeaker blared out disquieting news—a huge enemy striking force was bearing down on the area from the north. Planes, ships, subs, transports—the whole bit.

All of the players sprang to their feet, prepared to rush to battle stations, but the DesRon skipper quieted them with a wave of the hand. "Don't bother breaking up the game, fellows," he told them. "I'll go. I'm dummy for this hand, anyway," was his next remark.

We can't vouch for the authenticity of this tale—in fact we suspect it may be an exaggeration—but it helps to underscore a point we're anxious to make. Men can often accomplish great things through teamwork, and that intangible something the French called esprit de corps. That's as good a term as any, too, for among other things it means "a jealous regard for the honor of the body as a whole."

Consider the case of the "Little Beavers"—DesRon 23. They wrote a brilliant page in the history of WW II Pacific warfare behind the spirited leadership of Captain Arleigh Burke, who was to radio his superiors that he was "coming through at 31 knots." The Little Beavers came to believe that they could accomplish anything. They almost could, too.

Since man first ventured forth into battle—afoot, ahorse, afloat or in the air—he has commonly rallied around insignia or symbols of some type.

Ancient Greek and Norse sea-
farers, for example, habitually decorated the bows of their ships with huge symbols. It may have been the head of some favorite deity, who was supposed to protect them, or a dragon or other type of monster designed to terrify a superstitious enemy by the ferocity of its expression.

Many other examples spring readily to mind. U.S. submarines steaming back into Pearl Harbor after a successful Western Pacific campaign in WW II often sported a broom lashed to the mast, symbolizing a clean sweep.

Some U.S. planes received reams of publicity in that war through widely circulated photos showing a curvaceous cutie painted on their fuselage. Much more popular among airmen, however, and outnumbering pictures of unadorned females among men who knew the enemy best, were painted reproductions of squadron insignia.

In the case of a whole country, the symbol is normally a flag. An early U.S. flag—one adopted in the original 13 colonies—is a famous example. It featured a coiled serpent atop the legend “Don’t Tread on Me.” It accurately summed up the feelings of an entire people exulting in a new and hard-won freedom, and served as a warning to potential aggressors to keep their distance.

A little later, after we had switched to the stars and stripes, Francis Scott Key, fired by the sight of the flag still flying over Fort McHenry after a night of incessant bombardment, penned an immortal tribute. Ninety-nine and nine-tenths per cent of the American populace, though they might hide any outward evidence of sentimentality, still feel an inner surge of pride and patriotism when they see, or hear, the Star Spangled Banner.

Ground troops, members of battalions and regiments with histories dating back as far, in some cases, as the Revolutionary War, don’t go into battle, stand parade, or do much of anything else without their colors and battle streamers fluttering before them, serving as a constant inspiration to measure up.

What has this to do with us? Most of the examples cited here spring from wartime situations. This is the peacetime Navy, someone might say, and men are less prone to react to, and be stimulated by, insignia, symbols, slogans and the like.

That’s just not so. The history of any organization is built of many small events. How a ship or squad-
that pride. And one of the more effective ways to make that pride visible is the use of a distinctive crest or coat of arms.

If by now you're convinced of the worth of individual insignia, you'll want to know how to go about adopting one for your outfit. There's nothing particularly complicated about it.

First step should be to gather up official directives on the subject. These would include OpNav Inst. 5030.2B, issued by CNO to encourage ships and squadrons to devise their own crest, and to establish certain design criteria for them throughout the Navy. It also contains information on how to mount service ribbons or campaign medals on individual ships, and details concerning plaques that ships may mount. In addition, CINC PACFLT and CINCLANTFLT have published instructions to force and type commanders — CINC PACFLT Inst. 5030.1C, and CINCLANTFLT Inst. 5030.2, respectively.

If yours is a new ship or doesn't otherwise have an insignie, your next move is to make up one or several proposed designs, or, better still, organize a contest on your ship or station and invite one and all to participate. If a contest is held, selection of the best submission or combination of submissions should be made by a representative committee from the crew. Several commands have awarded cash or prizes and/or special liberty to the winning entry as an added incentive. In any case, when you have a design that seems to fill the bill, have it drawn up in smooth and approved...
by your CO. He will submit it through channels to the Fleet commander in accordance with instructions.

The Fleet commander will notify your ship when the insignia has been approved. And along that line, remember when you're making up your designs that good taste and dignity should be of paramount importance.

It should be of heraldic design, simple, colorful and with good contrast as opposed to cluttered appearance, and should depict the work your unit is engaged in. Cartoons, in most cases, are not acceptable. It's true that the pugnacious, tool-laden bee adopted by the Seabees has become world-famous, and is a very fine emblem, but as we've said, in most cases cartoons won't be considered appropriate.

You can arrange for your ship's crest to be printed on stationery and on pennants. Decals could be made for automobiles and motorcycles owned by crew members. They could be sewn on athletic uniforms, or, if your ship is large enough to have its own band, they could be used to decorate music stands and instruments. Members of air crews could have patches made and sewn on flight jackets.

In addition to ship and squadron insignia, the rules and regulations cover mounting of service ribbons and commendation ribbons earned by naval units, and the display of plaques. Fleet commanders have prescribed appropriate locations on ships and aircraft where they may be mounted.

So far as plaques are concerned, there are two which ships are authorized to display.

One is called the *ship's data plaque* containing the name of the ship, source of the name, information on the builder, including keel laying, launching and commissioning dates. You have probably seen it on board.

The other is a *historical data plaque*, which is relatively new. It must be cleared by CNO to insure accuracy. In general, this plaque should contain:

- Name of the ship, flanked on the left by the year the first ship bearing that name was acquired or commissioned, and on the right by the year the present ship was commissioned.
- A statement as to the number of ships to bear the name, for example: "uss *Tincan*," (first, fourth or sixth) ship to bear the name.
- The names and years of battles or single-ship engagements in which the ship or her predecessors participated.
- If appropriate, the terms "Presidential Unit Citation" or "Navy Unit Commendation" and the year or years earned.
- The term "Battle Efficiency Competitions Award" and the year earned.

Such a plaque can be manufactured by a repair facility or tender upon approval of a request by the commanding officer of the unit concerned. Requests should be submitted in accordance with current instructions for submission of work requests.

Some of the best Navy unit insignia today were drawn by professional artists as a favor to the crew of a ship or aircraft. Most, however, were devised by Navymen who had no special artistic ability but did have a keen interest in adoption of an appropriate symbol for their unit.

So you see, it's interest—or "esprit de corps"—that counts.

—Jerry McConnell, JO1, USN

**TOTEM POLE of squadron insignia shows unit's safety record helping to create pride and better performance.**
Sight-seeing in CIC

Before the days of jet planes, missiles, radio, radar and sonar, naval warfare was a relatively simple affair. In the early years of our Navy, the skipper of a ship could usually base his decisions on little more than his knowledge of his own situation, his seamanship and whatever he could find out about the enemy through his own eyes and reports from lookouts.

Nowadays, however, a battle might involve aircraft and missiles launched many miles from the center of action, and the commander of a Fleet or even the captain of a single ship has to rely on information from many sources in order to find out what's going on. If the skipper himself had to go through all the reports from all these sources he'd be so tangled up in details that he wouldn't have time to turn around—let alone make decisions—and, before he knew what or who had hit him he'd have lost the battle.

The solution to this problem is

ON THE BOARDS—CIC men on board USS Northampton (CLC 1) and (Rt.) USS Prairie (AD 15) chalk up incoming facts.
the Combat Information Center, where radar operators, plotters, talkers, status board keepers, evaluators, controllers and coordinators work to collect and assimilate the data so vital to a modern naval operation with its many diverse components.

In short, a Combat Information Center is the central unit of a single ship, or force, charged with collecting and assimilating combat data in order to advise the CO or unit commander of the present situation and possibilities of the future. Another way of looking at it is to regard it as an overgrown computer, consisting of many men and machines.

The core of CIC is still radar, which almost everyone in today's Navy knows, gets its name from "radar" (a contraction of "r"adial etection a(nd) r(anging)." If it's large enough, the image of any solid object (and even some not-so-solid ones, such as rain and snow storms), can be picked up on the radar screen. Radar isn't perfect, but, through its use of high-frequency radio waves to detect the presence and indicate the position of distant objects, it has almost completely eliminated the use of darkness, fog, camouflage, or the sun's glare as effective cover for attack.

A visitor, entering a darkened CIC for the first time, is confronted with an imposing array of radar repeaters used with the surface search, air search, and height finding radars; vertical plots, horizontal plots, and status boards, plus watchers, bystanders—and coffee cups. To add to the confusion there are loudspeakers rasping jargonese over several radio circuits, frequently interspersed with blasts from the intercom.

Here, in all this seeming confusion, reports, operation plans, and messages from operational commanders, from the radio room, sonar shack, signal bridge, from intelligence and radar operators and the lookouts are all brought together. These bits of information are then fitted into place like pieces of a jigsaw puzzle to form a complete picture of the situation around the ship. This "picture" shows up on the various plotting boards in the form of markings which indicate the positions and movements of all the ships and planes in the area.

The "modular combat information center," is a more recent concept. The modular CIC idea consists of a combat direction system which encompasses all the facilities needed to furnish data to a central information agency. CIC is now organized into centrally supervised functional groups known as "modules," which furnish their specialized information to the central or display and decision module.

Physically, the modular CIC is a large area usually located well amidship. Around the edge of the area are the various modules. In the center of the area, surrounded by status boards, is the display and decision module, where information fed in from the other modules is evaluated. From here, recommendations and decisions are sent to the commanding officer and task unit commander for action.

Consideration is given to the comfort of the men who work in CIC. Air-conditioning keeps the room temperature at 78 degrees effective temperature. The area is completely sound-proof, and all equipment that doesn't demand monitoring by CIC personnel is located elsewhere in the ship.
Meet the Grasshopper

Flying boats have been with us for a long time. Now we can look forward to a flying combatant ship (with underwater wings, yet) that will chase subs at speeds up to 60 knots. At the moment, however, it will not go under the water after them.

We're talking about a hydrofoil craft which will be known as a PC(H). The first of these will be a 115-foot, 110-ton prototype which is sure to give the most hard-bitten submariner a real headache.

PC(H) will very closely resemble a conventional type patrol craft but she has one important point of distinction—when she gets up and goes, she really does—literally. At higher speeds, the hull rises completely free of the water and is supported only by fragile-appearing hydrofoils. The ship is able to achieve these speeds with relative ease because she does not have to combat the drag of the hull in the water.

Powered during foil-borne operations (technically known as "flying") by two 3000-hp gas turbine engines, PC(H) will be able to carry a payload up to 2000 miles at slow speeds (below 25 knots) or some 700 miles on hydrofoils at 40 to 60 knots.

In normal displacement conditions at speeds below 25-30 knots—when the hull is in the water—the craft will ride in the water much like conventional ships, yet will be more seaworthy. At this phase, the PC will be propelled either by the gas turbines or by an auxiliary 600-hp diesel engine.

If this model is successful, the Navy hopes to build larger ships in the range of 250 to 300 tons. (Standard displacement for a coastal minesweeper is 320 tons.)

This ship is most important to the Navy because it will help improve the grasshopper technique. It will sit quietly in the water listening for submarines much like any other Navy ship. Then, when she makes sonar contact, she can dash to the area of contact at speeds around 60 knots. Ideally, the technique would use two such ships.

Captain James J. Stilwell, Head of the Preliminary Design Branch, Bureau of Ships, has said: "We are confident that we can build a 100-ton craft and we have proposed a research craft of about two-and-one-half to three times this size. At that time, we would perhaps be in a position to look forward to one even larger. We aren't talking of something the size of a large destroyer, cruiser or ocean liner. At the moment, this is out of the question."

PC(H) will fly on one of the four basic types of hydrofoil systems, the submerged foil which remains at a constant depth below the surface. Although maintaining the proper depth was somewhat of a problem at first, recently the Navy developed an electronic auto-pilot which seems to control the depths of the foils quite successfully. This
auto-pilot must be extremely accurate, however, since hydrofoils deal in inches, not hundreds of feet like an airplane.

With this electronic autopilot system, the foils can ride just below the surface of the water. Correct foil depth is maintained by moving flaps on the foils much like an airplane is controlled with the wing flaps.

Older hydrofoil craft—and some craft now being studied in the United States and abroad—use the surface-piercing ladder-foil types. This is a much simpler device, in which the lifting surfaces resemble venetian blinds along a strut going into the water. Here again the water passes over the blind-like device to lift the craft almost free of the water. These foils ride partly submerged and partly on the surface.

Another type is shaped like a "V" or "U." As the water passes through this "V," it raises or lowers the craft, depending on the weight and speed of the boat. At top speeds, just enough of the foil remains in the water to balance the craft. Like the ladder type foils, duplicate foils are placed aft to keep the boat level.

A fourth type foil system uses a submerged foil aft and two slippers or skids forward which slide along on the surface of the water. In this case, the craft itself acts as a control lever. If the boat is too heavy or is going too slowly, the after foil sinks into the water. The slippers forward, however, stay on the surface which increases the attack angle of the foils aft. This tends to bring the aft end up and keep the boat level.

One of the problems in the development of hydrofoil boats has been their performance in a following sea. Hydrofoil boats get their lift from the speed and angle of the water which flows over and under the hydrofoil much like an airplane gets its lift from air which flows over and under the wings. In a following sea, the waves come up from the stern, and there is a rotary motion which pushes forward and down on the foils. This slows down the forward motion and unless a big change can be made in the angle of the foils and also an increase in the boat's forward motion, the craft may stop flying.

If this happens, it is again necessary to go through take-off procedures to get the boat foil-borne. Submerged foils—similar to those used on the PC(H)—seem to have solved that problem.

Further research is required in the design of the foils for boats which will travel faster than 60 knots. Like ship propellers, which build up a partial vacuum at high speeds (cavitation), foils also when going through the water at high speeds develop this same type of vacuum.

Although this will be a major headache as ships reach higher speeds, Navy experts believe that by making the foils wedge-shaped, the cavitation, or vacuum, will be formed far enough behind the foils so that it will not hinder their operation.

What happens when the foils get fouled or if they should hit a floating obstacle? Here's what CAPT Stilwell had to say about this.

"We have run over logs and similar obstacles and usually the log comes out second best. Seaweed, however, is a little bit stickier in its consistency. But even then, with a suitable sweepback so there is a
FOILED—Early Navy hydrofoil craft looked like seaplane without wings.

little flow-out toward the tips of the foils, you are able to shed it in most cases."

Rear Admiral R. K. James, usn, Chief of the Bureau of Ships has commented that the worst that can happen to you is that you would stop flying and become a displacement craft.

Another spokesman for BuShips added, "I have seen a locust log about five inches in diameter which had been hit by one of our smallest hydrofoil craft and the log had been practically chopped in two. There was apparently no damage to the foils."

During tests by the U.S. Coast Guard, one and then both foils have been knocked from under a hydrofoil boat without wrecking the craft. According to reports, the boat merely settled into the water and stopped.

Hydrofoils are not a new concept. One of the first successful hydrofoil boats was designed in 1898. It used ladder-type foils. In the early 1900s the Wright brothers got into the act and did some research in foil boats. A little later a U.S. Navy captain and an Italian designer did further work on surface-piercing and ladder-foil boats. In about 1918 a group of men headed by Dr. Alexander Graham Bell built and tested a boat that set a motorboat speed record of over 70 miles per hour. It was an 11,000-pound craft, had ladder foils, and was propelled by two aircraft engines.

BETWEEN 1934 AND 1937 the interest in hydrofoils quickened in Europe. About this time the configuration with the skis forward and submerged foil aft was invented. "V" foils were also developed about this time. These are still widely used by Germany, Italy, Switzerland, and the Netherlands.

During the later thirties and in World War II about seven boats, all using the V-foil, were developed in Europe. They ranged up to about 80 tons and were apparently quite successful.

After the war, interest in hydro-
Foil craft was picked up by a Swiss company and later by an Italian concern. Both groups now have several ferry boats in operation.

In 1947, the U.S. Navy’s Office of Naval Research became actively interested.

The first U.S. Navy test craft was the XCH-4, which was a small, radio-controlled model. After this model was successfully tested, a seven-ton boat was built that looked much like a seaplane without wings.

A combination of two foil systems was used on this craft. Small “V” foils were used like rungs on a ladder. As the boat gained speed or slowed down, the boat climbed or descended from one rung of the foil ladder to the next. It operated very well and in smooth water reached a speed of about 75 miles per hour. It was propelled by two airplane engines.

Following this debut into hydrofoil research, the Navy planned and built several other boats which tested foils of many shapes.

Among the notables were Hi-Pockets, a V-foil type craft, Halobates, a submerged foil amphibious-type craft, and probably the most successful hydrofoil boat yet built by the Navy, Sea Legs which also used submerged foils.

It was after successful flights of Sea Legs that the Navy took one more giant step forward in the development of hydrofoils by ordering a PC(H).

Although the contract has now been let for the construction of the U.S. Navy’s first operational-type hydrofoil, the idea and first design of the PC(H) have been under study in the Preliminary Design Branch of BuShips for more than a year.

Construction of an 80-ton hydrofoil is now underway by the Maritime Administration. It is expected to do 60 knots or better.

The U.S. Coast Guard is also interested in hydrofoils. Seaworthiness is its main concern. Since hydrofoils can operate at high speeds in rougher water than any conventional craft, they seem well adapted to Coast Guard operations.

Canada has operated a hydrofoil at about 70 knots near Halifax, Nova Scotia, and now has in operation a 17-ton version of this boat.

In Italy and Switzerland hydrofoil boats as large as 27 tons are in use as ferry boats.

It appears that hydrofoil boats may be an important addition to the Navy’s armament of ships, especially in the ASW field. Many experimental craft have been built both in this country and abroad which have proved the idea feasible.

Now it’s up to the Navy’s planners. Hydrofoils are still not perfected, but Navy officials believe they have an operational hydrofoil in the PC(H) that will not only serve as a research vehicle, but also be one of the most useful ASW boats to come along in recent years.

—Erwin A. Sharp, JOC, USN.
Near the entrance to Pearl Harbor a small submarine surfaced for the first time after nearly 19 years below. However, no record was broken, unless it might be against the corrosive elements of the sea. The sub was a Japanese midget, sunk by a depth charge during the attack on Pearl Harbor.

The 80-foot sub had rested on a bed of coral 70 feet below the surface until it was recently discovered by a group of Navy divers stationed at Pearl's sub base. The sub was brought to the surface by the salvage crew of uss Current (ARS 22) and a large floating crane that lifted it onto a barge. It was then towed to the harbor's West Loch where members of Navy Explosive Ordnance Disposal Unit One disarmed the two torpedoes and deactivated a scuttling charge.

Despite all these years with Davy Jones, only the bottom of the midget sub was badly deteriorated. A Japanese cider bottle was found corroded into the bottom. The fact that the conning tower hatch was un-
from Pearl Harbor

dogged and the fuze to the scuttling charge partially burned led to the belief that the crew had escaped before their vessel went down.

Definite identification of the submarine has not yet been made, although Navy authorities know that it is one of the five midget submarines brought to Pearl Harbor by the Japanese during the attack. Four have now been accounted for, but the whereabouts of the fifth remains a mystery.

Clockwise from Upper Left: (1) Disposal team commander LTJG J. Connor, usn, opens up sub's hatch. (2) Midget sub is on the "surface" after 18 years. (3) Divers work cables under hull. (4) Deck hands on board uss Current handle lines. (5) Divers go below to check the situation prior to lifting operations. (6) F. J. Rowland, GMC, usn, scrapes coral from torpedo for disarming. (7) Sub is lifted out of water. (8) C. F. Buhl, SFL, usn, who spotted sub on diving exercise, looks it over. Its days at sea are finally at an end.
It's Good Duty —

A Cruise in the Mojave

Located in the Northern Mojave Desert, 150 miles north-northeast of Los Angeles, Calif., in a corner of the U.S. Naval Ordnance Test Station is the U.S. Naval Air Facility, China Lake, Calif.

Its mission reads: "Maintain and operate facilities and provide services and material to support research, development, test and evaluation operations of the U.S. Naval Ordnance Test Station, China Lake, Calif., and other activities and units as designated by the Chief of Naval Operations." To accomplish this, there are 35 officers, 445 enlisted men and 55 aircraft, plus associated ground support equipment.

The 55 aircraft operated and maintained here are enough to give ulcers to the toughest of maintenance crews. They include 18 types and 22 models which date from the F6F of World War II to the newest and fastest operational models of the present. Among these blowtorches and churning machines, there are: F6F drones, AD Skyraiders, T-28's, HRS's, P2V Neptunes, A3D Skywarriors, A4D Skyhawks, FJ Furies, F3D Skynights, F4D Skyrays, FSU Crusaders, F9F Cougars and F9F drones. In addition, located at the Naval Air Facility is the only operational F-104 Starfighter operated by the United States Navy. Not included in this list are the pilotless drones, the KDA, KDB and the KDA2R drones.

Some of the projects on which these aircraft earn their keep are the Sidewinder air-to-air missile, the Zuni air-to-ground rocket, the AN/APQ-71 radar, the AN/ASB-7 and the AN/ASB-8 Bomb Direction Systems, Boar air-to-ground rocket, Side Lobe Suppression radar, and many other projects.

Aside from these research and development projects requiring Air Facility pilots and aircraft, there is another phase of work which requires aircraft and pilots but in a somewhat different vein. That is the target aircraft or drone service. The Air Facility can provide NOTS with every conceivable type of target aircraft service available in the Navy today. This service in itself is one of the most time-consuming services that the Air Facility provides, but which is necessary to the advancement of naval ordnance. It is not unusual for the Air Facility to present five different target air-

TARGET TIME—A KDA drone is readied on plane wing at NAF China Lake.
craft within a week for some of the many NOTS projects.

This may not appear to be a large order. However, when measured on a manpower basis, which includes highly qualified enlisted ratings, numerous civilian technicians and highly skilled pilots for control, this job approximates a command within the command. CO of NAF China Lake is CAPT Theodore A. Grell, USN. He and his exec, CDR Gene Anderson, and the entire crew at China Lake have their hands full. There’s no time for boredom, on or off duty, they claim.

The projects are originated by NOTS and sponsored by the Bureau of Naval Weapons and the Chief of Naval Operations. The Naval Ordnance Test Station conducts the research and development of projects before and during their flight evaluation and testing at the Naval Air Facility.

When the projects are ready, they are assigned to aircraft of the Naval Air Facility. A project pilot from NAF is assigned to study the particular piece of ordnance or airborne equipment, furnish technical and operational advice during its installation in the aircraft, and finally fly with the project during its research, development and test phases. Some of these projects are short-lived; some continue for years.

In addition to these projects is the routine task of maintaining the aircraft and doing the sort of work performed by any Naval Air Facility. The transport aircraft furnish communication between this remotely located base and the outside world. The maintenance and ordnance shops furnish support to the many visiting aircraft and squadrons that come to conduct business or receive training on the ranges.

These firing ranges are operated by NOTS, but the scheduling is administered by NAF. The ranges include the instrumentation to evaluate any type of missile and rocket firing or type of aircraft delivery, whether it be high-altitude-level bombing or tree-top loft bombing and rocketry.

The organizations aboard the Naval Air Facility include Air Development Squadron Five (VX-5) and the Aviation Ordnance Department of NOTS. Each is assigned one-half of a hangar plus buildings and

NO HANDS—Ground crew gets set to launch F9F-6k drone, one of four types used in support of NOTS projects.
spaces for the necessary administrative work and project engineering. The Aviation Ordnance Department, (AOD) is concerned with the in-flight development, research and evaluation of airborne ordnance. AOD also handles the engineering problems which may be encountered when the future weapons are installed in aircraft. Air Development Squadron Five is responsible for developing and evaluating tactical maneuvers for the delivery of weapons by Fleet squadrons in the event of armed conflict.

Though remotely located, the Naval Air Facility is an excellent duty station for the sports-minded. Within a reasonable driving distance to the west and north are the Sierra Nevada mountains which offer hunting, fishing, skiing, boating, camping and other recreational facilities. A 90-mile drive to the east brings the sight-seers to the lowest point in the United States—the impressive desolation of Death Valley.

The entire desert area offers unlimited possibilities for study and observation to the student of history of the far west. One of the richest gold and silver mining areas of California surrounds the area. Although most mines are now abandoned, an insight into the living conditions and characteristics of the early California miner can be obtained by spending a few weekends exploring the mines and shacks left by these wanderers.

BOARD NAF AND NOTS are facilities for many forms of recreation, entertainment and education. These include a shopping center, movie theatre, gymnasium, swimming pools, civilian recreation center, enlisted men's and officers' clubs. Duty at China Lake is further enhanced by the opportunities available for those who want to participate in high school and college level courses sponsored by NOTS. These courses are primarily directed at the engineers, scientists and professional administrators attached to NOTS, but are available to all who can meet the prerequisites for entry.

The desert climate, said to be one of the most healthful in the world, varies considerably in temperature from an average low of 31 degrees in December to an average high of 102 degrees in July. Flying conditions are ideal for research and development work. There is an average of 347 days a year of VFR weather. The average annual precipitation is 0.19 inches. In other words, dry.

You'll find duty in the Desert Navy very interesting.

—LT R. G. Blackwood, USN

HOT SHOTS—Ordnanceman load rocket pods. Right: 'Cool' May temperature of 98 is logged by NAF weathermen.
Salute to a Great Navigator

Not long ago the unusual sight of a line of ships passing under full sail and the ear-splitting sound of a 21-gun salute by 32 ships was experienced by members of the Sixth Fleet participating in a salute to Prince Henry the Navigator.

Ships of 13 navies gathered to honor the 15th-Century Portuguese scientist and explorer whose discoveries opened the seas to world navigation. The Sixth Fleet ships and 29 others of the international naval review sailed in columns of two and as they passed the spot on the bank of the Tagus River where Prince Henry established his famous navigation school, each ship rendered honors with a 21-gun salute. Memories of bygone days were heightened as a column of majestic sailing ships cruised past the sleek modern warships. The Sixth Fleet men learned that these canvas-flying ships serve a utilitarian as well as decorative purpose, since they are still used as training ships by several nations.

The shoreside part of the celebrations included a military parade in downtown Lisbon. Representing the U.S. Navy in this event were six companies of Sixth Fleet bluejackets, Marine and midshipmen.

These ceremonies climaxed Portugal’s year-long commemoration of the 500th anniversary of the death of Prince Henry, and as the Navymen explored the city of their Portuguese host they made discoveries in the way of hospitality and friendship.

New and Old ships of the sea pass during Portuguese International Review.
These Ships Will Fly the

The Battle Efficiency Pennant for fiscal year 1960 has been awarded to 113 Navy ships—62 of them in the Atlantic Fleet, 49 in the Pacific Fleet, and two in the Naval Reserve Training Command.

For some of these ships it was a new experience—for others a repeat performance. But no matter if the ship was decorated with an "E" for the first award or a hashmark for a repeater, it's a great honor to earn.

Here is a list of the ships that won the Battle Efficiency Pennant for Fiscal year 1960 (For a complete "E" award story, see the July 1960 issue and this issue, p. 49.):

**AIR FORCE, ATLANTIC**

- Forrestal (CVA 59)
- Randolph (CVS 15)
- Greenwich Bay (AVP 41)

**CRUISER FORCE, ATLANTIC**

- Canberra (CAG 2)

**DESTROYER FORCE, ATLANTIC**

- Remey (DD 688)
- Bease (DD 654)
- Compton (DD 705)
- Peterson (DE 152)
- Barton (DD 722)
- Harold J. Ellison (DD 864)
- Dyess (DDR 880)
- Hawkins (DDR 873)
- Warrington (DD 843)
- William C. Lowe (DD 763)
- Allen M. Sumner (DD 692)
- The Sullivans (DD 537)

**MINE FORCE, ATLANTIC**

- Bluebird (MSC 121)
- Adroit (MSO 509)
- Valor (MSO 472)
- Aggressive (MSO 422)
- Yazoo (AN 92)

**AMPHIBIOUS FORCE, ATLANTIC**

- Wood County (LST 1178)
- Fort Mandan (LSD 21)
- Taconic (AGC 17)
- Rockbridge (APA 228)
- San Marcos (LSD 25)
- Rankin (AKA 103)
- LCU 1486

**SERVICE FORCE, ATLANTIC**

- Suribachi (AE 21)
- Rigel (AF 58)
- Alcor (AK 259)
- Chukasaw (AO 100)
- Truckee (AO 147)
- Pecatonica (AOG 57)

**USS Canberra (CAG 2)**

**ALL HANDS**
Battle Efficiency Pennant

Tutulia (ARG 4)  Forster (DER 334)  Walton (DE 361)  Mine Force, Pacific
Opportune (ARS 41)  Woodpecker (MSC 209)  \nUtina (ATF 163)  Prime (MSO 466)  \nWeatherford (PC 618)  Excel (MSO 439)  \nSUBMARINE FORCE, ATLANTIC  MSB 54  \nHardhead (SS 385)  MSB 30  \nConger (SS 477)  Mine Division 112  \nCorporal (SS 346)  AMPHIBIOUS FORCE, PACIFIC  \nCobbler (SS 344)  Union (AKA 106)  \nCroaker (SS 346)  Tulare (AKA 112)  \nSkipjack, SS(N) 585  Matheus (AKA 96)  \nAtule (SS 403)  Montrose (APA 212)  \nKittiwake (ASR 13)  Westchester County (LST 1167)  \nHoward W. Gilmore (AS 16)  Wastenaw County (LST 1166)  \nAIR FORCE, PACIFIC  Tioga County (LST 1158)  \nTiconderoga (CVA 14)  Wexford County (LST 1168)  \nHornet (CVS 12)  SERVICE FORCE, PACIFIC  \nPine Island (AV 12)  Mount Baker (AE 4)  \nCRUISER-DESTROYER FORCE, PACIFIC  Vega (AF 59)  \nHelena (CA 75)  Cacapon (AO 52)  \nPiedmont (AD 17)  Passumpsic (AO 107)  \nHamul (AD 20)  Genesee (AOG 8)  \nRichard B. Anderson (DD 786)  Pollux (AKS 4)  \nGeorge K. MacKenzie (DD 836)  Bolster (ARS 38)  \nSomers (DD 947)  Mataco (ATF 86)  \nRichard S. Edwards (DD 950)  Ute (ATF 76)  \nLyman K. Swenson (DD 729)  SUBMARINE FORCE, PACIFIC  \nMorton (DD 948)  Salmon (SSR 573)  \nErnest G. Small (DDR 838)  Greenfish (SS 351)  \nUhlmann (DD 687)  Growler (SSG 577)  \nShields (DD 596)  Sea Fox (SS 402)  \nTrathen (DD 530)  NAVAL RESERVE TRAINING COMMAND  \nIngersoll (DD 652)  Cockrill (DE 398)  \nPreston (DD 785)  DeLong (DE 684)  \nJohn S. McCain (DL 3)  \nBridget (DE 1024)  

OCTOBER 1960

USS Growler (SSG 577)  \nUSS Valor (MSO 472)  

USS Skipjack, SS(N) 585  \nUSS Richard S. Edwards (DD 950)  \nUSS Forrestal (CVA 59)  \nUSS Stormes (DD 780)  \nUSS Corporate (SS 346)
Electronics Technician

**Electronics Experts**

**Man-made space satellites** are sending signals back to earth from distances which were considered impossible a few years ago. The moon and meteor trails are being used as reflecting media for radio transmission. Automatic switching is in operation, transmitting at speeds of more than 100 words per minute. Other electronics projects are in advanced stages of development and evaluation.

Keeping pace with this rapid progress in the fields of electronics and communications is an important part of Naval Reserve training. If you should visit any one of the nearly 200 Naval Reserve electronics divisions, however, you would find that Reservists have not abandoned the use of manually keyed radio transmission. The "brass pounder" is a long way from becoming obsolete.

During the past year, the Reserve electronics lash-up has undergone a number of organizational changes. The pay units of the former "Electronics Program"—electronics divisions and battalions—have been assigned to the Surface Program, as part of the "Active Fleet Augmentation Component" of the Selected Reserve. Each electronics division has an allowance of five officers and 50 enlisted men. When two or more divisions are located in the same area, a battalion may be formed with a staff of three officers and one EM.

The primary function of the divisions is to provide rate training for enlisted Reservists. The prescribed allowance includes ratings normally assigned to a ship's Operations Department.

Divisions are established at Naval Reserve Training Facilities and Electronics Facilities; they are not authorized at Naval Reserve Training Centers supporting Surface Divisions.

Reservists assigned to electronics divisions have pre-cut mobilization orders; they would be ready for immediate assignment to active duty in Fleet billets.

Now let's take a look at the electronics setup at the naval district level—using the Eighth Naval District as our example—and see what keeps it humming.

ComEight now has 38 electronics divisions in operation; one additional division is authorized. ComEight also has four electronics battalions. More than 2500 Reservists take part in ComEight's electronics training—making use of 31 Naval Reserve Electronics Facilities and three Electronics Stations.

Radarmen, radiomen, electronics technicians and signalmen are learning techniques of seeking out and destroying the enemy. All are being welded into a trained team for maintaining the Navy's vital communications.

And that isn't all. The Eighth ND electronics setup includes a Master Control Radio Station (NDF), located at New Orleans, La. In addition, there are more than 60 radio stations located in various NRTCs, NRTFs and NREFs, plus approximately 100 Reservist "ham" radio operators.

Administration of this network and correlation of the training schedule of some 40 basic training circuits (night drills), 25 daytime training circuits, and seven ham cir-
on Ice

Cuits is the responsibility of Eighth ND's Reserve Master Control Radio Station. NDF is the only operational radio station available to the commandant. In addition to the circuits named above—all of which are activated at least once a week—NDF operates on special circuits which give direct contact with Washington and other naval districts’ Master Control Radio Stations in the continental United States. All radio stations in the district are on the air daily, so that it is possible for HQ-to-field and field-to-field contact.

Use of these circuits keeps communications personnel proficient in CW, voice and radioteletype (RATT) operating procedures. Com-Eight now has 16 complete send-and-receive RATT installations. Several locations have receiving equipment only. Eventually, complete send-and-receive RATT gear will be in all NRTCs, NRTFs and NREFs.

NR ELECTRONICS program has been reorganized to provide better training for ratings dealing with complicated communications gear of today's ships.

T HIS RESERVE COMMUNICATIONS NETWORK stands ready to supplement the facilities of the Naval Communications System in the event of an emergency. It also provides
COURSE for ECM operators includes electronic signals from foreign ships.

How to Recognize Signals of Foreign Ships

Many Navy ECM operators have never seen or heard signals from foreign radars or other electronic emitting equipment. This is due to the infrequency of interception and distances involved.

To fill this gap in Fleet Training the Chief of Naval Operations recently established the Electronic Warfare Recognition Program. This program will be similar in nature to the Aircraft and Warship Recognition Program now in force, and will encompass all ships, stations, and aircraft squadrons charged with the responsibility of intercepting signals for tactical or intelligence purposes.

The Naval Training Device Center, Port Washington, New York, is procuring a quantity of Sound/Slide Projectors to be used as instructional aids in this program. Slides for use with the projectors will show signal analysis and antenna patterns, together with a coordinated tape recorded presentation explaining the displayed characteristics. These slides and tapes are being arranged for lessons of about twenty minutes each and will include signals from U.S. and foreign sources. The Sound/Slide Projector thus enables instruction to be given, without specially trained instructors, to any sized group, and in any convenient room.

The projectors and programmed Electronic Warfare Recognition lessons will be available this fall and will be distributed to those activities designated by Fleet Commanders.

The ASSIGNMENT of electronics divisions to the Active Fleet Augmentation Component limited the source of experienced and qualified Reservists who would be needed to bolster shore-based communications activities in the event of mobilization.

Accordingly, a Naval Reserve Communications Program was launched within the Shore Establishment Component of the Selected Reserve. To start this new program, 12 communications divisions were authorized with locations at Boston, Brooklyn, Philadelphia, Washington, Norfolk, Charleston, New Orleans, Chicago, San Diego, San Francisco, Seattle and Kodiak. Each division has an allowance of five officers and 45 EM. Members have pre-cut mobilization orders.

The Communications Program has a nonpay counterpart in the Specialist Reserve.

Back in the 1930's, the Communications Reserve—as it was called then—was considered the best organized group within the Naval Reserve. Reservists engaged in electronics and communications work today are maintaining their high reputation. If M-day comes, they'll be ready to bring you peacetime allowance up to full wartime strength.
NAS Smoke Eaters

No matter what the weather, when an aviator takes off or lands his aircraft at a Naval Air Station he can be sure that the Crash and Rescue crews are on duty and ready in the event of an emergency.

No one plans to have an accident, but it's reassuring to know that there is always a fully manned crash truck standing ready to roll at the first sound of the alarm.

Typical of these always-ready units is the one at NAS Brunswick, Me. When a telephone call comes into the alarm room there, the location and type of emergency are quickly passed on to the crash crew. As the units leave, the control tower operator picks up radio contact with each unit to relay and receive detailed information.

Speed is essential. A few seconds may mean the difference between life and death, minor fire or complete destruction. Therefore, constant training in rescue and fire fighting is a must at Brunswick.

To maintain the speed, team work, and skill needed to combat emergencies, realistic training in fighting aircraft fires is done on old, non-salvageable aircraft or mockups. When a hundred gallons or so of fuel is fired off, the crash crew goes into action. They first rescue a "dummy" from the cockpit, and then put out the fire.

Since the alarm sounds not only for crashes and other emergencies, but also for drills, a unit must treat each call as the real thing. Many calls are received in the tower from aircraft with rough-running engines, hydraulic trouble or some other aircraft malfunction. Any one of these could lead to a serious accident.

When such calls are received the crash equipment rolls into position about where the plane will touch down and then follows the aircraft until it comes to a complete stop. Many disasters have been averted in this way.

Fleet aircraft operating off carriers at sea can divert to Brunswick if necessary. In this case the crash crew can rig an emergency chain arresting gear for their tail hooks in a matter of minutes. If the landing gear cannot be lowered, a blanket of fire fighting foam can be applied to a portion of the runway. Sliding along on the foam not only reduces damage to the aircraft, but also lessens the danger of fire.

Integrated teams of Navymen and civilians are on duty 24 hours a day at Brunswick.

The Crash and Rescue crews at Naval Air Station, Brunswick, also back up the structural fire department for other types of fires on the Station, and are available to help civilian fire departments.

The crews at Brunswick demonstrate the team work, and courage of Crash and Rescue units throughout the Navy who have saved the lives of countless pilots by being in the right place when they're needed.

—C. S. Brown, JO2, USN(W).
Naval Intelligence Clerk

Sir: Could you clarify for me OpNav Inst. 1221.1A, which concerns eligibility requirements for assignment of NEC Code YN-2505 (Naval Intelligence Clerk.)

Paragraph 5a of that instruction says “Male personnel in pay grade E-5 or higher,” but no rating is specified. Does this mean that any Navyman of any rating—a storekeeper, for example—in pay grade E-5 or above may apply if he meets all the qualifications?—K.M.Y., Jr., SKCS, USN.

- NEC Code YN-2505 has been established to identify outstanding Navy personnel whose eligibility for high security clearance has been established after undergoing a complete background investigation, and who possess the qualifications and/or potential for assignment to clerical type intelligence billets. These billets require performance of predominantly YN-type duties, thus, with the exception of a very few men of other ratings who possess certain special qualifications, only YNs and a few PN’s have been designated. There are no plans at present to expand the program to other ratings nor are requests from other ratings desired.—ED.

Pre-Commissioning Sea Duty

Sir: In December 1955 I was assigned to the pre-commissioning crew of USS Franklin D. Roosevelt (CVA 42), which was then undergoing conversion. That ship was commissioned on 6 Apr 1956, and three days later I was detached to another one. I have been on continued sea duty ever since.

Did my sea duty begin when I joined the pre-commissioning crew, or did it start when the ship was commissioned?—J.P.D., SF1, USN.

- Your sea duty began when you reported to the pre-commissioning crew, and—unless we miss our guess—that part of your sea duty was probably the roughest of the lot.—ED.

Beeps, Gongs, and Bells

Sir: It seems to have become accepted practice in the Navy to use the Chemical Alarm (or beeps) or bells for the arrival, departure and passing of dignitaries and naval officers. There has been much discussion about this aboard my ship and little or no information to prove if this custom is right or wrong. Would you answer these questions for us?

1. Are the number of beeps received the same as the number of sideboys?

2. How many beeps would a lieutenant commander get if he were a commanding officer?

3. What is the proper phraseology of the word to be passed with the beeps, and should “staff gangway” be used for staff officers?—R.J.L., LT, USN.

- To use the chemical alarm to signify the arrival or departure of officers may be a practice on some ships, but it certainly should not be an accepted one. Two publications that are aboard every ship in the Navy clearly state for what purpose the chemical alarm should be used. They are NWP-50 and NWIP-50-1. One says that the chemical alarm is used only to alert the crew when an atomic, biological, or chemical attack is probable or has occurred. The other says that “No person shall, without proper authority and due cause, tamper with, operate, or otherwise disturb any contact maker used to sound the general or chemical alarm.”

And, even when boat gongs are used to signify the arrival of officers they are merely to alert certain members of the crew—boat gongs are not honors. In no place does Navy Regulations’ discussion of honors (Chapter 21) say anything about using boat gongs for honors.

When the gongs are used to signify the arrival of an officer, however, the number of gongs received is the same as the appropriate number of sideboys. If a lieutenant commander is a commanding officer, he should receive two gongs. As for staff officers, after the correct number of gongs have been sounded, the word “staff” may be passed for senior officers. “Staff gangway” should not be used at all with boat gongs.—ED.

Dependent Medicare Program

Sir: I would like clarification of the Dependents’ Medicare Program under SecNav Inst. 6320.8A which went into effect on 1 Jan 1960. I thought this program was established for the dependents of service personnel who were not near service medical facilities.

Take my family for example. We are about 200 miles from the U.S. Naval Hospital, Portsmouth, Va. According to my interpretation of SecNav Inst. 6320.8A, Medicare is only authorized for hospitalization. Must I pay for emergency office calls or if a physician is needed for a house call?

I think Medicare should provide for acute emergencies of any nature which are a threat to the life, health, and well-being of the patient.—R.P.N., HMC, USN.

- You have interpreted the Medicare instruction correctly—it is primarily designed for hospitalization. The civilian medical care program for dependents provides only for physicians to render authorized care during hospitalization. Care or treatment rendered by physicians in their offices, a home, or outpatient clinic of a hospital is not allowable from civilian sources at Government expense. The only exceptions are:

1. Care required by a physician be...
fore and after hospitalization for a bodily injury or surgical operation;  
2. Prenatal and postnatal care in connection with authorized maternity services; and  
3. Treatment of bodily injuries, including necessary diagnostic tests and procedures in treatment of fractures, dislocations, lacerations and similar wounds.

Of course, the Navy wants your dependents to use service medical facilities if available and adequate. If, on the other hand, the service facilities are not available or are incapable of providing the required care, a Nonavailability Statement (DD Form 1251) will be furnished. This will entitle them to receive authorized care from civilian sources.

You do not determine, however, if service facilities can provide care for your family. The decision as to whether a DD Form 1251 will be issued rests entirely upon authorities at the installation concerned.

If, in their opinion, a service medical facility within a reasonable distance from your home is capable of rendering the required or requested care, a Nonavailability Statement would not be issued. If, on the other hand, they feel that these service medical activities cannot render the required care, a DD Form 1251 would be issued.—En.

Fitness Report

Sir: You said in your reply to G.S.Y., YNC, USN, in the May All Hands, that a fitness report need not be submitted at the end of the quarter for a LCDR who reported to a command on 5 February. You stated that the period 5-29 February could be included in the next regular report since Article B-2203(4) of BuPers Manual gives a commanding officer authority to extend a report 30 days on either end of a regular reporting period.

If the officer in this case did not have a delay in reporting from his last command and his proceed and travel time did not exceed six days, I agree.

However, if his proceed time, travel time and DELREP exceeds six days (which would have made his detachment in January), I feel that a report must be submitted. Article B-2203(4) of BuPers Manual states that the reporting period starts the day after the date of detachment from his previous duty station.—L.H.K., YNCS, usn.

* Technically, you’re right. However, we have been advised by the Bureau that in this article regarding the 30 days’ latitude to avoid as many “record purposes only” type reports as possible.

The Chief of Naval Personnel gives this article a very liberal interpretation, and in such cases would prefer that the report be extended for that short period, even though it runs slightly more than 30 days.—En.

In Support of Forces in Lebanon

Sir: I have an entry in my service jacket which reads: “Served in support of the U.S. Forces in Lebanon, under the operational control of Commander Task Force SIXTY, from 12 Sep 58 to 25 Oct 58.”

Is the Navy considering a medal, ribbon, or other award for this service?
—R.C.J., AT2, usn.

* No. After the crisis in Lebanon such a medal was considered, but it was disapproved.—En.

SIDE BY SIDE—USS Essex (CVS 9) and USS Saratoga (CVA 60) spell out greeting as they enter harbor at Mayport.
LETTERS TO THE EDITOR (Cont.)

Pink Ships? You Bet!

Sir: Re the letter from N.C., SD1, usn, concerning pink ships, which appeared in your August 1960 issue. As one who was there, I can assure the Boats on uss Strobel that not only Jouett and Davis, but 10 other ships—more or less—of the South Atlantic Force too, wound up painted pink. It wasn't any pinkish gray either, but an out-and-out pink.

May I give you the story of how all this came about?

In late fall, 1941, I was serving as Chief Engineer in one of the old 1850 class two-stack destroyers, uss Winslow (DD 359). We had to lay into Boston Naval Shipyard for some repair work, and, since I lived nearby, I was able to grab a couple of days leave at home.

When I returned to the Shipyard, I couldn't find Winslow—and it was only after an extensive search that I found her high and dry in one of the dry-docks. But what a job I had recognizing her!

BuShips was, at that time, experimenting with a type of blue paint, hoping that it might help camouflage ships at sea more effectively than the black and white or gray finishes then in general use. Winslow, it seems, had been chosen as a guinea pig to give this blue paint a try, and there she sat—unmistakably blue.

To make matters worse, time wouldn't allow for a conventional paint job, so that blue paint had been slapped on over the coats of gray and black and white we already sported, plus salt, rust, barnacles and what-have-you.

We received orders to join a convoy (which I recall included Queen Elizabeth and Queen Mary) out of Halifax N.S., and help provide escort around Capetown and into the Indian Ocean. So, blue paint and all, we stood out to sea.

Now, I don't know if blue paint was a good idea or not, or whether BuShips ever experimented with it. It may well have been a good idea in those portions of the oceans where the water is normally blue. However, that's neither here nor there so far as this story is concerned.

I do know that, by the time we'd traversed thousands of miles of ocean, the convoy over to Australian naval forces in the Indian Ocean, and returned to the South Atlantic to join the Patrol Force there, our slapdash blue paint job had largely worn off, leaving us a something less than beautiful three-tone.

Something, obviously, had to be done—but in all of Capetown, the only shade of paint available was pink. It's true the skipper shuddered more than a little at the prospect of becoming the first pink ship in the U.S. Navy, but he finally concluded that pink was better than the shade we were in, so pink we became.

It wasn't long after that when we got the word to rendezvous with the rest of the South Atlantic Force.

The late VADM Jonas H. Ingram, Force Commander, was embarked in his flagship, the light cruiser uss Memphis (CL 13.) He was on the bridge the early morning we and other ships joined up with the main force, and, while he could easily see the other ships of more conventional hues approach, he was completely unaware that we had arrived until we were within just a few thousand yards of him.

Apparently the combination of tropical weather and early morning or late evening sunlight in that area produces a sort of pink smog, or, more accurately, haze in the air, which masked our approach perfectly. I understand that after the Admiral finally discovered our presence, and recovered from the initial shock of our appearance, he was mightily impressed, muttered something about "a beautiful camouflage job," and forthwith issued orders that every ship in his force be painted pink.

My memory fails me now as to exactly which ships besides Winslow, Jouett and Davis got the pink paint treatment, but I'm sure there must have been at least 10-12 altogether. Nor do I know how long they remained pink, for I left that area for other duty in May 1942.

Before I left Winslow, however, we went through a shattering experience which I'm sure none of her crew will ever forget. Shortly after we became the first pink ship in the Navy, we experienced some mechanical difficulties, We were ordered to Charleston for emergency repairs, but first we had to make a stop in Norfolk.

I'm sure it won't tax your readers' imaginations too much to imagine the reception we got from other ship's crews when we hove into that teeming Navy town. The only word I can think of to describe it is—horrible.

That's about it. I just couldn't resist adding my two cents' worth to the tale of the Navy's pink ships. Perhaps some other readers who served in the South Atlantic Force at that time will be able to fill you in on some more details which I've overlooked or forgotten.

—CAPT Neal Almgren, USN.

Service for Hash Mark

Sir: I spent two years in the Ready Reserve before I joined the regular Navy. Will I be able to wear one hash mark after two years on active duty?—R.G.S., DK3, USN.

Yes. Service—other than on the retired list—in the Navy, Naval Reserve, Marine Corps, Coast Guard, Army or Air Force may be counted toward determining your eligibility to wear a service strip.

When you start counting service for gold hashmarks, (12 years' continuous good conduct) however, only continuous active duty in the Navy or Reserve may be counted.—Ed.

Dock Not Always a Slip

Sir: In your reply to Signalman First Class P.V.F. in the August 1960 issue you discussed dock log terminology. You made the point that "Resting on keel blocks as before" and "Docked as before" meant the same thing.

I believe you are in error inasmuch as a dock is defined severally as (1) a basin into which a ship enters prior to being drydocked, and (2) the slip between two piers, etc. It follows that it is not possible to be resting on keel blocks and docked at the same time.

I hold that it is proper to say that a ship (under certain circumstances) is being docked, but once the lines are over, she is then moored. With the water pumped out of the bottom of the drydock she is then drydocked.

—P.R.H., LT, USN.

Ground Work — USS Terrebonne Parish (LST 1156) off-loads troops in Sixth Fleet amphibious exercises. 

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—P.R.H., LT, USN.
As Knights “Modern Seamanship” puts it: “...strictly speaking a dock is a structure used for drydocking a vessel. The space between neighboring piers is called a slip.”

“Naval Terms Dictionary” bears this out with this definition of dock: “Large basin either permanently filled with water (wet dock) or capable of being filled and drained (drydock or graving dock). Also a common though inaccurate term for pier or wharf.”

The rub of the question, though, is as you put it. A ship in a drained drydock is drydocked. Therefore, “Drydocked as before” would probably be a more accurate term than “Docked as before.” The former term is used in the Navy Training Course “Quartermaster 3 & 2.”

Now we’ve still got that ship in drydock... and “Resting on the blocks as before” would also be correct, as borne out by the “Watch Officer’s Guide.”

To round this out, a ship alongside a pier or wharf would be “moored as before” while a ship at anchor would be “anchored as before.”

Perhaps we are splitting hairs here. Docked could be considered a short version of drydocked.—Ed.

**Filling Warrant Officer Billets**

Srn: The warrant officer billet as Assistant Personnel Officer at this station is being made a FNCM billet. Unless certain changes are made in Navy Regulations about who may administer oaths and sign official correspondence, how can he do the job right?

It seems to me that if master chiefs are going to fill warrant officer billets, they should be allowed to administer oaths and sign official letters. Is this being considered?—A.G.S., PNC, USN.

- No. If the job needs a person who can sign official correspondence and administer oaths, it would be upgraded to an officer billet when no more warrant officers are available to fill it. On the other hand, if the position needs an administrator/interpreter and not necessarily someone to assume an officer's responsibility, then it would be made a master chief's job.

This, apparently, was the deciding factor in your case. Since you have a personnel officer to act for the commanding officer, a master chief should be able to handle the job with little trouble.—Ed.

**This Is The ‘Most’**

Snr: Some time ago, during one of your Navy-wide discussions of “firsts” and “mosts” in the Letters to the Editor section, the subject of most ships in a nest was quite thoroughly covered. I remember one Chief wrote—a few years back—that he remembered seeing a photo of a submarine tender with quite a group of subs tied up alongside. I had some photos packed away in storage but I couldn’t at the time check them to verify the chief’s tale.

For what they are worth, here they are. The tender is USS Howard W. Gilmore (AS 16). The setting, dear old Subic Bay, and the year—some time in mid-1945. In one shot you can see that both port and starboard have—by assumption—17 subs made up alongside and one either coming into the nest or leaving. The assumption is that one sub is out of sight against the port side of Gilmore. No record claimed.

In one of the shots you can see uss Bay’s shark snout.—R. H. Womeldorf, YNC (SS), USN.

- Well, here we go around again. Thanks for the photos—they gave us a nostalgic twinge. You have a long memory. The chief who wrote to us about seeing this nest of ships sent his letter way back in 1956. We won’t stick our necks out, but let’s see if someone else can beat this record.—Ed.
Obligated Service for B School

SIR: About 15 days before I reenlisted in July last year, I submitted a request for Class B yeoman school under the reenlistment incentive program as explained in the Enlisted Transfer Manual (Chapter 12, paragraph 12.8).

I knew I wouldn't receive orders for the school before I reenlisted, but since I would reenlist anyway, this wasn't important.

My orders for school came back for the October class. I was told at that time, however, that I must extend my enlistment for one year to meet the obligated service requirement for the school. I was unable to contest the decision then and signed the extension.

The basis on which the personnel officer made his decision was that under this incentive plan a man would normally have a set of orders in his hand at the time he reenlisted for six years.

Is there any reason why a man with five years' and eight months' obligated service should have to extend for another year to attend a B school which normally requires only 18 months' obligated service? If not, how can I have the extension canceled?—G.W.E., YN2, USN.

In your particular case, it wasn't necessary to extend your enlistment. As you reenlisted on board your duty station and requested a school as a reenlistment incentive—regardless of the length of the school—you were obligated to reenlist for only four years.

The only persons who are bound by the different length schools are those who reenlist at a recruiting station. In that case, a man must reenlist for four years to get a school of 19 weeks or less, and for six years for schools of longer duration.

If you want the extension canceled, you must submit a letter to the Chief of Naval Personnel (Pers B222)—via chain of command, of course.—Ed.

Postal Clerk from Yeoman

SIR: Somehow I failed to get the word about the new Postal Clerk rating in time to submit my application to the Chief of Naval Personnel as specified in BuPers Inst. 1440.26. I am a former teleman. I have had quite a bit of experience as a Navy mail clerk, and I know I could do a much better job for the Navy if I were a Postal Clerk.

Is there any way that I can get my rating changed to PC now that I have missed the August selection?—C.R.D., YN2, USN.

You missed an opportunity when you failed to submit your application to BuPers before the 25 August deadline set in BuPers Inst. 1440.26. A selection board was convened late in August that picked a nucleus for the new PC rating. Men selected by this board will be changed to PC, rate for rate, without taking an examination.

To change your rating now, submit your request in accordance with BuPers Inst. 1440.5C—this is the regular change of rating instruction. Under this instruction, you will be required to complete the necessary training courses (they will be published soon) and pass the service-wide examination.—Ed.

From BM to NW

SIR: I am a BM2 with more than 11 years' active duty in the USNR and USNR TAR program. I am very much interested in changing my rating from BM to NW, but have been unable to find any information regarding my eligibility for making such a change.

My question is—can I apply for change of rating, and if so, what is the procedure. I am at present in the TAR program.—L.R.L., BM2, USNR.

As a TAR, you will be eligible to enlist in the Regular Navy at the expiration of your Naval Reserve enlistment.

Immediately before that time, you could request assignment to the NW Class "A" School before transfer to a sea billet.

Here are the eligibility requirements for Class A instruction aimed at preparing personnel for change in rating, as contained in BuPers Instruction 1440.18B:

Must be a volunteer for one of the ratings to which "changes to" are desired.

Must be in a source rating, that is, one of the overcrowded ratings.

Must meet obligated service requirements.

Must meet test score requirements.

Must be recommended by CO.

Must meet security clearance requirements of school concerned.

Must have less than 14 years' active Naval service at time of submission of request for school.

In the case of Nuclear Weaponsman Class "A" School, you must:

Be in pay grade E-4 or E-5 in one of the source ratings.

Have at least 36 months' obligated service remaining at the time your request for school is submitted.

Have a combined ARI/MECH score of at least 105.

Have normal color perception.
Personnel in pay grades E-4 and E-5 are changed in rating in equal pay grade upon successful completion of the course of instruction.

In the event you plan to enlist in the Regular Navy, you should utilize the time remaining before the expiration of your current Naval Reserve enlistment to prepare yourself for qualifying for the change in rating you desire. Toward that end, you might try studying the BuPers Publication "Training Publications for Advancement in Rating" (NavPers 10052-G) of March 1959.

This publication is in the library at your Reserve Training Center, and contains information on available study guides.

Let's suppose, however, that for one reason or another, you could not qualify for NW Class A School. This would not mean that a change in rating to NW was necessarily barred to you. It would mean that the change would have been accomplished through your own efforts by means of the appropriate training courses and publications, and through successful completion of a service-wide examination for the rating requested.

To be eligible for a change of rating under those circumstances, you would have to:

- Be a volunteer.
- Complete the required training courses, practical factors and performance tests as outlined in the "Manual of Qualifications for Advancement in Rating" (NavPers 18068).
- Be recommended by your CO.
- Receive authority from the Chief of Naval Personnel to compete in a service-wide examination for the rating requested.
- Satisfactorily complete the service-wide examination.

Be authorized by the Chief of Naval Personnel, through the regular Naval Examinining Center announcement letters, to change your rating.

Whichever course you choose we wish you good luck in your campaign to become one of the Navy's Nuclear Weaponsmen.—Ed.

Transferring to Fleet Reserve

SIR: I plan to transfer to the Fleet Reserve some time this year, but there is one slight hitch.

I reported aboard my present duty station in February this year, and the personnel office tells me that according to BuPers Inst. 1830.1 (formerly 1813.3A), I will have to do one year aboard before I can transfer to the Fleet Reserve.

I would be happy to do that, but there is still one hitch, I will have completed 20 years' service on 12 November, and my current enlistment expires on 16 November. What about the last three months of my year on board? Can I reenlist and at the same time put in my papers to get out in February, or will I be involuntarily extended for three months to complete my one year on board?

It seems to me that it would be less trouble for the Navy just to let me go into the Fleet Reserve at the end of my enlistment and forget about that last three months.—J.B.G., BMCS,

BuPers Inst. 1830.1, which requires one year on board a station before a Navyman can go into Fleet Reserve, doesn't apply in your case. During peacetime your transfer to the Fleet Reserve may not be involuntarily deferred beyond the normal expiration of enlistment. Possibly the Navy figures you will have enough paper work to do preparing for the Big Day without adding more to it.—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 25, D.C., four months in advance.

- uss California (BB 44) — The second reunion will be held in St. Louis, Mo., during the third week of June 1961. For further details, write to Harold D. Bean, Box 5, Sorento, Ill.
- uss Leedstown (AP 73) — The 11th annual reunion is scheduled for 12 November in New York City. For more information, write to Frank A. Wiseman, 104 West 83rd St., New York 24, N.Y.
- uss New York (BB 34) — A reunion of those who served on board during the period 1914-1945 is being planned. For details, write to Bernard J. Grinshaw, BM3, usn, uss Colorado (AGC 11), FPO, San Francisco, Calif.
- uss Platte (AO 24) — A reunion of those who served from 1946-1947 is being planned. Those interested may write to Raymond F. Wright, 60 Grandview Ave., Watertown, Conn.
- NAS Squantum, Mass. — All officers who served at the naval air station from 7 Dec 1941 through 1946 who are interested in holding a reunion in Boston during September 1961 may write to Herbert E. Tuttle, Jr., 88 Eustis Ave., Newport, R.I.

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OCTOBER 1960 29
The navy is a big outfit and has a lot of jobs to do. It follows that, to accomplish its missions with as little confusion as possible requires careful planning and a delicate division of labor. One of the reasons for its success is based upon its organizational structure as it has evolved through the years. Here’s a brief summary of that structure, based upon General Orders 5 and 19. You’ll find a more complete picture on the following pages.

To begin with, the entire Navy, ashore and afloat, is the Department of the Navy, or Naval Establishment. Don’t confuse this with the Navy Department, which is something else again.) It includes all active and Reserve personnel, men and women, and the Marine Corps. The Department of the Navy has three parts:

- The Navy Department.
- The Shore Establishment.
- The Operating Forces.

In other words, the Department of the Navy is the whole naval establishment; the Navy Department is the headquarters of that establishment. The Navy Department and the Shore Establishment support the operating forces.

The Navy Department, which has its headquarters in Washington, D.C., is made up of the bureaus, boards and offices of the Navy, headquarters of the U.S. Marine Corps, and headquarters of the U.S. Coast Guard when that organization is assigned to the Navy. No part of the Department carries on its duties independently. All are linked together in a logical chain of command, as demonstrated on the following pages.

The Shore Establishment includes all activities of the naval establishment not assigned to the operating forces and not a part of the Navy Department.

The Operating Forces consist of the Fleets, seagoing forces, sea frontier forces, district forces, Fleet Marine Forces, and such shore activities of the Navy, and of other forces and activities as may be assigned to the Operating Forces by the President or the Secretary of the Navy.

The Secretary of the Navy (SecNav) is the head of the naval establishment, appointed by the President and approved by the Senate. He directs and controls the Navy by establishing broad policies and regulations.

A civilian, he administers the Naval Establishment as one of the three military departments in the Department of Defense and is responsible to the Secretary of Defense and the President for the supervision of all naval matters.

SecNav’s civilian assistants form what might be called the business organization of the Navy Department. At present, they consist of an Undersecretary of the Navy who, in turn, is aided by three Assistant Secretaries.

The Undersecretary is responsible for the supervision and coordination of the work of the other civilian executive assistants and collaboration with the Chief of Naval Operations who, as the top ranking officer in the Navy, is the military authority for the naval establishment. The Assistant Secretaries are responsible for: (1) Personnel and Reserve forces; (2) Material; and (3) Research and Development.

The Chief of Naval Operations, a four-star admiral, is a member of the Joint Chiefs of Staff and is the naval adviser to the President, the Secretary of Defense, and the Secretary of the Navy. He plans, forecasts and determines the requirements of the Operating Forces for equipment, material, personnel and supporting services, and coordinates and directs the efforts of the bureaus and offices.

To accomplish all this, he is assisted by a Vice Chief of Naval Operation (VCNO), six Deputy Chiefs (DCNOs), three Assistant Chiefs (ACNOs), the ASW Readiness Executive, the Naval Inspector General and the Director, Long Range Objectives Group. The functions of his assistants are outlined in the accompanying illustration.

The Commandant of the Marine Corps is the head of the Marine Corps, which has its own recruit training.
schools, camps, bases, equipment and supplies. However, the Corps makes use of Navy doctors, dentists, hospital and dental corpsmen, nurses and chaplains. Although they operate on the land, the sea, and in the air, their specialty is in amphibious warfare. They also provide sentries and guards for the larger Navy ships and for some shore installations.

The bureaus and offices assist the Secretary of the Navy, his assistants and the Chief of Naval Operations on technical matters. Here, very briefly, is a description of the mission of each one:

- The Bureau of Naval Personnel procures, trains and distributes the officer and enlisted personnel of the Navy. It supervises promotion, discipline and welfare of naval personnel and operates field personnel establishments.

- The Bureau of Ships designs, constructs, procures and maintains ships and small craft, radio, sound and other equipment. This Bureau operates several experimental laboratories and is responsible for the upkeep and operation of the naval shipyards.

- The Bureau of Medicine and Surgery maintains the health of the Navy and cares for its sick, wounded and injured. It operates hospitals, dispensaries, clinics and laboratories and trains the personnel of the Medical Department.

- The Bureau of Supplies and Accounts procures, stores and issues supplies, provisions, clothing, fuel and such other material as the technical bureaus do not procure directly. It keeps the property and money accounts of the Navy and pays vendor invoices and Navy payrolls.

- The Bureau of Yards and Docks designs, constructs and maintains public works and public utilities at shore establishments, both continental and at outlying or advanced bases. This Bureau also trains, organizes and maintains the Construction Battalions (Seabees).

- The Bureau of Naval Weapons (formed through the consolidation of the Bureaus of Ordnance and Aeronautics) develops and makes operational to the combat forces new and improved missiles, aircraft, weapons systems and ordnance components.

The services of all these bureaus and offices are directed toward the two other components of the Naval Establishment—the Operating Forces and the Shore Establishment.

- The Operating Forces are composed, briefly, of several fleets (active and reserve) seagoing forces, sea frontier forces, district forces, Military Sea Transportation Service (MSTS), Fleet Logistic Air Wings, Fleet Marine Forces, and their assigned shore activities. The broad responsibility of fulfilling the Navy’s role in support of fundamental national policies and interests throughout the world rests on the Operating Forces.

Hence, both the Navy Department itself and the Shore Establishment exist for the purpose of supporting the Operating Forces.

- The Shore Establishment comprises the field activities of the Navy Department ashore and includes all such activities not assigned to the Operating Forces. These are the activities distributed throughout the U.S. and outlying territories for the purpose of maintaining, supplying, equipping, repairing, overhauling and rendering similar services for the Operating Forces.

The activities which make up the Shore Establishment are distributed at strategic points along our coastal regions where they may best serve the needs of the Operating Forces. However, many activities in which such close relationship is not essential, such as air, ordnance, procurement and supply, personnel and special service activities are distributed at various points within the continental U.S. and the territories.

Military command of the Shore Establishment stems from CNO and is exercised through the Sea Frontier Commanders and the District Commandants, the Chief of Naval Air Training and the Commandant of the Marine Corps. For organization chart, turn page.
This Chart portrays the basic organization of the Department of the Navy. Relationships in the administration of the Department are based on Department of the Navy General Orders No. 9 and No. 19. The following footnotes indicate the more significant of these relationships:

1. Additional responsibility to the Chief of Naval Operations.
2. Additional direct responsibility to the Secretary of the Navy.
3. In all matters relating to duties assigned to the Civilian Executive Assistants, the Office of the Chief of Naval Operations, Headquarters, U.S. Marine Corps, and the Chiefs of Bureaus and Offices function under the direction and supervision of the Civilian Executive Assistants, and in those matters are accountable to the Under Secretary.
4. Additional direct responsibility to the Chief of Naval Operations for the readiness and performance of these elements of the Operating Forces of the Navy; and, responsible to the Chief of Naval Operations in his capacity as naval executive for matters assigned by the Secretary of the Navy.

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5. The Chief of Naval Operations plans, forecasts, and determines the requirements of the Operating Forces of the Navy for equipment, material, personnel, and supporting services, and coordinates and directs the efforts of the bureaus and offices (headed by Naval Technical Assistants) as may be necessary to effectuate availability and distribution of these requirements.

6. For purposes of military command.

7. For purposes of management control.

8. Handles affairs of District Commandants in the Office of the Chief of Naval Operations and carries out administrative duties for the Chief of Naval Operations.
ICE-BOUND—Navy icebreaker, USS Glacier (AGB 4) breaks up the frozen sea around Danish Kista Dan, carrying members of Fuchs’ Antarctic expedition.

Life-Saving Cucumbers

Studies currently being conducted under the sponsorship of the Office of Naval Research may lead to increased safety for skin divers, survivors of shipwrecks and aircraft accidents, rescue parties and marine salvage workers.

Basically the studies involve investigation of a toxin called holothurin, which may help protect swimmers against carnivorous and noxious marine animals. Holothurin is secreted by creatures known as “sea cucumbers,” and protects these animals from their enemies.

In addition to exploring possible uses of holothurin in repelling dangerous marine animals, researchers hope to examine the apparent relationship of the sea cucumber to the poisonous sea urchin. Breakdown of the chemical composition of poisons produced by these creatures could pave the way for the development of antidotes.

Other facets of the studies have shown that holothurin also possesses powerful nerve-blocking properties, and increases the clotting time of blood. It may lead to possible medical applications of the substance.

Shipbuilding in Fiscal ’61

The Navy’s fiscal 1961 shipbuilding plans add up to 42 new ships, ranging from a conventionally powered Forrestal class attack aircraft carrier to two large harbor tugs. In addition, 14 aged destroyers and an auxiliary submarine will have some years added to their seagoing lives through the FRAM (Fleet Rehabilitation and Modernization) program.

A few of the new ships will represent radically new and different concepts and designs, while the more conventional types will feature the latest design and much new equipment, plus added firepower.

Slated to begin building during the ’61 program are: an attack aircraft carrier (CVA); an amphibious transport dock (LPD); a fast combat support ship (AOE); a combat store ship (AFS); an oceanographic research ship (ACOR); an escort research ship (AG); a nuclear-powered attack submarine (SSN); an auxiliary deep-diving submarine (AGCSS); five nuclear-powered Fleet ballistic missile submarines (SSBN); three guided missile frigates (DLC); two guided missile destroyers (DDG); two escort vessels (DE); two large harbor tugs (YTB); and 20 landing craft, mechanized (LCM 6).

Two new developments are the fast combat support ship (AOE) and combat store ship (AFS), both of which will combine functions now being performed by several types of ships.

The AOE, for example, will be part AO, part AE, and part AK. Carrying petroleum products, ammunition and provisions, and able to off-load those items rapidly from both sides of the ship simultaneously, she’s being designed to operate as a part of today’s high-speed task forces.

The AFS will combine the replenishment facilities of the present AKA, AKB and AVS. She will carry the same provisions in lesser quantities than the ships she replaces. She will also feature cargo-carrying helicopters to help speed up movement of supplies.

As for the other planned additions to the Fleet, some of the outstanding features will include the following:
DDGs will carry a Tartar missile battery, long range sonar, an ASW rocket launcher, (ASROC), and two ASW torpedo launchers. This array of firepower is being designed to make these ships equally effective against air, submarine and surface threats.

The LPD is being built to replace the attack transport and cargo ship. It will carry six helicopters, one large utility landing craft, and three personnel landing craft. It will be possible to launch both the helicopters and landing craft either while the ship is underway or stopped.

The DE's are being loaded up to provide increased ASW capabilities. They will employ bow-mounted long range sonar, drone anti-submarine helicopters, (DASH), ASROC, and ASW torpedo launchers.

The DLGs' size, speed, endurance and advanced sea-keeping qualities will enable them to operate effectively under even the most extreme weather conditions. They too will be armed with Terrier, ASROC, and other ASW weapons.

Two of the new ships will be experimental models. The AGSS will be a deep-diving submarine which will be used in the development of hull structures, sonar equipment and weapon systems for combatant submarines of the future. It will also serve as a deep weapon impact target for ASW forces.

The AG will be an experimental hull of advanced hydro-dynamic and propulsion design. Experiments with her are expected to provide data which will help determine ultimate configuration for mounting sonar equipment. She will be equipped with counter rotating propellers mounted in a nacelle, which will isolate propeller noise.

**It's 600 Million Million Miles**

The Navy plans to build a 60-inch reflector telescope of advanced design at the Naval Observatory Station five miles west of Flagstaff, Ariz. It will be used for work in astrophysics and in the study of comets.

Naval Observatory astronomers will be able to determine the distances and motions of stars as faint as the 18th magnitude up to 100 light years, or some 600 million million miles, from the solar system.

Quartz has been selected for the mirror system because of that material's advanced optical stability. The 60-inch mirror will be nearly double the size of any quartz mirror yet manufactured. In addition, a secondary 35-inch quartz mirror will be incorporated in the telescope's design. An improved stellar tracking system will furnish a high degree of dependability and smooth movement, and other new engineering techniques will provide the telescope with a supporting structure with the extreme rigidity required for high precision observations.

A three-story circular building will house the new 'scope. Laboratory space for photographic work and the testing of optics and electronic equipment will be included. It will be located near the station's 40-inch telescope, which is now being used for work in astrophysics and in the study of comets.

In addition to basic research in positional astronomy, the new telescope will enable Observatory scientists to observe deep-space probes and distant artificial satellites. It will also be possible to use it for visual and photographic observations of binary and multiple star systems, photoelectric and spectographic studies of extremely faint objects, and determination of stellar distances.
ASROC missile blasts from launcher aboard USS Norfolk (DL 1) while testing the ASW weapon in Fla. waters.

Amphibious Midshipmen

Five hundred fifty NROTC midshipmen from 31 colleges and universities are back in their classes after spending three weeks late this past summer learning amphibious operations first hand.

Midshipmen receive their amphibious indoctrination between their sophomore and junior years. They reported to the Pacific Fleet Amphibious Training Command at Coronado, Calif., soon after completing a three-week Naval Aviation Indoc- trination Course at NAS Corpus Christi, Tex.

This year's training schedule included both theoretical amphibious indoctrination and practical demonstrations ashore and afloat. At Coronado the midshipmen were organized into one battalion of six companies, with Marine Corps officers assigned as company commanders.

During their first week of training the midshipmen witnessed a full scale amphibious assault at Silver Strand. Navy frogmen from Underwater Demolition Team 11 and Marine reconnaissance personnel paved the way, then a battalion landing team of some 1200 Marines from Camp Pendleton swarmed ashore from ships and units of Amphibious Squadron Five.

In just two hours, and nine separate assault waves, aggressor forces were captured, and the beachhead secured.

Later each midshipman received individual instruction in the various arts of amphibious warfare, including boat handling, water safety, beach intelligence, wet and dry net handling, and the planning and execution of an amphibious operation.

The second week of the course saw the midshipmen at sea in the helicopter assault ship USS Princeton (LPH 5). Aboard Princeton they were checked out in a relatively new amphibious technique—vertical envelopment. Combat-equipped and divided into "Heli-teams," each with a Marine Corps instructor, they were whisked far behind enemy lines to try out the vertical envelopment (or, attack from above and behind) system for themselves.

Then it was back to sea again, as, embarked in Amphibious Force ships, the midshipmen had front-row seats during a shore-bombardment exercise conducted by destroyers near San Clemente Island.

For their final exam the third week the midshipmen hit the beach at Camp Pendleton. Plenty of realism was provided by controlled demolition charges exploded on the beach all around them, while jets from MCAS El Toro made bombing and strafing runs on enemy defense positions.

Training over, the fledgling officers left for their homes and a few days' leave. They reported to their respective units in early September.

Tug Rescues Sailing Ship

The Fleet tug uss Paiute (ATF 159) bucked high seas and 40-mile winds while rescuing a crippled sailing vessel, Annyah, in the storm-tossed Atlantic some 35 miles southeast of Rota, Spain.

Paiute was underway to Lisbon, Portugal, for a two-day visit before returning to her home port, Mayport, Fla., when she received word that Annyah was wallowing helplessly, four sails and some standing rigging torn away, and back stays broken.

An aircraft from the U.S. Naval Base at Rota originally sighted the distressed three-masted schooner, and directed Paiute to her. Another plane, a P2V Neptune attached to Patrol Squadron Five from Jacksonville, Fla., temporarily based at Rota took over surveillance of Annyah until Paiute took her in tow.

SUB HUNTER—ASROC missile, new ASW weapon, is loaded in launcher. After firing, homing torpedo separates from propelling rocket and is lowered into sea by parachute.

Latest Guided Missile Frigate

One of the newest members of the Fleet is uss Coontz, a guided missile frigate that recently joined the Fleet at the Puget Sound Naval Shipyard, Bremerton, Washington.

Coontz (DLG 9) has two distinctons. It is the first DLG built on the West Coast. And it is the prototype ship for its class of 10 DLGs. uss Farragut (DLG 6) was, however, the first ship of the Coontz class to be launched.

Featuring the all-weather, surface-to-air guided missile Terrier as its main armament, Coontz also has two 5-inch, rapid-fire single mounts forward, two 3-inch twin mounts port and starboard, and the latest types of ASW and fire control gear.

In size, Coontz is in the destroyer- leader or large frigate range. With a 512-foot length and 50-foot beam, the 5500-ton ship can develop 85,000 horsepower, giving her a speed in excess of 30 knots.

A notable innovation in the construction of Coontz and her sister DLGs is the large amount of aluminum used in the ships' superstructures—an estimated 560,000 pounds for each ship.
Sub Gets FRAM Treatment

The guppy submarine **uss Tiru (SS 418)** has been FRAMed, and old-time crew members would hardly recognize her now. They'd enjoy seeing aboard her though—she's got more elbow-room.

**Tiru,** first submarine to get the FRAM (Fleet Rehabilitation and Modernization) treatment, underwent quite a transformation at the Pearl Harbor Naval Shipyard. Shipyard workers cut her completely in two amidships, the forward section was jacked ahead, and a new 24-foot section was added to the pressure hull. The conning tower was extended by five feet to provide for an attack center. All operating machinery was overhauled.

Lengthening **Tiru** has provided the added space needed to house the modern equipment (advanced electronic and communications systems) and new weapons available to today's submarines. There's more habitability (living space) too, and greatly increased fuel capacity. In addition, when equipment was placed back aboard after completion of the overhaul, it was done according to the "human engineering" concept—in other words, it was so located to be most easily accessible to the operators who use it.

Much of **Tiru's** changed appearance is a result of her brand new, "non-corrodible" laminated glass plastic fairwater and superstructure. Its plastic construction combats the corrosion of the inaccessible superstructure.

Shipyard designers took advantage of increased stability afforded by the added 12 feet of hull to put the bridge high in the fairwater. They built a trunk leading to it from the conning tower, and raised the main induction, giving **Tiru** greatly increased sea-keeping qualities.

Since leaving the shipyard, **Tiru** has been testing and evaluating its increased operating capabilities. Eventually the Navy hopes to give some 23 old-style submarines this "new look."

The interior of **Tiru** takes on an appearance as modern as the exterior. The decks have been covered with various patterns of vinyl tile similar to that found in recreation rooms of modern homes. The bulkheads have been given the new look by use of varied color schemes to enhance living. Unlike other ships in the guppy class, **Tiru** has been provided with a separate Chiefs' Quarters, steering station in Control Room instead of Conning Tower, new and improved Radio and Sonar Room, additional repair parts stowage and new electronics and fire control system equalled by no other submarine except the latest new submarines under construction.

When 10 students from the Brazilian Navy arrived for damage control training at Newport's Fleet Training Center without an interpreter, the Officer-in-Charge of the Damage Control School did some improvising.

After a search of the Naval Base failed to turn up a Portuguese interpreter, LT Ralph Motika called on the wife of one of his damage control instructors to fill the breach, and Mrs. Rose Selley, wife of John S. Selley, DC1, assisted her husband in teaching the Brazilian student class.

Mrs. Selley sat in on the lectures on basic damage control given by her husband, translating to Portuguese the instructions which her husband gives in English.

Mrs. Selley has found her work most interesting, and at times exasperating. Although she has had no formal schooling in Portuguese, her parents were from Portugal and she learned the language at home. "The Brazilians have a somewhat different dialect," she said, "and it caused confusion at times, but the boys seem to understand me very well."

To LT Motika, the progress made by the Brazilian students has been highly satisfying. "The sailors have shown an amazing comprehension of the subject matter, despite the fact that they haven't had much previous formal training in our method of damage control," he said. "Mrs. Selley has done a wonderful job."

The students felt the same way. They were eager and attentive in class, and paid close attention.

After two weeks of damage control training, the Brazilian sailors joined their new ships in Boston. The ships, recently turned over to the Brazilian Navy by the U.S., are former **uss Cardinal** (MSCO 4) and **Egret** (MSCO 46).
TODAY'S NAVY

TREASURE SHIP—USS Okanogan loads Thai art. Rt.: Bust given close look.

Here's a New Style “Treasure Ship”

A PhibPac attack transport is getting to be known as the Navy’s "treasure ship." uss Okanogan (APA 220) has returned to the U.S. with national art treasures from Thailand and from Viet-Nam. Last year this same ship had delivered several million dollars' worth of Korean art treasures to Hawaii.

Putting into Long Beach (Calif.), her home port, after six months in the Far East, Okanogan had nearly 800 art objects in her holds. The monetary value of the exhibit is impossible to determine, for the art items represent all types and periods of Thai (Siamese) and Viet-Namese art, and few of the objects could be replaced. One estimate for the Thai exhibit: $40 million.

The first art pick-up was made at Bangkok, Thailand. Taken aboard were bronze and stone Buddhas, ceramics, paintings, wood carvings, gold and jewelry, furniture, ceremonial objects and other items of artistic significance.

Notes on Australian Visit

It's always nice to go visiting and when you're made to feel at home, it is even more enjoyable. Using these standards, some 4000 officers and enlisted men aboard nine U.S. Navy ships did have an enjoyable 17-day visit in Australia earlier this year.

These men arrived aboard the Terrier-equipped guided missile cruiser uss Canberra (CAG 2); Helena (CA 75), equipped with the Regulus I missile; the nuclear-powered guided missile submarine Halibut, SSG (N) 587; escort destroyers Jenkins (DDE 447), Taylor (DDE 468), O'Bannon (DDE 450), and Walker (DDE 517); the amphibious force flagship Eldorado (AGC 11); and the Fleet oiler Hassayampa (AO 145).

Our friends down under were able to see the U.S. Navy's most recent developments in modern seaborne weapons. uss Halibut was the first nuclear-powered ship to visit Australia. Displaying its Regulus I, the 350-foot submarine visited Sydney and Melbourne.

The Australians, our partners in SEATO (Southeast Asia Treaty Organization) and ANZUS (Mutli-lateral treaty between Australia, New Zealand, and United States) treaties, also witnessed their first performance of the Terrier missile. While most of nine visiting ships held guest cruises, the guided missile cruiser Canberra conducted off-shore maneuvers for its guests by launching and destroying drone targets with the Terrier. Canberra was an appropriate choice to visit this country, since it is the only U.S. warship named after a foreign city, the capital of Australia.

During the celebrations, officers and men on the visiting U.S. ships had plenty of liberty, but still took time to donate blood to local hospitals and to join the Australian ground forces on bivouac.

Similarly, thousands of Australians familiarized themselves with the U.S. Navy and Navymen as they toured and inspected the nine ships visiting their country. And then they swamped their guests with invitations to tour their cities and visit their homes.

Helena's commanding officer, Captain D. L. Kaufman, said that every man on his ship was invited into the home of some Australian family.

Although busy with parades, ban-
queats, sight-seeing tours, or appearing on local television shows, some crew members found time to go kangaroo and boar hunting. Others played baseball, basketball and golf with Australian naval and civilian teams.

**Busy Year for Canberra**

When the guided missile cruiser **uss Canberra (CAG 2)** joined the Sixth Fleet in the Mediterranean recently, it was just about a year to the day since she had ended her last deployment there. It had been a busy, busy year, during which she operated with every U.S. Fleet, and became the first guided missile cruiser to circle the globe.

After returning to the East Coast from the Med last year, **Canberra** spent the fall of 1959 operating with the Second Fleet. She then entered Norfolk Naval Shipyard for overhaul and refitting before leaving on her world cruise early in March.

Upon transitting the Panama Canal, **Canberra** became the first guided missile cruiser to enter the Pacific, where she operated for a stretch with the First Fleet off the California coast.

Next it was off for the Southwest Pacific. Crossing the equator, some 1100 of **Canberra**'s crew were initiated into the Ancient Order of the Deep. Later, she fired a Terrier missile across the International Date Line from west to east—"into yester-
day."

In the Coral Sea, **Canberra's** crew held a memorial service in honor of the men who gave their lives during the World War II battle there. Upon reaching Australia the ship also participated in that country's annual victory celebration of the Coral Sea battle.

In all **Canberra** steamed some 32,000 miles and entertained more than 45,000 guests in 14 ports. One of these was Moji, Japan, sister city of **Canberra**'s home port, Norfolk.

While in the Far East, **Canberra** operated with the Seventh Fleet. Her last port of call before leaving the Pacific was Cochin, India. She reentered the Med via the Suez.

**Navy Judo Expert**

"Airman Wrobel, you see, is a judo expert, and he likes to spend a good share of his off-duty hours teaching that potent art of self-defense to fellow crew members.

How did Wrobel get that way—Black Belt holder, 13th step, just four rungs from the top in judo hierarchy—at the age of 23? Well, it all started when he was nine.

It's the age-old one of the small boy or the 97-pound weakling who gets beat up by the neighborhood bully, and vows then and there that he'll never be pushed around again.

In Wrobel's case, it started, as we've said, when he was nine—when the South Bend, Ind., youth got worked over by a tough bunch from South Chicago. It was then Wrobel decided—I'm going to learn judo.

In 1950, when he was 13, Wrobel got a big break. He was one of a group of eight youngsters selected by a wealthy Chicago judo enthusiast for a trip to Japan, and intensive training at the hands of experts. It was there that he first acquired the Black Belt.

Now a strapping, 200-pound, six-foot, Wrobel is especially interested in three things these days—teaching judo to others; progressing through the final four steps to the highest plane of judo expertise, and learning all there is to know about judo, which is, basically, the application of anatomical knowledge in a person-to-person clash.

One thing's for sure—Don Wrobel doesn't have to worry much about being pushed around any more.

**Fourth Polaris Sub**

The first nuclear-powered submarine to be launched in the south has been commissioned as **uss Robert E. Lee, SSB (N) 601**.

**Robert E. Lee**, the fourth Navy submarine designed to launch the **Polaris** missile, measures 380 feet and has a displacement of 5490 tons on the surface and 6790 tons submerged.

**HANDY CRAFT**—Off duty Judo teacher, D. E. Wrobel, AN, USN, **uss Yorktown (CVS 10)** shows shipmate a few tricks.
The most powerful sub-surface missile launched to date—a 450,000-pound thrust booster motor—has been blasted from an underground site by the Army at the White Sands Missile Range, N.M.

A Nike-Zeus missile test model was sent soaring skyward in the record-shattering blast from a new type underground launching facility.

When this anti-missile missile becomes operational, it may use underground launching sites since they will be less vulnerable to enemy attack.

The lower underground cost is possible as subsurface facilities do not require elaborate barricades and access tunnels necessary for above-ground installations.

Constant subsurface temperatures eliminate extensive air-conditioning and artificial temperature controls. Maintenance would also be simplified because upper sections of the Zeus could be removed and serviced without disturbing the lower sections.

***

The Air Force plans to add more punch to its air defense program by installing new Bomarc-B supersonic interceptor missiles at two Northeastern United States sites.

McGuire AFB, Fort Dix, N.J., and Otis AFB, Fallmouth, Mass., are each slated to get 28 of the new long-range interceptors and their launchers. They will supplement existing air defense facilities at the two bases, which consist of Bomarc-A missiles already operational.

Bomarc-A, launched by liquid-fueled boosters, has a range of more than 200 miles. Bomarc-B, which uses solid-fueled launch-boosters, will travel twice that far.

Both missiles are powered by ramjet engines, are ground-controlled by SAGE direction centers, and have built-in seekers for final interception.

Construction of the new launchers and facilities at both bases will begin as soon as final details of construction are worked out.

***

An 1800-mile expedition of the Greenland Ice Cap, dubbed Project “Lead Dog,” is being conducted by the Army as part of an over-all program to develop new techniques for transportation support operations in difficult environments.

A 30-man task force is attempting to establish two safe overland routes from the crest of the ice cap to the ice-free coast of Northeast Greenland, moving both by air and on the surface.

Project Lead Dog will cross the ice cap from Camp Tuto, near Thule, to Crown Prince Christian Land, retrace a portion of the route and then proceed straight north to Peary Land.

In both Crown Prince Christian Land and Peary Land, the party will use helicopters to attempt to locate a route from the ice sheet to the ice-free land area and then to the coast. Two weasels, one of which is equipped with an electronic crevasse detector, will explore any feasible routes to the sea which are indicated by air reconnaissance.

Lead Dog’s equipment consists of six large tractors, 18 sleds, two 10-ton trailers, six wanningans (portable snow shelters), three weasels with one-ton sleds, seven rolling liquid transporters and two helicopters.

In addition to the trail-blazing activities, scientists accompanying the Army task force will make meteorological, glacial and other scientific observations.

***

An advanced model of the Titan ICBM, capable of carrying a heavier load and with a greatly reduced reaction time, is being developed by the Air Force.

Known as the Titan II, this improved weapon is launched directly from its underground silo, only a few seconds after the order to fire is given. This Titan is fueled with storable liquid propellants. Materials now in use, such as liquid oxygen, must be kept in special containers at minus 300 degrees Fahrenheit to remain in a liquid state. Storable liquids will permit the new Titan to be fueled and kept in a ready-firing condition for long periods of time at ordinary temperatures.

In addition, Titan II will be directed to its target by a self-contained, all-inertial guidance system. This system cannot be jammed by any known method.

Titan II in the operational version will be SM-68B.
The present Titan missile, when it becomes operational next year, will be designated the SM-68.

The 98-foot Titan is in advanced flight testing at Cape Canaveral, and has proven its intercontinental range capabilities with five 5000-mile flights this year.

A new radar photography system is an important step in providing improved combat intelligence for a field army.

Enemy territory can now be photographed by planes flying behind our own lines with a new all-weather, day-and-night radar photography system that has been developed for the Army: The system is for tactical, battlefield use.

This system, which can even out-perform the human eye, is capable of separating large and small objects at great distances.

Distant objects, such as a long row of telephone poles merge when seen by the human eye. The eye's physical limitations do not allow a separation of distant objects. The Army's newly developed system overcomes both this human problem and that of previous radars by seeing closely spaced objects and ground differences clearly, whether on the horizon or nearby.

This versatile radar-photo system can probe enemy territory without flying over the hostile areas. With its side-looking operation, scanning enemy territory at right angles to the aircraft's direction of flight, it produces map-like photos for intelligence studies. This "sideways" gathering of information keeps the aircraft inside of friendly lines, where maximum protection can be provided.

This system, officially designated the AN/UPD-1, using a small antenna, gathers fine radar-map-detail by "synthesizing" side-looking antennas many times longer than the aircraft itself.

The complete airborne radar-photo system includes the airborne radar equipment in an Army L-23 aircraft and the conversion and processing equipment in a mobile ground van.

Strips of photographic maps which show the distant areas clearly without distortion due to distance can be produced in the mobile van.

LARGE AND FAST—The B-70 bomber of the Air Force is designed to fly at three times the speed of sound.

A contract has been awarded by the Air Force for a precision trajectory measurement system for the Atlantic Missile Range.

Known as MISTRAM, the missile trajectory measurement system will be used to determine accuracy and guidance performance of missiles fired down the Atlantic Missile Range. The contract calls for the contracting organization to analyze, design, develop, produce, install, and check out the new system.

Communications between spaceship in the future may be carried on by a beam of light rather than the conventional radio.

This light beam communications system is currently under study by the Wright Air Development Division of the Air Research and Development Command.

It is believed that light beam communications will be cheaper than present systems and will feature simpler and lighter equipment for certain specialized applications.

Basically, here's how this future communications system will work:

Special equipment will collect sun rays, run them through a modulator, and direct the resulting light wave in a controlled beam to a receiver.

There the wave will be put through a detector, changed into an electrical impulse and be amplified to a speaker. Depending upon the type of equipment used, either a dot-dash (digital) message or voice transmission can be sent.

A shutter speed of one five-billionth of a second is being used on a camera by Army scientists to find out what happens to explosive materials during detonation.

An argon gas bomb triggered simultaneously with the explosion being photographed serves as a flash gun for the high-speed camera.

Located at the Army's Picatinny Arsenal, Dover, N. J., the instrument, known as the Kerr camera, has made still photographs of explosion shock waves traveling as fast as five miles a second (18,000 miles an hour).

This new high-speed camera is four times faster than any other camera known to be in use at the present time.
**THE WORD**

Frank, Authentic Advance Information
On Policy – Straight From Headquarters

- **REENLISTING AFTER 20** — Navymen who now become eligible for transfer to the Fleet Reserve, but who want to reenlist, are no longer restricted by the selective retention plan established by the Chief of Naval Personnel in 1958.

Under the program, which was instituted to permit the orderly advancement of junior petty officers, senior personnel in certain ratings were retained only if they received specific approval of BuPers.

As the advancement opportunities improved for junior POs, more and more ratings were dropped from the restricted list.

Now BuPers Inst. 1133.12A, which established the plan, has been canceled. If you want to do 30 years, you will not be hampered by being in a crowded rating.

If, however, the Chief of Naval Personnel has denied you permission to remain on active duty, or if BuPers Inst. 1133.12A applied to you before it was canceled and you failed to request retention, you will not be allowed to remain after your obligated service ends.

Earlier information was contained in BuPers Notice 1133 of 4 Jun 1960.

- **19 AND SIX IS NOT 20**—If you want to get paid for 20 years' service when you transfer to the Fleet Reserve, it looks as though you'll have to do every day of it. Nineteen years and six months probably will not do the trick according to a recent Comptroller General decision.

SecNav Notice 1830 of 23 Aug 1960 says this decision may make it illegal to credit a fractional year of six months or more as a full year for basic pay purposes when computing retainer pay.

This does not mean that you will not be able to use constructive service or that you must do a full 20 years to transfer to the Fleet Reserve.

If you want to stay aboard for the extra few months, the Navy will let you. If you already have your authorization to transfer to the Fleet Reserve, your commanding officer can let you remain for the extra time. On the other hand, if you have applied for transfer to the Fleet Reserve, but have not received your authorization, you will be warned of the possible loss of pay before you are allowed to transfer.

A final ruling will be made later.

- **FIRE CONTROL TECHNICIAN** — In a change approved by the Secretary of the Navy, the structure of the Fire Control Technician (FT) rating has undergone considerable revision.

In the E-7 to E-9 grades FT is now a general rating.

The general service rating of FT in pay grades E-4 to E-6 has been replaced by two separate service ratings: FTM (Missile Fire Control) and FTG (Gun Fire Control). The FTG service rating now embodies all maintenance and repair of gun fire control systems; while for those PTGs designated "SS" it embodies submarine fire control equipment. The scope of the FTM rating now includes missile fire control systems and equipment.

Maintenance and repair of surface ship underwater fire control systems is no longer in the scope of the FT rating. It has been switched over to the Sonarman (SO) rating.

Six emergency service ratings have been discontinued. They are: FTA (Automatic Directors), FTG (Missile Guidance Systems), FTM (Manually Controlled Directors), FTU (Underwater Systems), FTE (Electro-mechanical), and FTL (Integrated Systems).

- **NAVY TRAVEL INSTRUCTIONS** — Answers to questions about dislocation allowance and trailer allowances can now be found in U.S. Navy Travel Instructions. Although the information is basically the same as that already published by individual Instructions, it is now included in two new chapters (9 and 10) in the revised travel instructions.

According to revised Article 7008-(2), it is necessary now to receive a negative reply to a request for concurrent travel overseas before dependents may complete their travel to an alternate location in the U.S.

Also included in Change 3 to U.S. Navy Travel Instructions is a new Article 7060, which clarifies entitlement to travel allowance for dependents when a modification of PCS (permanent change-of-station) orders are received en route.

- **SUBMARINE OFFICERS NEEDED**— The Submarine Force will have 84 more potential submarine officers come 26 Sep 1960. On that day, 84 line ensigns and lieutenants junior

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TRICK OR TREAT—Nine other Navymen are practically begging to see this copy of ALL HANDS—so pass this copy on.
grade will begin submarine school at New London, Conn.

These officers will remain in the school for about six months, after which they will most likely be assigned to a submarine operating out of New London, Norfolk, Charleston, Key West, San Diego, or Honolulu. A few may go on to nuclear power school.

With recent successes of the Polaris missile and with an increasing number of submarines now being constructed, even more submarine officers will be needed in the future.

To fulfill this need, classes begin at New London every three months. The Navy is looking for volunteers to attend the classes convening in mid-1961 and later.

Send your letters of application as early as possible to the Chief of Naval Personnel, via your CO.

Officials requesting submarine school must be physically qualified for submarine duty as established in the Manual for the Medical Department, Article 15-291.

Earlier information can be found in BuPers Inst. 1520.6H, and in BuPers Notice 1520 of 21 Jul 1960.

- E-4 AND E-5 PRO-PAY EXAMS—If you're a second or third class petty officer, or a Navy recruiter (all pay grades,) and have been recommended for proficiency pay, circle Tuesday, 1 November on your calendar—that's the date you'll take the examination which will determine whether you will begin drawing $30 per month extra next January 16th.

Since 70 per cent of all pro-pay authorized goes to POs 2 and 3 in the critical ratings; 15 per cent to those in pay grades E-6 and E-7 in the critical ratings, and the remaining 15 per cent to recruiters and those of all pay grades in the "outstanding effectiveness," or non-critical ratings, you're in a very good position to start making the extra money—provided you can pass the test. That doesn't mean that everybody passing the test will make pro-pay, but in most ratings, your chances are much better than fair.

On the accompanying chart ratings with pay grades marked with an "x" are eligible to compete for pro-pay in each pay grade.

<table>
<thead>
<tr>
<th>Rating</th>
<th>E-4</th>
<th>E-5</th>
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<tbody>
<tr>
<td>AB</td>
<td></td>
<td>x</td>
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<tr>
<td>ABA, ABG, ABU</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ACR</td>
<td>x</td>
<td>x</td>
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<tr>
<td>ACT</td>
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Navy Inaugurates STAR Program for First-Cruise Career Men

THE NAVY HAS COME THROUGH with a new career program which will offer to career-minded men very substantial benefits.

To be known as the STAR (Selective Training And Retention) Program, it enables selected first-cruise enlisted personnel with at least one year of active duty to be discharged for immediate reenlistment in return for:

- Guaranteed assignment to Class A school of choice.
- Automatic advancement from pay grade E-3 to PO3 for those who graduate from Class A school in upper half of class.
- Guaranteed assignment to Class B school for PO3s and PO2s.
- Automatic advancement to PO2 for PO3s who graduate from Class B school.
- Reenlistment bonus.

Periods of enlistment are either for four or six years. The years of the second enlistment, when added to those of the first, must total seven or more years.

The STAR Program was originated because of the degree of training needed to service and operate many of the Navy's new "weapons systems"—a degree of training so high that it has become over-costly to train non-careerists in those weapons systems. The training has, in many cases, been taking up more than half of a normal first enlistment.

On the Navy's part, the STAR Program will help assure that those who avail themselves of special training programs have enough obligated service to provide an adequate return for the Navy's investment in time and training. On the part of the STAR personnel there are, of course, the various career benefits.

"Career designated" is a term that applies to those who take part in the program. Eligible for the program are qualified personnel, both male and female, and both USN and active duty USNR, with at least one year's active naval service and less than four years' service. Taking a Convenience-of-Government dis-
If you graduate in the lower half of your class, you will be designated as a striker for the rating in which trained.

A special provision exists for identified strikers in one of the previously listed 19 ratings who enter the STAR Program. If you have already graduated in the upper half of your Class A school class and have at least six months in grade you may, upon your CO's recommendation, be advanced to PO3 without further examination, effective on your reenlisting and acquiring "career status.

If you are advanced to PO3 while waiting to enter Class A School (which would then cause Class A level training to be inappropriate) you may request assignment to the Class B or C school appropriate to your rating. You will be assigned on an "as-seats-are-available basis," with assignment normally made within 12 months of date of request.

**Assignment to Class B School — Eligible STAR Program PO3s and PO2s are guaranteed assignment to one of the schools listed in the "Catalog of U.S. NavTraAct and Courses" (NavPers 91769D) or "CNATECHTRA Bulletin of Schools and Courses." The guarantee here is to a school of choice, provided it would be in your normal path of advancement.

Assignments are on an "as-seats-are-available basis." It can normally be expected, however, that a guaranteed transfer to school will occur within 12 months of date of request. ("Class A level school" as used here also includes attending a Class P school, when the P school is required before going to the A school.)

Although the school entrance requirements laid down in the above-mentioned catalog and bulletin remain as established, a waiver of 10 points on combined test score requirements or five points on a separate single score requirement may be granted by the CO.

If you desire Class A School training and do not have sufficient test scores, including waivers where applicable, to qualify you for this training and it is considered that your present scores do not reflect your true potential, a request for a retest may be submitted.

Requests for changes in rate or rating (apart from those authorized by Article C-7213, BuPers Manual) may be requested from the Chief of Naval Personnel. This action should be taken and completed before you enter the STAR Program, since approval of changes in rating (GM3 to RM3, for example), rate (that is, SN to FN) or striker designation (for example, YNSN to RDSN) cannot be guaranteed.

**Automatic Advancement to PO3**

(for those who graduate from Class A School in upper half of class), those in the STAR program in pay grade E-3 will be advanced to PO3 upon graduation, provided:

- You graduate in the upper half of class.
- You have been recommended by your CO.
- You have completed six months in pay grade E-3.
- If otherwise qualified but do not have the six months in pay grade, you will have an entry made in your service record authorizing your advancement when you complete your six months in grade.

**HOW DID IT START**

**Ships Back in Dad's Day**

When the recruit of today studies his Bluejackets' Manual and comes to the chapter showing the types of Navy ships he sees quite a variety there. Upwards of 175 ship types are listed, divided into about a dozen main categories.

Quite a contrast to what his father or grandfather might have learned back in '17.

The next question reads: "How are they rated?"

Answer: "In the first rate are men-of-war of 8000 tons and above. In the second rate are men-of-war of 4000 to 8000 tons, and converted and auxiliary vessels of 6000 tons and above, except colliers and other vessels constructed or equipped for special purposes."

"Third rate ships are men-of-war 1000 to 4000 tons, converted and auxiliary vessels 1000 to 6000 tons, colliers, refrigerating ships, distilling ships, tank steamers, repair ships, hospital ships, and other vessels constructed or equipped for special purposes of 4000 tons and above."

"In the fourth rate are all other rated vessels."

On the subject of whether a ship was rated or not rated, there was included this rather unusual statement, which points up how times have changed even since World War I. "Note—Torpedo boats, torpedo-boat destroyers, submarines, and auxiliary vessels are not rated."

**Cruisers, first class; cruisers, second class; cruisers, third class. Gun boats, monitors, torpedo-boat destroyers, torpedo-boats, submarines, and auxiliaries."**
To make sure these men receive the necessary training before they go into the Fleet for duty, they are being issued orders that will carry them from recruit training, to four to eight months' temporary duty, and then on to school. The orders will include the name of the school, its location, and the class convening date.

By the end of the four-month period, it is anticipated there will be a backlog of some 11,000 class A students. These men will supplement the regular input from recruit training during the remainder of the year.

About one-fifth of these men will be temporarily assigned to the Atlantic Fleet, another one-fifth to the Pacific Fleet, and the remaining 60 per cent will be assigned to commands within the Continental United States.

Although this will insure that class A schools have most seats full, eligible Fleet personnel who did not get a school when they left recruit training are being permitted to request school under Plan TIGER (Plan To Improve General Employment of Recruits). Complete information on this plan is listed in BuPers Inst. 1510.86A.

Details on how receiving activities are to handle the non-rated men being assigned through orders to class A schools can be found in BuPers Notice 1510 of 22 Jul 1960.

**Latest List of Motion Pictures Scheduled for Distribution To Ships and Overseas Bases**

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn I, N.Y. is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen process by (WS). Distribution of these motion pictures to the Fleet began in August.

**Killers of Kilimanjaro** (1559) (WS): Melodrama; Robert Taylor, Anthony Newley.

**Plunderers of Painted Flats** (1560) (WS): Western; Corinne Calvet, John Carroll.

**Look for the Silver Lining** (1561): Musical; June Havoc, Gordon MacRae.

**When Comedy Was King** (1562): Comedy; Wallace Beery, Charlie Chaplin.

**The Stranglers of Bombay** (1563) (WS): Melodrama; Guy Kofle, Alain Cuthbertson.

**Raymie** (1564): Melodrama; David Ladd, Julie Adams.

**The Woman in White** (1565): Mystery; Eleanor Parker, Sydney Greenstreet.

**Tall Story** (1566): Comedy; Anthony Perkins, Jane Fonda.

**The Unforgiven** (1567) (C)
Two Correspondence Courses Are Added, Five Discontinued

Two new Enlisted Correspondence Courses are now available from the Navy Correspondence Course Center at Scotia, N.Y. Five other courses have been discontinued.

Enlisted correspondence courses will be administered (with some exceptions) by your local command instead of by the Correspondence Course Center.

If you are on active duty, your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command for administration.

Personnel on inactive duty will have courses administered by the Center. The new courses are:

<table>
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<tr>
<th>Course</th>
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<tr>
<td>Electronics Technician 3</td>
<td>91373-2</td>
</tr>
<tr>
<td>Construction Mechanic 3</td>
<td>91579-1</td>
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</tbody>
</table>

(Both these courses may be taken for repeat Naval Reserve Credit.)

The Enlisted Correspondence Courses for Mechanic 3 (NavPers 91578-B), Mechanic 2 (NavPers 91579-D), Electronics Technicians 3 (NavPers 91373-1B), Mathematics, Vol. II (NavPers 91220), and Manual for Buglers (NavPers 91257) have been discontinued.

If You Can Meet the Quals NavCad Program Offers You a Big Opportunity

If you are an enlisted man who would like to be a Navy officer in less than two years, and if you are interested in aviation, the Naval Cadet program might be right up your alley. Look over the following qualifications. You may be a potential naval aviator.

To be eligible, you must:
- Be an enlisted man of the Regular Navy or Naval Reserve on active duty for at least a year before submitting an application.
- Be a citizen of the United States.
- Have 60 semester hours (or 90 quarter hours) of unduplicated college work at an accredited college or university; or have 30 semester hours (or 45 quarter hours) of unduplicated college work at an accredited college or university, plus a minimum combined CBT/ARI of 120 and MECH score of 58. Successful completion of the USAFI General Education Development Test, one-year college level, will be accepted in lieu of the 30 semester or 45 quarter hours of unduplicated college work.
- Be at least 18 and under 25 years of age when you submit your application.
- Agree to remain on active duty for three and one-half years after you finish flight training.
- Be unmarried and agree to remain unmarried until commissioned.
- Be physically qualified and aeronautically adapted for the actual control of aircraft in accordance with Chapter 15 of the Manual of the Medical Department. (Waivers of age and physical standards will not be granted.)

This program leads to a commission as Ensign in the Naval Reserve. If you think you meet the above qualifications, submit your application to the Chief of Naval Personnel (Pers B0), via your commanding officer. BuPers Inst. 1120.20B gives all the details you should need.

New Editions of Standard Texts Are Now Available

Three standard professional books — Naval Shiphandling, by Captain R. S. Crenshaw, Jr., USNR, Mixter's Primer of Navigation, edited by Captain Donald McClench, USNR (Ret.), and the classic, Knight's Modern Seamanship — have been brought up to date in new editions.

Perhaps the most valuable material added to this second edition of Shiphandling is the new chapter on Rules of the Road. It not only quotes and compares International and Inland Rules, but also gives the professional shiphandler (as well as the amateur) a sound interpretation of the rules.

Other new material includes the handling characteristics of the latest ship types—the giant carriers, the fast destroyer leaders, the nuclear submarines. There is also a new section on minesweepers with special emphasis on the handling of vessels equipped with variable-pitch propellers.

The fourth edition of Mixter's conforms with all recent changes in navigational publications issued by various government agencies. This includes the Nautical Almanac, Air Almanac, Tide Tables, Tidal Current Tables, and Light Lists. The star charts have been revised to conform to the latest list of navigational stars, and the new Star Finder and Identifier (H. 0. 2102-D) is described.

Emphasis is placed on the explanation of the use of radar to avoid collision at sea. Simplified instructions for plotting directly on the radar scope and on the new Radar Plotting Sheet recently issued by the Hydrographic Office are discussed.

New information in the 13th revision of Knight's includes nuclear powered submarines, guided missile submarines, Arctic type ships and icebreakers for Arctic and Antarctic expeditions, latest developments in ship construction, propellers, compasses, steering devices, lifeboats, communications systems, and cargo handling. The latest Rules of the Road are discussed.
DIRECTIVES IN BRIEF
This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instruction, BuPers Notices, and SecNav Instructions 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, NavActs, Instructions and Notices for complete details before taking action.
Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.
No. 19—Announced approval by the President of selection board reports which recommended officers on active duty in the Medical Corps, Supply Corps, Chaplain Corps, Civil Engineer Corps and Dental Corps for temporary promotion to the grade of rear admiral.
No. 20—Announced approval by the President of report of a selection board that recommended Marine Corps officers for temporary promotion to colonel.
No. 21—Authorized the transportation, under certain conditions, of a limited amount of alcoholic liquor aboard ship or aircraft for personal use ashore.
No. 22—Announced approval by the President of the report by a selection board that recommended officers of the Regular Marine Corps and Marine Corps Reserve for temporary promotion to major.
No. 23—Referred to recent decision of the Comptroller General which casts doubt upon the legality of crediting fractional year of six months or more as full year for basic pay purposes in the computation of retainer pay.
No. 24—Directed attention to the need to obtain the maximum number of applications for the Navy Enlisted Scientific Education program.
No. 25—Referred to certain BuShips instructions which specified procedures for charging submarines with oxygen from dockside and tenders.
No. 26—Directed commanding officers to nominate certain outstanding USN CPOs for appointment under the limited duty officer program.
No. 27—Announced approval by the President of the report of a selection board that recommended Regular and Reserve line officers for temporary promotion to the grade of captain.
No. 28—Urged all hands to drive safely, particularly over week-ends.

WAY BACK WHEN
USNA in the Old Days
Although life today at the Naval Academy is anything but a bed of roses, it was quite rugged back in the earliest days. Known then as the Naval School in Annapolis, it was the subject of the following excerpts from reports on the school:
It seems the galley and class rooms were close to one another. So a new arrangement was proposed, with this argument: "By this arrangement the Professors and students would not be annoyed, as they are now, by the noise and fumes from the kitchen during recitation hours." (6 Jul 1846.)
A century ahead of refrigeration as we know it today, the Superintendent recommended that an ice (storage) house be built, because: "The use of ice is so conducive to health, and is so important an element in the treatment of diseases during the summer months that we may justly consider it a constituent of the American Materia Medica." (11 Aug 1849.)
Interior lighting in those days was chiefly by whole oil lamps and candles. It seems that the lighting facilities in the quarters were below par, even by the standards of that time. As for the instructors, they had to pay for the oil and candles "out of their small salaries." The proposal was made that: "a reasonable supply of lights (oil or candles) be allowed by regulation to all quarters within the school grounds" excepting "those of the Superintendent, in consideration of his higher salary."
Just where the mids took a bath or a shower in the very earliest days the records do not say. They could have soaped down in the nearby Severn River in warm weather. At any rate things must have come to a head by 1851, for it was then recommended that a "Bathe-house" be built — "such a building calculated for hot and cold baths, is essential, and necessary to the health and comfort of the acting midshipmen."
But all was not drill, grind and study even then. Another early proposal was that two or three boats be obtained so that the midshipmen "might enjoy the healthful exercises of rowing. These and other facilities of harmless relaxation would doubtless have a tendency to divert the young gentlemen from a practice of mingling too generally in the society and amusements of the Town."

INSTRUCTIONS
No. 1120.29A—Provides eligibility requirements for officer candidate school programs and processing instructions for the submission of applications.
No. 1133.13—Provides information concerning additional career incentives to induce increased numbers of selected, high quality personnel to make the Navy a career.
No. 1306.71—Discusses the policy concerning the use of military personnel in Navy commissary stores.
No. 1510.9B—Announces the current All Hands
rent program of language instruction at the U.S. Naval Intelligence School, Washington, D.C.

No. 1830.1A—Encourages the timely submission of requests for transfer to the Fleet Reserve, and discusses the conditions under which transfer may be deferred.

No. 5101.3—Announced the availability of the traffic safety film "Death on the Highway (MC 9463)" in naval training aids sections and libraries and naval aviation film libraries and sub-libraries.

No. 5390.1—Clarifies the relationship between the naval leadership program and the protection of moral standards and character education program and prescribes action to be taken.

**Notices**

No. 1520 (21 July)—Announced the selection of officers for the submarine school class which convened in September at the Submarine School, New London, Conn., and announced, by dates of rank, those lieutenants (junior grade) and ensigns who are eligible to apply for the January 1961 and April 1961 classes.

No. 7312 (29 July)—Revised instructions for the application of accounting data to permanent change of station orders and related authorization and payment documents when costs are chargeable to the appropriation "Military Personnel, Navy."

No. 1120 (1 August)—Outlined the procedures for the submission of applications from USN temporary warrant officers who desire permanent appointment to warrant officer (W-1 through W-4).

No. 1418 (11 August)—Announced the schedule for proficiency pay examinations for pay grades E-4 and E-5 and all pay grades for recruiters to be conducted in November.

No. 1140 (19 August)—Announced the selection of personnel recommended for appointment to the grade of ensign, Medical Service Corps, USN.

No. 1110 (24 August)—Provided information relative to the selection of enlisted personnel on active duty for appointment as midshipmen in the NROTC program for the class entering school in the fall of 1961.

No. 1530 (24 August)—Announced the selection of personnel for assignment to the Naval Preparatory School, Bainbridge, Md., as candidates for appointment to USNA.

No. 1430 (31 August)—Provided information regarding the future advancements in the steward rating.

### $50,000 for Scholarships Given in Memory of Navyman

A scholarship fund has been established in honor of Commander Anson A. Bigelow, USN, who served in World Wars I and II. The fund is expected to provide about $2000 yearly for students undertaking graduate studies and residing in Florida's Palm Beach County. Preference in the scholarships will go to former Navymen, Marines, or Coast Guardsmen, or to someone whose family is associated with one of those services.

The annual scholarship will be administered by a veterans' organization in Palm Springs, Fla. The fund will be financed by interest gained on a $50,000 gift presented by the commander's widow, Mrs. Josephine W. Bigelow. It was Mrs. Bigelow's wish that preference be given candidates in the above categories.

CDR Bigelow entered the U.S. Naval Academy when he was only 16 years of age—one of the youngest men ever to attend the academy.

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**(USS Rankin (AKA 103) has the 'Smart Ship' Habit)**

USS Rankin (AKA 103) is now the only Atlantic Fleet ship entitled to display a Gold Battle Efficiency "E." Rankin earned this unprecedented honor when she won the Battle Efficiency Award for the fifth consecutive year as the outstanding ship in her squadron. She is the first ship of the Atlantic Fleet Amphibious Force ever to receive this award and, so far as she knows, she's the first ship in the entire Atlantic Fleet to be so honored.

In the past five years, Rankin has won every type of award it's possible for an amphibious ship to get. (See "Is There a Formula For a Smart Ship?" All Hands, January 1959.) These awards include the Operations Department Green "E," the Red "E" for Engineering, an "E" for the five-inch gun mount, an "E" for a 40mm mount and the Assault Boat Group Insignia.

In 1958, Rankin also received the Marjorie Sterrett Award, which is given each year to one ship in the Atlantic Fleet and one in the Pacific Fleet for the highest mark in intratype battle efficiency competition.

Besides displaying the "E" on the port and starboard bridge structures and flying the Navy's traditional meatball pennant, Rankin can now display the Battle Efficiency Plaque.

Named for Rankin County, Ky., the ship is a member of Amphibious Squadron Ten. She is commanded by CAPT L. E. Harmon.

"Rankin is designed to carry a small number of troops and most of the supplies and equipment of a battalion to the shores of the enemy, and to land them in an amphibious assault on a selected beach."
As an NAO Officer You’ll Have Chance to Fly High, Handsome

NAVAL OFFICERS with a yen to fly, but who can’t, for one reason or another, qualify to become a designated pilot, may still be able to build a worthwhile and rewarding career in aviation.

Provided they can meet the requirements, they may be able to join the ranks of a special breed of Navy flying men—as a Naval Aviation Officer. They won’t drive the planes of the future, but they’ll play an important role in the operation of those planes.

They’ll do so as a specialist in any one of several billets—Naval Aviation Observer; Radar Intercept Operator; Bombardier; Navigator; Bombardier Navigator; Airborne Early Warning; Anti-Submarine Warfare; ECM Evaluator; Maintenance; Electronics Maintenance; Ordnance and Air Intelligence. And they’ll move into one of those fields after basic training at a newly established school—the Naval Aviation Officer school at Forrest Sherman Field, NAS Pensacola.

NAO, which operates under the control of the Naval Air Basic Training Command, was established after a lengthy study of the complexities created by advances in Naval Aircraft since World War II.

Those studies revealed that technical progress had produced a definite need for better trained crews to operate much more complicated planes. They also showed that a growing number of qualified pilots were, of necessity, being used in a non-pilot capacity because of the lack of trained air crewmen and ground officers.

That’s enough of the why of the new school—how do you go about being selected?

BuPers Inst. 1120.29A contains complete information on the new program, and is much too long to quote in its entirety here. However, there are a few basic requirements. To be eligible, you must:

- Be a male U.S. citizen between the ages of 19 and 27½ at time of appointment. If you’re a veteran, however, the maximum age may be adjusted.
- Possess a baccalaureate degree from an accredited college or university. If you have a degree in engineering, electrical/electronics engineering, or a good mathematics background your application will be particularly welcome.
- Be aeronautically adapted and able to pass the physical examination required for Naval Aviation Observer if you wish to qualify for flight crew duties. If you would be a non-flying officer, you must have the same physical qualifications now required for surface unrestricted line officers.
- Score at least a four on the Aviation Qualification Test phase of the Aviation Selection Tests. A qualifying Flight Aptitude Rating score is not required, but, unless you are a candidate for Air Intelligence, you will be given an FAR test, and the results will be forwarded to BuMed.
- Be motivated for aviation duty and be intellectually capable of learning the technical aspects of operation and/or maintenance of the equipment involved.
- Not have been disenrolled for any reason other than physical or flight failure from any military flight training program.

Candidates may be either married or single.

Once selected for the program, you’d first attend 16 weeks of Pre-flight School as an Aviation Officer Candidate receiving indoctrination and training in the first phase of becoming an NAO. You would then join a class at the Basic NAO school, where you would follow an eight-week curriculum aimed at acquainting you with all of the various fields open to an NAO school graduate.

Specifically you would be instructed in jet engines, aviation electronics, air intelligence, communications, special weapons, navigation and meteorology. Other subjects would include combat information.

And North Pole Was Home Plate

Baseball pioneers Doubleday, Chadwick and Cartwright no doubt fondly dreamed that their brainchild, baseball, would some day become a widespread and popular sport. But it’s certain that even in their more wildly optimistic moments they never foresaw the day when a baseball game would be played at the top of the world, with the North Pole as home plate.

Organizing and playing in the historic game were crew members of the trailblazing nuclear submarine USS Seadragon SS(N) 584. Seadragon had surfaced near the pole after pioneering a new and shorter east-west passage through the lower Arctic.

Enlisted men battled a team of officers and CPOs in the frosty encounter, played in below-freezing temperatures under clear skies.

Polar Field was laid out in such a way that a home run would travel "from today into tomorrow, and from one side of the world to the other." And—shades of Zeke Bonura, Ernie Lombardi, Fat Pat Seerey and other notable tanglefeet of past major league renown—a runner leaving the plate arrived at first base some 12 hours later.

Seadragon left Portsmouth, N.H., 1 August, and reached the Pole after negotiating a series of sounds and straits designated as Parry Channel.

Then, the ballgame over, she submerged again and headed out through the Chukchi and Bering Seas to the Pacific. She reached Pearl Harbor early in September, and joined the Pacific Submarine Force.

Reports of the "bundled-up ball game" radioed from the Pole by Seadragon’s skipper, CDR George P. Steele, II, USN, didn’t include a score—but it may have been zero-zero, rising steadily.
WOs Have Chance to Apply For Permanent Commissions, Final Board Will Be Convened

If you are a temporary warrant officer (W-1 through W-4) in the regular Navy who would like to be a permanent WO, you're going to get one chance to see it happen. The Chief of Naval Personnel has asked WOs who want a permanent commission to apply now.

Permanent commissions were promised warrant officers when the Secretary of the Navy decided to discontinue the warrant officer program in 1959. The current program has been tailored primarily for those men who will remain in the Navy during most of the phase-out period.

Warrant officers who are serving in a higher grade as temporary LDOs (Limited Duty Officer) are not eligible to apply under this program, but they will be considered for permanent warrant rank if they are later twice passed over for selection to the next higher grade.

This is a one-shot affair, and WO applicants will be considered by a selection board to be convened by the Chief of Naval Personnel. No later boards will be convened for this purpose.

There are two possible obstacles to the program that the Chief of Naval Personnel wants to make clear to all WOs. They are the Dual Employment and Dual Compensation Acts. You will probably want to work after you retire, and many may plan to take a job with the Federal government. If you retire as an officer, you may be restricted in the amount of money you may earn, or even if you can accept a Federal government position at all.

Here is a short summary of the

### Dual Compensation Act
- This act affects you only if you are exempt from the Dual Employment Act. In such cases, although the retired officer may be free to accept Federal Employment, the combined total of compensation he can receive from that position and from his retired pay may be limited to $10,000 per year. Under the terms of the Act, however, the retired officer may waive all or part of his retired pay in order to keep the job and bring the combined rate down to the $10,000 limit. If the job pays more than $10,000 per year, he may waive his entire retired pay and receive the total compensation of his Federal position.

### Dual Employment Act
- Generally speaking, the Dual Employment Act prohibits officers who are retired in the permanent or temporary grade of Warrant Officer, W-1 or above, from accepting civilian employment with the Federal government. The prohibition, when applicable, is absolute, and may not be avoided by waiving acceptance of retired pay during the period you hold the Federal government job. It is true, however, that there are certain general exceptions to this act in addition to the specific exceptions which allow employment of retired naval officers in some appointed Federal positions.

Here are some of the exceptions. The Dual Employment Act does not apply to:
- Members who retire while serving in enlisted status on completion of 30 years' active service, even though subsequently advanced to officer status. (It should be noted in this connection that acceptance of a permanent appointment in the grade of warrant officer will prevent reversion to enlisted status for retirement purposes.)
- Members who are transferred to the Retired List from the Fleet Reserve and subsequently advanced to officer status.
- Regular Navy officers, including Warrant officers, retired for reasons of physical disability.
Coming to Washington for Duty? Here's What You Can Expect

All too often, it has been necessary to base our reports on living conditions throughout the world on pure hearsay. Limitations of budget and staff just do not permit us to check personally on each site, much as we'd like to.

This time, however, we know what we're talking about. We're in a position to confirm the authenticity of the following report on living conditions in Washington, although we do feel that the authors could have been a little more emphatic concerning certain aspects—summertime humidity, for example. As the report states, if you have an air conditioner, bring it. We also heartily concur that parking is a problem.

If you enter Washington in your own automobile, you may either come into the city from Virginia (south) or from Maryland (north). Located on all main entrances to the city are many excellent motels and tourist homes. If you come to Washington by commercial airplane you will land either at the National Airport, which is situated three and one-half miles south of Washington on the Mount Vernon Parkway, or, at Friendship Airport, located approximately 20 miles northeast of the city via Washington-Baltimore Parkway. If you arrive by train you will come into the Union Station which is just north of Capitol Hill at Massachusetts and Delaware Avenues, Northeast. There are two bus terminals; the Trailways at 1201 New York Avenue, Northwest and the Greyhound at 1110 New York Avenue, Northwest. There are buses as well as taxis available at bus and train stations.

Climate—With a temperate rain climate, predominantly oceanic but partly continental, Washington seems cold and wet in winter and hot and humid in summer. You also may have heard about the beautiful spring weather and all too short but lovely autumn, with its incomparable Indian summer. There is an average of 40 inches of rain and 22 inches of snow. The humidity, a general subject of conversation, has averaged 76 (at 7 A.M.) and 62 (at 7 P.M.) percent in the past 17 years. An air conditioner will prove to be a boon in summer months.

Health Conditions—There are no unusual prevalent diseases in Washington and no vaccinations other than those standard throughout the United States are necessary. Sanitary conditions are excellent. Building and sanitary codes are strictly enforced. City water may taste unusual at first, due to excessive chlorination.

Armed Forces Hostess Association—The Armed Forces Hostess Association welcomes newcomers to the area. This is an association of volunteer service wives, which maintains an office in the Pentagon, Room 1A736, where, in the past year, the association has answered thousands of inquiries concerning, among other things, schools, camps, baby-sitters and shopping services. They also operate an overseas file for the benefit of families leaving the area for duty in foreign lands, and another file for helping families who are transferred to other stations in the States. Telephone OX 7-3180 or OX 7-6857.

Housing—The Joint Armed Forces Housing Office located in Room 1A854 of the Pentagon Building offers assistance to military and civilian personnel of the Department of Defense to find living accommodations in the greater Washington area. There are branch offices located at Bolling Air Force Base and at the Main Navy Building.

Upon your arrival in Washington, a housing counselor will discuss your particular needs with you and offer listings of appropriate available accommodations. The Office does not supply listings by mail.

The housing situation is not critical at the present time. However, the prices of all types of housing are high. One to four weeks is required to locate suitable housing for permanent residence. It is recommended that you not bring your family to Washington until you find suitable housing unless you are willing to pay the high price for temporary lodging.

Apartments in Washington are no longer as difficult to obtain as they were during and just after the war. It is difficult, however, to estimate the approximate rentals to be expected, since so much depends on location, size, condition, and other intangible factors.

The following prices reflect prevailing monthly rental rates on housing in this area. In permanent-type housing of any kind the one-year renewable lease is prevalent. A protective clause covering permanent change of station is to be found in many cases, though it is not universal.

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<thead>
<tr>
<th></th>
<th>Unfurnished</th>
<th>Furnished</th>
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<tbody>
<tr>
<td>3- and 4- Bedroom Houses</td>
<td>$125 to $200</td>
<td>$135 to $250</td>
</tr>
<tr>
<td>2-Bedroom Houses</td>
<td>100 to 150</td>
<td>120 to 150</td>
</tr>
<tr>
<td>3-Bedroom Apartments</td>
<td>106 to 150</td>
<td>175 to 225</td>
</tr>
<tr>
<td>2-Bedroom Apartments</td>
<td>87 to 99</td>
<td>110 to 150</td>
</tr>
<tr>
<td>1-Bedroom Apartments</td>
<td>73 to 86</td>
<td>85 to 125</td>
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</table>

Apartment rentals usually include utilities, while house rents do not. It can also be assumed that such apartments and houses contain kitchen ranges, refrigerators and lighting fixtures. Many apartment houses also have central telephone exchanges with extensions in each apartment. Some provide metered automatic washers and dryers.

The Joint Armed Forces Housing Office also maintains a file of homes for sale. It is difficult to estimate real estate costs but as in any large city, prices are high.

A limited number of Bachelor Of-
Officers’ Quarters, with complete facilities, including messing, are available for bachelor officers and those married officers who are not accompanied by their families. These quarters are located at the Naval Air Station, Anacostia, and the Naval Station, Washington, D.C.

There is one local housing project for Navy and Marine Corps enlisted personnel and their families, the Bellevue Naval Housing Project. Bellevue contains 601 units of one- two- and three-bedroom unfurnished apartments. These units are unfurnished except for stove and refrigerator. Rates including utilities are:

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<tr>
<th>Shelter</th>
<th>Utilities</th>
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<tr>
<td>1-bedroom</td>
<td>$24.00</td>
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<tr>
<td>2-bedroom</td>
<td>$33.00</td>
<td>$19.00</td>
</tr>
<tr>
<td>3-bedroom</td>
<td>$36.00</td>
<td>$24.00</td>
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</tbody>
</table>

There is a considerable waiting period for this housing; nine months for a one-bedroom unit, 12 months for a two-bedroom unit, and 17 months for a three-bedroom unit. Report to the Naval Housing Office, Building 200, Naval Weapons Plant, Washington, D.C. for an interview regarding eligibility. If eligible, your application is accepted and placed on file.

PRNC also maintains a housing list for Chinquapin Village, a low-cost housing unit in Alexandria, Va. Unlike Bellevue, Chinquapin is administered by the Alexandria Redevelopment and Housing Authority. Whereas Bellevue is occupied entirely by Navy and Marine Corps personnel, Chinquapin is divided between military and civilian personnel. This housing is available to enlisted personnel on a hardship basis only. Information concerning eligibility is available at the PRNC Housing Office. The rental rates are one-bedroom, $52.00; two-bedroom, $63.00; and three-bedroom, $68.00. Again there is a considerable waiting period for this housing; six months for a one-bedroom unit, 12-18 months for a two-bedroom unit, 24 months for a three-bedroom unit.

You may apply for housing in advance of your arrival by a letter request, accompanied by a certified copy of transfer orders, addressed to Commandant, Potomac River Naval Command, U.S. Naval Weapons Plant, Washington 25, D.C. Applicants will be placed on the appropriate housing list as of the date of receipt of the request in the Housing Office. Upon arrival in the Washington area you must report to the Potomac River Naval Command Housing Office to complete your application.

Since there is such a long waiting period for the Bellevue housing, some personnel live in the low-cost housing controlled by the National Capital Housing Authority. The rental rates for this housing vary from $24.00 to $97.00 per month, according to your income.

### WHAT'S IN A NAME

**What to See in Washington, D.C.**

Of course, no stay in your Capital City would be complete without a tour of all the public buildings and places of historical interest in and near Washington. There are so many places to see that only a few can be mentioned here, but others will be discovered after you have settled in this city.

The natural starting point for any tour of Washington is the Capitol. Across from the Capitol is the Supreme Court Building. The first Monday in October usually marks the beginning of a new court session which lasts into June, and during this period there is a section of the seats open to the public. In this building are to be found such interesting items as the oldest Bible used in the Government, which has been used for swearing in Justices of the Court.

Adjacent to the Supreme Court Building is the Library of Congress, the largest institution of its kind in the world. In the Archives Building several blocks away, one may see the original Declaration of Independence and the Constitution of the United States.

Along Pennsylvania Avenue, between the Capitol and the White House, is the Federal Building Triangle, containing more than $200,000,000 worth of structures. The base of the Triangle is the Department of Commerce Building. Others in this area include the building of the Interstate Commerce Commission. Justices of the Court. The Department of Labor, Internal Revenue Service, the Department of Justice and the F.B.I. Headquarters, which is open to visitors throughout the year.

Not far from the White House, in a sixty-acre park, is the towering marble shaft of the Washington Monument. It is the tallest masonry structure in the world, rising more than 500 feet. Nearby is the temple-like Lincoln Memorial, perhaps the most impressive of Washington's many monuments, and overlooking the Tidal Basin is the newer Jefferson Memorial.

Standing at the Lincoln Memorial visitors can look toward the Capitol and view the tracts that is known as the Mall, a great park flanked on one side by Constitution Avenue and on the other by the Smithsonian Institution and the greatest Department of Agriculture Buildings.

No tour of Washington would be complete without a visit to historic old Georgetown. Many of the old homes have been restored and are beautiful examples of old Georgian architecture. Dumbarton Oaks, 3101 R Street, Northwest, a handsome old Georgian estate, is open to the public daily, except for Monday, from two to five. Other interesting houses to see in Georgetown today are "Evermay," 1623 28th Street, Northwest and the Baido House, 3322 O Street, Northwest.

Another must for the Navy family is the Tudor-Decorat Naval Museum, located at 1610 H Street N.W. (see ALL HANDS, December 1959, p. 19.)

Across the Potomac, the $10,000,000 Arlington Memorial Bridge, is Arlington Memorial Cemetery. Here is the Tomb of the Unknowns. Here also is Lee Mansion, the old residence of General Robert E. Lee.

One of the most interesting diversions for the newcomer in Washington is the trip to Mount Vernon. After leaving Arlington, the highway is routed through historic Alexandria. George Washington Memorial Parkway follows the winding Potomac directly to the old homestead of George Washington, which is 15 miles south of Washington. Mount Vernon probably has more universal appeal than any other American shrine. It captures the leisurely charm and courtly decorum of an eighteenth-century estate. Every ship of the Navy which passes the spot lowers its flag to half mast and renders honors.
There are many good hotels available in Washington, although, as with all real estate costs, prices are high. They range from the more expensive hotels through the more moderately priced, without the luxury features but adequate and comfortable.

In addition, there is a public tourist camp operated by the National Capital Parks in East Potomac Park and there are numerous good motels as well as authorized tourist homes, located in Maryland and Virginia on all roads leading into the city. Many of the motels and tourist homes, AAA-approved, charge very reasonable rates and offer good places to stay while house-hunting.

**Domestic Help** - Servants are scarce and expensive in Washington. The same is true for gardeners and men to do odd jobs around the house. Wages for domestic servants range from $20.00 to $40.00 per week depending on the number of meals they receive and the length of time they work as well as whether they “live in” or maintain separate quarters. Servants hired by the day are somewhat more expensive and their wages usually include car fare.

**Clothing** - The climatic conditions of Washington are such that wardrobes must range from heavy clothing in winter to the lightest summer clothing. While the temperature in winter months is not excessively low, the cold is often felt more intensely because of the humidity. Serviceable clothing on hand should be brought since prices are high, although, as in any large city, all kinds of clothing are available.

The influence of the “Government Girl” who is the prime consumer in Washington is reflected on the clothing market. Consequently, there are in Washington many large and small stores where inexpensive dresses are available, such as cotton or rayon street dresses for as little as $8.00. There are also exclusive hat, dress and shoe stores available for women who desire clothing of better quality, durability and originality.

Children’s clothing is expensive, especially for snow suits and other large items. However, there are good bargain basements in the large department stores and mail order stores located in Washington, Maryland and Virginia.

Footwear in Washington is especially expensive, having increased

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**How to Get Around in Washington**

The District of Columbia, seat of the Federal Government, was created as an area 10 miles square, taken from the sovereignty of Maryland and Virginia. In 1846 Virginia’s portion was ceded back to that State and is now Arlington County. The District is now just under 70 square miles in area and lies entirely on the left bank of the Potomac River, 115 miles by river from the Chesapeake Bay and 185 miles from the Atlantic Ocean.

The bill for a Federal town was passed on 16 July 1790, and in January 1791, President Washington chose the land that is now the District of Columbia. Major L’Enfant, the brilliant French engineer was selected to plan the city. The basic idea of L’Enfant’s plan was the development of the city on two axes of parks, with a monument at their intersection; one park system to extend West from the Capitol to the Potomac and the other one south, from the White House to the river. The Capitol building was like the hub of a huge wheel, with four streets, radiating from it which divided the city into four sections, Northeast, Southeast, Northwest and Southwest.

From the very beginning, the plan for Washington streets was almost perfectly carried out. It seems very simple, but many newcomers to the city complain of difficulties in finding their way about.

L’Enfant had intended that all sections of the city be the same size; however, the first large development began at the foot of Capitol Hill and extended to the West and North, hence, today, the Northwest section is by far the largest, reaching out to include Georgetown.

Having planned the four sections, L’Enfant then named all the streets running due east and west with the letter of the alphabet. He planned to use single letters and when the single letters had been exhausted, words of one syllable beginning alphabetically. When the one-syllable alphabet had been used, he planned to use words of two syllables and so on.

In the different quadrants of the city these names are different, but the plan has been followed exactly. L’Enfant then designated streets running due north and south by numbers; for example, First Street, Second Street, etc.

Once one understands the plan of the city, it is not difficult to find a certain address; for instance, a house at 1736 N Street would be located on N Street running east and west between Seventeenth and Eighteenth Streets running north and south.

In addition to these streets, L’Enfant planned avenues which cut through the other streets on the diagonal. The avenues are named for states, including Hawaii and Alaska. Where avenues and streets meet there are often circles and parks and these seem to cause much of the confusion to newcomers.

Government is the most important occupation in Washington. Not only are there many military personnel stationed here, but by far the greatest number of civilians are members of the government service.

Washington’s governmental activity also brings thousands of travelers to the city. It has the largest transient population for its size of any city in the world.
in price from 50 to 75 per cent in the last few years.

For social occasions the dress is generally informal. Cocktail parties for women require short silk or rayon dresses or a suit, with a suitable afternoon hat and dressy accessories.

The uniform of the day for naval personnel which is worn on duty during office hours in the Washington area is shown in the box on this page.

Laundry and dry-cleaning facilities are operated by Navy Exchanges, and pick-up stations are available at several locations in the Navy buildings in the area.

Commissary and Post Exchange—There are seven commissary stores in the Washington area. All are closed Mondays and holidays and most are closed on the last day of each month for inventory. The commissaries are located at:

Cameron Station

Fort Myer
Arlington, Va.

Walter Reed Hospital
Washington, D.C.

Fort Lesley J. McNair
4th & P Sts., SW., Washington, D.C.

Bolling Field
Washington, D.C. (Anacostia, SE.)

Fort Belvoir
Fort Belvoir, Va.

Andrews Air Force Base
Andrews Air Force Base, Md.

Medical Care—There is inpatient medical care available for naval dependents at the Bethesda Naval Hospital, but admittance is authorized only through Main Navy Dispensary for dependents. The dispensary at the Main Navy Building cares for dependents while the dispensary at the Arlington Annex cares only for uniformed personnel. Since there is a concentration of military personnel and dependents in Washington, the existing facilities are often crowded.

There are many excellent private physicians, dentists and oculists available in Washington although they, too, may have rather crowded schedules. It is best to make appointments as far in advance as is possible.

Schools—There are numerous excellent schools available in Washington from nursery age through college and university. Lack of qualified teachers with consequent overcrowding is noticeable. The only general requirements for attendance at public schools are that residence within the District must be shown, that the pupil have a birth certificate and that he has had a successful smallpox vaccination. In Maryland and Virginia, residence within the county or school district must be shown.

Private schools are available both in the District and in neighboring areas.

Public kindergarten schools are available in the District of Columbia and became available in Arlington, Virginia for the school term in September.

Georgetown University, George Washington University, American University, Catholic University, Maryland University and numerous other colleges, graduate schools, art schools, business and technical schools are located in the Washington area and offer much in the way of higher education.

Churches—There are churches of nearly every denomination located in the Washington area. There are, in addition, many churches which are landmarks for the sightseer. The Washington Cathedral of St. Peter and St. Paul (Episcopal) located at Massachusetts and Wisconsin Avenues Northwest, is an impressive sight. Christ Church in Alexandria, Va., was built in 1773 and George Washington was one of the first vestrymen. St. Matthews Cathedral on Rhode Island Avenue, Northwest, is one of the finest churches in the area.

Shopping—The main shopping area of Washington is in the downtown section between 7th and 14th streets on F and G. However, in the past few years, numerous suburban shopping centers have grown up and many of the larger department stores have large suburban stores in Virginia and Maryland. There is a two per cent sales tax in the District as well as a food tax of one per cent. Maryland has a sales tax of three per cent. Virginia has neither a sales nor a food tax.

There is a shopping service available in the area with branches in the District, Maryland and Virginia, which offers a discount for military personnel on items such as television

Here's Uniform of the Day in the Washington Area

<table>
<thead>
<tr>
<th>Dates</th>
<th>*Officer</th>
<th>Enlisted</th>
<th>Women Officers &amp; Enlisted Waves</th>
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<tr>
<td>Mid-May</td>
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<td>Service Dress Blue B</td>
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*Officers and warrant officers have been authorized to wear civilian clothing at the option of the individual officer concerned. This authorization is applicable to officers serving in the following: Offices of SecNav and Executive Assistants, EXOS, Office of CNO, OPNAV, JAG and Bureaus.

The uniform is worn by inactive Reserve officers when on annual training duty and by other officers on certain specified occasions.
sets or large household appliances.

Local Transportation—Washington has the greatest number of automobiles per capita of any city in the United States. Large numbers of foreign license vehicles from Maryland and Virginia suburbanities who work in the District and untold numbers of tourist and visiting automobiles aggravate the situation. With the congestion of streets in the business and government areas in downtown Washington, finding a parking space is a problem.

Public transportation in the District is provided by the D.C. Transit System which operates streetcars and buses. (The streetcars are being phased out to improve traffic conditions.) Despite the number of vehicles in operation, service is not adequate during the morning and evening rush hours, and consequently, it is still common practice to queue up.

Suburbanites are served by various bus companies, all of which operate under public control either by the Maryland or Virginia Governments or jointly with the District Public Utilities Commission. Consequently, service is generally adequate and dependable and fares are fairly reasonable, although if you live in Virginia and work in the District you may not transfer, and depending on where you work, it may be necessary to pay two bus fares.

Taxicab service in the Washington area is convenient. Rates are scaled according to the number of persons carried and the zones traversed.

Excellent government transportation connects the various Department of Defense installations in the Washington area. Military bus service is available between the Pentagon, Arlington Annex, Yards and Docks, Main Navy Building and the Capitol. Other facilities of the official government transportation system provide service to the Naval Weapons Plant, Fort Belvoir, Langston Hall, the Naval Air Station and Andrews Field.

Social Affairs—Many Navy families are reluctant to request Washington duty because of the prevalence of persistent rumors regarding formal Washington entertaining with its resultant expenses. Because of that it may be helpful to know that socially speaking the Washington Navy is not so formal as it used to be.

In pre-World War II days when there was a smaller Navy, Washington duty made many demands on the family pocketbook because of social affairs and formal dinner parties which were considered in the category of social obligations.

With the advent of the larger Navy and less formal entertaining in many quarters, certain problems of a social nature ceased to arise. Today questions on Navy and Washington protocol are, for the most part, answered in the Foreign Liaison Section of the Office of Naval Intelligence. Explanations are made about calls and calling cards.

The social side of Washington life need no longer be an important factor in the decision of junior officers or enlisted personnel when requesting duty in this area. Only officers in key positions call on foreign ambassadors and attachés, and present practice is for only officers with rank of captain and above to leave cards at the White House.

Recreation—There is an enlisted men’s club at the Naval Air Station, Anacostia. There are CPO messes (open) located at the Naval Station, Washington, D.C., and the National Naval Medical Center, Bethesda, as well as at the Naval Air Station, Anacostia.

The National Naval Medical Center Bethesda, and the Naval Weapons Plant each have a commissioned officers’ mess (open) with dining facilities, a cocktail lounge and other facilities. There is an Army-Navy Country Club available for officers. Facilities include golf courses, swimming pools and tennis courts. Lunches, dinners and dances are held throughout the year.

The National Capital Parks, Department of the Interior, control numerous tennis courts, golf courses, swimming pools, etc., on Federal property, which admit the general public. A great variety of sporting facilities such as horseshoe pitching courts, baseball and softball diamonds are available through the District of Columbia Recreation Boards, the only stipulation being that advance reservations must be made. In addition, picnic areas in Rock Creek Park, are available, free of charge through the Recreation Association, and here again, advance reservations must be made. Horseriding also in Rock Creek Park, is popular, but expensive.

With many people hiking is a favorite form of recreation and service personnel often join clubs whose activities include hikes to all parts of Washington and the surrounding area.

The National Zoological Park, ranking among the finest in the United States is another favorite recreation spot, especially with the children.

The professional Washington and numerous college and schoolboy teams have a wide following among sports fans and a variety of sporting events are scheduled at Griffith Stadium and Uline Arena. In nearby Maryland and Virginia, flat racing, harness racing, and steeplechasing tracks attract persons of all ages.

There are also many recreational opportunities in the nearby Chesapeake Bay and mountain areas.
There's no question about it—of all the excellent titles selected for review this month, _Surface at the Pole_, by CDR James Calvert, USN, easily leads all the rest in interest.

_USS Nautilus, SS(N) 571_, was, of course, the first to travel under the North Pole, but _USS Skate, SS(N) 578_, had a different assignment—to travel under the Arctic ice, then see if it would be practical to surface in the dead of winter. In this first-person account, CDR Calvert, skipper of _Skate_, not only explains how his sub accomplished its mission but re-creates the sights and sounds, moods and sensations, evoked within the confines of _Skate_ on its long run beneath the surface. He also tells of the earlier history of polar exploration which paved the way for his own voyage. The accompanying photos make the text seem all the more real.

There's little doubt about it—oceanography is becoming more and more important to everyone in the Navy and, it might be mentioned, it's becoming more and more interesting. The latest contribution to a growing library on the subject is _Frontiers of the Sea_, by Robert C. Cowen.

Admitting the impossibility of giving adequate treatment to every aspect of the science, the author does give a layman's understanding of this important field of scientific exploration and background. In 11 chapters, the author tells in varying degrees of detail the birth of the science, the origins of the seas, the undersea landscape, probing the deep-sea floor, the patterns of waves, currents, sands, theories of heating, cooling and water movement, the range of life in the sea, food from the sea, and the future of undersea exploration. A good, solid introduction to a subject of growing importance.

There's plenty of World War II coverage in this month's selections. Two are concerned with dramatic incidents which involved the British Navy. _Black Saturday_, by Alexander McKee, presents a new slant on the sinking of the British battleship _Royal Oak_ in 1939. While lying inside the main base of the Home Fleet at Scapa Flow she was shaken by four explosions, rolled over and, within seven minutes of the last explosion, sank with nearly 800 men trapped inside. Up to the present, credit has been given a German sub for the sinking. Now, McKee casts considerable doubt on this version. He thinks it's sabotage. Right or wrong, his description of the actual sinking is excellent.

Then there is _The Greatest Raid of All_, by C. E. Lucas Phillips. This is a description of the destruction of the largest dock in the world, the Normandie Dock at St. Nazaire. The raid was made in March 1942 by a group of 600 men, mostly commandos, using torpedo boats and an ancient destroyer. They got away with it because it was "one of those actions which can only be attempted, precisely because it must appear to the enemy to be absolutely impossible." Not impossible, but almost so. Another incident in which the British did not precisely cover themselves with glory is described in _Fortress: The Story of the Siege and Fall of Singapore_, by Kenneth Attiwill. As the author spent some three and one half years in a Japanese prison camp as a result of that fall, he can be forgiven if his account is not coolly objective. His thesis: this is what happens when rulers are unable to see the waning of their power in a new kind of world. Grim, but instructive, reading.

_Two novels have been selected for comment_. _The Beardless Warriors_, by Richard Matheson, is concerned with the story of youngsters—teenagers—who suddenly grow up as a result of their wartime experience during World War II. Matheson tells what happens when the squad is taken directly from basic training into the front lines. You grow up in a hurry, or else.

_Sands of Kalahari_, by William Mulvihill, carries the man-against-nature theme and Mulvihill manages to suggest that man against man is much rougher and more dangerous than nature can ever be.

He believes that men can no more do without being controlled than they can live without food, drink and sleep, and that the factors of command are to be found in the personal prestige of the leader. He must, according to de Gaulle, have the power to dominate events, leave his mark on them and assume responsibility for the consequences of his action. If you wish, you can try to guess whom he had in mind as he describes the perfect leader.

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_Sands of Kalahari_, by William Mulvihill, carries the man-against-nature theme and Mulvihill manages to suggest that man against man is much rougher and more dangerous than nature can ever be.
Just one hundred years ago, a Japanese warship first set sail for the United States on a ceremonial visit. On board, as an early version of our contemporary MAAG missions, were a naval lieutenant and 10 seamen to help the inexperienced Japanese seamen across the Pacific.

Here's the story of the beginning of the Japanese Navy as that nation emerges from the feudal era, and of the historic first cruise of a Japanese warship across the Pacific to the United States. It was written by a Japanese, Masataka Chihaya, managing editor of Shipping & Trade News, Tokyo, Japan. The author had access to various accounts by writers on the scene, including one report that has just recently been disclosed. The following are excerpts from his lengthier account.

JUST IMAGINE THIS:
A three-masted schooner corvette, of only 400 tons, with a Sun flag atop the stern pole. Nearly 100 officers and men, all clad in Happilike coat and cotton trousers, all with quaint hairdos and wearing straw sandals.

Also on board, a team of 11 American naval officers and men, headed by a young, full-bearded captain. All but one of the Japanese can't speak English, and orders are given in Dutch! To add to this, on deck are two hogs, 60 chickens and 20 ducks.

This was what happened exactly 100 years ago this year. The time was February 10, 1860 and the place, Uraga, at the mouth of Tokyo Bay.

The setting, perfect for a movie, was far from that for the group's makeshift, reckless venture of crossing the notoriously rough winter North Pacific. They had been trained in naval technology for less than five years, and the longest cruise they had ever made was from Edo, the present Tokyo, to Nagasaki in the western part of Japan proper and back again.

Their assignment was to go to the United States with USS Powhatan, which carried on board the Japanese Embassy, consisting of two ambassadors and their suite of 79 persons. The Samurai ambassadors were assigned to present to United States President James Buchanan the ratification by their government of the Treaty of Amity and Commerce signed by the United States and Japan two years before.

However, their real intention was to prove their ability at ocean navigation. Further, they intended to leave the small inlet facing Tokyo Bay ahead of the Powhatan, and then make a cruise alone. How reckless their venture would be—but few of the rash youths of the infant Japanese Navy cared.

The only exception was an admiral, on board the corvette to take command of the cruise. Though also young and inexperienced, he foresaw the grave risks involved in the adventure. So skeptical was he that he arranged to have the American team go with his ship.

For the sake of pride, the Japanese regarded the American team, from captain down to sailors, as “just passengers” returning to their homeland. As it turned out, however, they proved to be far more than that; their helping hands were very badly needed, as the thoughtful admiral had anticipated.

The carefree attempt was actually nothing but an outburst of haste to make up Japan's lag in naval arm. Since several years earlier, Japan had been visited by a number of Western representatives, including Commodore M. C. Perry of the U.S. Navy, to seek an open door to feudalistic Japan, which had been closed tight to the outside world since 1633. The Tokugawa regime issued an order in 1853 lifting a ban on building non-coastal ships, a ban which had strictly been observed for more than two centuries. At the same time the Shogunate decided to ask the Dutch mission at Nagasaki, which had long been the only foreign diplomatic outpost there, to help it build up a new navy.

In the same year, the Dutch Government made a present of the paddle steamer Soembing to the Tokugawa Shogunate and accepted a construction order for two corvettes from the Shogunate, an order which had been pending for some time.

The two corvettes were sister ships of 163 feet in length and 24 feet in width. Their tonnage was unknown, but estimated to be around 400 tons. Each wooden schooner was powered by a 100-horsepower steam engine and equipped with 12 guns. Their price was $100,000 each, according to an old document.

They were actually the first two warships the Tokugawa Shogunate had ever acquired at any price. After arrival at Nagasaki, they were proudly renamed as the Kanrin Maru and the Choyo Maru. Kanrin means substantially in Japanese "making peace together," while Choyo means "morning sun." Incidentally, "maru," now well known as the ending word of Japanese merchant ships, was also used as the ending word of warships in the infant Japanese Navy.

IN THE MEANTIME, primitive naval training had been pushed ahead at Nagasaki, soon after Soembing was received as a gift from the Dutch Government. Officer candidates were selected from Samurai of Tokugawa and other lords, and sailors from boatmen of Shiakujima in the Inland Sea. Boatmen of Shiakujima had long been noted for engaging in the sea traffic in the important seaway connecting major islands of Japan.

The faculty of this "school" consisted completely of Dutch. Teachers and students had a lot of trouble with each other; worst among them was the language barrier, since all communication had to be made through Japanese interpreters.

**CHOW TIME—Between raging squalls U.S. Navymen joined the Japanese in their simple meals on the deck.**

Officer candidates were mostly intellectuals, few of whom knew anything about navigation. The enlisted men knew something about navigation, though in their own way, but most of them were illiterate.

Officer candidates were reluctant to practice seamanship, which they thought was the sailor's job, while a few were willing to learn drum-beating, which they believe, according to their school of tactics, belonged to the Samurai class.

But these obstacles could not discourage the burning zeal of the young students of Western navigation, and in the spring of 1857, about one year and a half after the training was started, they made a successful cruise on Soembing, then renamed as the Kanko Maru, from Nagasaki to Tokyo Bay by themselves. Those concerned in the Shogunate rejoiced at the early success. Only to see such accomplishment, the then money-tight Shogunate had spent great amounts to build up a new navy.

Efforts were spurred on to double-quick time. Another training center was established in Edo. At Nagasaki, an iron works was erected, which eventually developed into
‘HIJST HET GROOTZEIL’ the Dutch order to set the top mainsail began voyage for U.S. and Japanese Navymen. the present huge yard of the Mitsubishi Shipbuilding and Engineering Co., Ltd.

THE MAIN PURPOSE of dispatching a Japanese warship together with the American warship was to offer a chance at real ocean navigation to the just-hatched navy of Japan, although the head of the expedition was to be given the additional job of becoming an envoy in case of an emergency. All preparations for the venture had to be rushed, and the most immediate problem was the selection of a ship and crew.

The man who was picked as the head of the expedition was Yoshitake Kimura, Lord of Settsu, who had the official title of the Superintendent of Warships. Usually called Kimura Settsu-no-kami (his name card, procured after his arrival at San Francisco, read KIM-MOO-RAH-SET-TO-NO-CAMI), he was 31 at the time. Born as the son of a higher-class Samurai family, he had for some years been the chief superintendent of the naval training center at Nagasaki.

Rintaro Katsu was chosen to command the expedition ship. A progressive, Katsu had learned Dutch culture before he joined the new navy in 1855 at the request of the Shogunate, to master the Western naval technique.

In spite of his youth, Kimura was not reckless. Wisely, he judged the venture too risky for his inexperienced men and decided to ask help of the Americans.

When informed of Kimura’s desire to have Americans on board the Japanese ship going to the U.S., Townsend Harris gladly arranged to have LT John M. Brooke, USN, and his men go with the Japanese.

Kimura recorded in his note concerning the venture that, “We asked for Brooke to go with us.” He went on to say that, “It was my great luck to have him go with us, he who had full knowledge of navigation, beside a gentle nature.”

Yukichi Fukuzawa, who accompanied Kimura as his personal secretary, wrote in his autobiography that, “Every member of the crew was determined to take the ship across unassisted by any foreigners.”

“The staff of the Kamin Maru protested strongly,” he continued, “since they thought having American navigators with them would cast a slur on their ability to sail.”

THEIR PREPARATIONS were very simple, and interesting from the present standpoint, for such a cruise. Here is a list of some of their supplies:

Rice .............................................. 372 bushels
Water ........................................... 7766 gallons in 24 metal tanks
Candles .......................................... 1500
Charcoal ......................................... 200 bundles
Firewood ......................................... 1350 bundles
Dried bonito ...................................... 1500 pieces
Hogs ................................................. 2
Chickens .......................................... 60
Ducks ............................................ 20
Coal ................................................ 32,770 kilograms

The crew who manned the Kamin Maru, now ready to go, consisted of 17 officers and 65 men under the command of CAPT Katsu. Besides these, there were young Admiral Kimura and 12 others, including his suite.

INCLUDED IN THE CREW was Manjiro Nakahama, who had had an old life. Nineteen years earlier, he had been shipwrecked with four other fishermen and had gone ashore on an uninhabited island sound of Hachijo Island. After living in a cave for about five months, the group was saved by an American whaler, which took them to Honolulu. At that time a 16-year-old boy eager to gain knowledge, Manjiro was taken to Fairhaven in the United States, where he was given an education in navigation and survey.

After growing up, he worked on whalers for four years before he ventured back to his long-missed home country in 1850. But the closed country was cool to the honest repatriate, and put him in jail for several months. When Commodore Perry came to Japan in 1853, however, the startled Shogunate had to use Manjiro’s invaluable talents for important work.

As the only Japanese who spoke English and was familiar with Western navigation, Manjiro was destined to play an important part in the enterprise being undertaken by the inexperienced Japanese and the Americans.

He was 34 at that time.

On February 6, LT Brooke and his men boarded the Kamin Maru to accompany the Japanese crew. His group included:

Edward Kern, artist and draftsman
Charles Rogier, ship’s steward
Lucian P. Kendall, hospital steward
Charles Falk, instrument maker
Charles Smith, quartermaster
George Smith, seaman
Frank Cole, sail-maker
Axel Smedborg, seaman
Alexander Morrison, seaman
James Burke, cook
As the order to set the main-top-sail was barked out in Dutch, the Japanese crew set out to mark the beginning of their first venture in crossing the Pacific, as the ship sailed out into the open sea.

Pitifully, however, the beginning was to end soon, as the sea became heavy. Brooke recorded in his diary that, "captain sick, diarrhea" and "commodore seasick,"—they kept themselves in confinement in their cabins. Many others were seasick too. Spirit and zeal alone could not win over the heavy seas.

The Japanese learned for the first time that one of the biggest enemies in the open sea was heavy weather, as the weather was even worse the following day. The ship plunged violently, taking in water occasionally. Some of the sails were split.

As the cruise entered its third and fourth days, the Japanese were gradually recovering from their seasickness, but Kimura and Katsu were still sick. Manjiro became not only valuable, but also a joy to the others, as he started to enjoy his renewed sea life. He made observations and amused others by telling them stories and singing songs.

On the other hand, Brooke had a real headache. He deplored in his diary, "The helmsmen do not know how to steer by the wind. They don't attend to weather braces and bowline."

Most of Japanese documents and writings concerning the cruise fail to describe in detail this stage of the cruise, but one of them covers it as follows: "For the first time in my life did I learn the horror of living. All were dead pale, except the Americans, who talked and grinned." It goes on to say that the Japanese could not cook rice and ate, only once or twice, dried rice which was boiled during this period.

Though there was no sign of improved weather the ship nevertheless made its way very handsomely because of the prevailing favorable winds.

Brooke also complained about the carelessness of the Japanese crew toward fires, a fault which their Dutch teacher had once attacked when a fire was started in the galley at night. "The Japanese sailors must have their little charcoal fires below, their hot tea and pipes of tobacco."

By that time, Kanrin Maru was entirely in the hands of Brooke and his men. Brooke said that his men steered the ship and also that, "The Japanese seemed to rely entirely on us."

"The commodore thanks me for taking care of the ship under these circumstances," his diary said. Kimura was still confined to his bed and so was Captain Katsu. Though he was so young, 33 at that time, Brooke had deep sympathy for the Japanese. He wrote: "We must remember, however, that this is their first cruise, that the weather is heavy..." The full-bearded American captain even ate boiled rice and salt fish with the Japanese under the light of candles.

"This is a high old cruise. But I like the novelty. I shall endeavor to improve the Japanese Navy and will aid Manjiro in his efforts," he concluded.

On February 17, just one week after the departure from Uraga, the sea began to subside gradually. But the lull did not last long as strong winds blew in from SSE on the afternoon of the next day. The sea became very heavy again, as threatening clouds hung low on the horizon. As the night drew on, the wind increased to heavy squalls.

That night Brooke had hardly any rest. Obviously, the ship had been struck by a typhoon.

"Several times I thought the sails would leave the yard," Brooke recorded. "At 12 p.m. it rained in torrents, the air white." He could not be relieved until the wind changed to west. "I had hardly laid down before I was called again. Squalls heavy."

A few Japanese documents also record this incident. "With the intensified south wind, the heavy seas struck..."
and hammered on the deck of the ship all the time. All the sailors were exhausted and could not furl sails. The ship was lifted high before she plunged deep in the sea, as if she would go down at any moment. As all hatches were closed tight, quarters below were as dark as night."

Fukuzawa also recorded in his autobiography that, "When the ship keeled over on her side, I could see the top of big waves in the distance through the skylight from below." A listing of 37 or 38 degrees was not uncommon, he wrote.

One of the Japanese officers on board the ship disclosed in later days that "some of our sailors were so exhausted they wanted to go home." The officer, who later became a vice admiral of the Imperial Japanese Navy, even admitted that, "As it turned out, therefore, those American sailors who were on board the Kanrin Maru as passengers became a great help."

**When the Kanrin Maru had entered the other side of the Pacific after crossing the Meridian on the night of February 24, the situation improved a great deal. The sun was out for the first time, after more than two weeks of cloudy and stormy weather.**

The Japanese had made improvements in their navigation. One of the navigators was Tomogoro Ono, who had learned navigation before he entered the new navy in 1855. "Tomogoro is an excellent navigator. I am explaining Sumer's method to him," Brooke mentioned in his diary.

On the following day, a strange sail on the weather quarter gradually loomed up. When the Kanrin Maru hailed it after catching up, it turned out to be the Flora bound for San Francisco from Hong Kong.

After steering both ships to run together, Brooke and the captain of the Flora exchanged greetings, the latter commenting that, "The vessel sails very well for a steamer and a Japanese." To this, Brooke replied that "you must not let a Japanese vessel beat you!" Then, the Kanrin Maru rapidly drew ahead of the Flora, whose light still was occasionally visible during the night.

Though the ship was making the latter part of the voyage in good time, the situation was still unpromising so far as the Japanese watch was concerned. Brooke wrote, "it was necessary to keep a constant lookout myself and to have our men on watch."

Brooke then resorted to an emergency step; he called all his men and sent them below with orders to do nothing without his consent. He then informed the captain that "he should not continue to take care of the vessel unless the officers would assist." This trick worked. "The captain gave them a lecture and put them under my orders, and I sent my watch on deck," Brooke recorded.

With a moderate breeze, the ship made pretty good speed, six to seven knots under all sails.

**The Eventful Voyage was nearing its end. The trip, which the Japanese had originally planned to make by themselves alone, had proved to be too much for them. They had had to depend entirely upon LT Brooke of the U.S. Navy and his men, whom they had regarded "just as passengers."

Brooke's men never tired of manning the ship against tremendous odds; they took the risks of furling the sails alone when the ship was hit by a heavy gale and all Japanese hands were seasick, and they never had any trouble with the Japanese crew in working together.**

The Japanese had learned a lot; most important is the fact that without LT Brooke and his men, the venture would have been impossible. They asked Brooke to arrange for eight of his men to accompany the ship back to Japan. Of this request, "Cole and Smedborg wish to go," Brooke recorded in his diary.

At dawn of March 17, a dim mountain top came in sight across the great distance toward the east through the morning mist. "That's California," the Japanese spoke among themselves. It was a big moment to all of them, for they had crossed the stormy North Pacific for 37 days finally to reach there. They had come at last as the first Japanese warship crossing the Pacific.

Kanrin Maru switched on its steam from 8 a.m. to approach San Francisco. A Sun flag, the Japanese national flag, was proudly hoisted on the gaff and the pennant atop of the mainmast. In addition, the house flag of Admiral Kimura was fluttering on the jib boom.

At that time, the ensign of the rising sun, which later became the symbol of the imperial Japanese Navy, had not yet been adopted. After picking up a pilot, the weather-battered corvette entered into the bay entrance. When the Stars and Stripes atop a battery on the island was moved up and down to welcome her, the Sun flag of the Kanrin Maru was moved up and down three times to return the salute.

A short while after 1 p.m. the Kanrin Maru dropped anchor several hundred meters off the Vallejo St. Wharf. The historic voyage was concluded.

On that date, no ceremonies were conducted. Brooke took three officers and Manjiro with him to the shore to report the arrival of the ship. Many people crowded on the shore to see the strange ship from the Far East. A shore leave was also granted to sailors.

But that was the only day Admiral Kimura and his officers and men would have a quiet time in San Francisco. From the following day, they had to exchange an official visit with President Teschmacher of San Francisco, the Governor of California and various Army and Navy commands. Contrary to their lonely departure from Uraga port a little more than five weeks before, they were given a gala welcome by all the city.

**ROUGH GOING—Kanrin Maru forges ahead through rough Pacific seas as Japanese make first ocean voyage.**
The Japanese were far more than just strangers. They had come straight from a land more than two centuries behind the United States. Everything they saw was strange, amazing, startling and wonderful to them. So were they to the citizens of San Francisco, who were seeing people from the long-isolated, mysterious country for the first time. What the Japanese thought of the American people and their customs, and vice versa, is an interesting subject, but it must be left for another tale.

One of the things which Katsu felt concerned most after their arrival in San Francisco was how to repair the storm-hit Kanrin Maru. As it was agreed that the Mare Island naval yard would take care of her repairing, the corvette steamed out of port on March 23 and arrived at the yard on the afternoon of the same day. Brooke and Kern were on board the ship.

The repairing work at the yard was a big surprise to the Japanese crew. When the ship was put into a floating dock and the dock was floated, some described the scene as that "the dock was lifted up by some floating instrument and the ship came out of the water as if she were on land." There was no dock whatsoever in Japan at that time. When the Kanrin Maru had been given dock repairs in June of the preceding year, she had been put in the stream mouth at Uraga, which was then pumped dry.

The repair work on Kanrin Maru was very extensive; the main and foremasts were replaced; most of the sails newly procured, leaking planks replaced, and gears and engines checked or overhauled. New paint was applied throughout the ship.

The U.S. Navy did everything possible not only in repairing the first Japanese warship visiting the United States, but also in helping the Japanese learn. A three-storied brick building standing next to the Governor's residence was provided for officers' lodging and a two-storied house for sailors and others.

The Japanese were given full-hearted hospitality by the American naval officers and others, who invited them to their homes and took them to the blossoming-spring outskirts of the yard. On Sunday some were taken to church.

The most exciting moment for the crew during the repair period came when the Powhatan arrived in San Francisco on March 29 and the two Japanese groups were reunited on the following day.

Kimura records that "Shimmi, Muragaki, Oguri and others came to my billet to have a chat. Oguri and Mori stayed the night. I treated them by offering a bath and foreign liquor." Over 60 persons in the suite of Shimmi and Muragaki stayed the night on the island to talk about their experiences.

Kimura and Katsu were especially impressed by the sincerity of CAPT MacDougall of the yard in taking care of the repairing business of their ships. "The captain never tired, directing workers from 7 a.m. to 6 p.m. every day," Katsu wrote. "He was the very man who had most to do with the completion of the repairing work." Katsu also wrote: "Even when I told him he didn't need to tell me every detail of the repairing, he told me it was only because he believed that the captain of a ship should know every detail of his ship. Otherwise, how could he steer the ship in the event of danger? I was very much impressed by him."

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April 2 was the day when Kimura and others were to miss LT Brooke, to whom they owed so much in their reckless venture of crossing the Pacific. He and his men, except some who had agreed to accompany the return trip of Kanrin Maru, were going to take a mailboat from San Francisco soon.

Several days earlier, Admiral Kimura invited Brooke to his cabin and offered him as many gold coins as he pleased from his private treasure boxes. Brooke refused to accept, however. Kimura's offer must have stemmed from his deep appreciation for Brooke's full-hearted cooperation with the Japanese which had made his risky mission successful.

Kimura had also been worrying about how to pay the repair expenses on Kanrin Maru for some time. The Japanese did not yet know the credit system at all. To his inquiry about that, Kimura was handed a letter from Admiral Cunningham on April 24 to the effect that "the expenses of repairing the Kanrin Maru are requested to be held pending until further notice, since it is considered to be a present from the United States President to the Emperor of Japan." But even this answer hardly eased Kimura's worry.

After five weeks' hard work, Kanrin Maru looked like an entirely new ship. The Japanese crew was satisfied and pleased.

On the morning of May 8, Kanrin Maru steamed out of San Francisco for the return trip through Honolulu. Five American navymen accompanied the ship. After exchanging a gun salute with the island fort in the bay, the ship entered the Pacific and set her course at SSW under the new sails, favored with the northwesterly wind.

On June 22, after a 26-day-long uneventful trip from Honolulu, the Kanrin Maru entered Uraga and dropped anchor. The first Japanese attempt to cross the Pacific, over four months' long, was over.
At all hands, as it does all over the Navy, Seavey-Shorve takes its toll—and in mid-July the bell tolled for Chief Journalist H. George Baker, a news desk mainstay since June 1956.

George is now applying his nose for news, and his furious energy to the cause of good reporting as a feature writer for "Stars and Stripes," European Edition. He operates out of "Sand's" headquarters in Darmstadt, Germany, but will no doubt be clattering all over Europe in search of Navy news items. If you should run into him, do it gently—physically, as well as artistically, George left a large pair of shoes to fill.

Fortunately for us, Baker's relief comes equipped to walk a mighty wide path himself—in the writing field, that is.

Returned for a second stint as an All Hands staffer is Master Chief Journalist William J. Miller. During his first tour here (1951-1953), Bill was still a Chief Quartermaster, USN. Since then he's served aboard the attack cargo ship USS Alshain (AKA 55); at the Naval Support Activity, Naples, and on the staff of ComSubLant. Along the way he converted to Chief Journalist in 1955, and became his rating's only E-9 in 1958.

A former gold medalist in the enlisted essay contest conducted by the Naval Institute, Bill has also applied the knowledge gained over 21-plus years of naval service (more than 13 of them sea-going) to contributing about 35 percent of the work involved in the two latest editions of the (1957 and 1960) Bluejackets' Manual.

You'll be reading features with Bill Miller's byline frequently in upcoming issues, and we're sure you'll look forward to them as much as we do.

It just goes to show that it frequently takes a crisis to bring out an individual's true worth. Consider, for example, the crisis faced by Roger L. Mort, SN, of Key West, Fla. Mort, who just happens to be attached to the public information office, was dispatched to a ship which shall be nameless to deliver a message to one of the ship's officers.

After giving a sharp salute to the ship's ensign and the OD, he was given permission to come aboard—just as it says in the books. What happened next was not to be found in any book, however. A PO2 immediately took over and told him to snap to and stand at attention in the ranks. Unknown to Mort, he had arrived about five seconds before a commodore's inspection. He took his place just in time to be reviewed by the commodore as he passed down the line.

How did Mort make out? 4.0, of course.

Periscope tells us of the reception received by the numerous new hands assigned to vss Pomoden (SS 486) to replace those sent to new construction and the FBM program. As they reported aboard, they were greeted with this message: "We're sure that you'll enjoy your tour aboard Pomoden. If you have taken time to read this, you're two months behind in your qualifications. Get busy."

Now, if you've gotten this far, will you kindly pass this issue on to the next man on the list.

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 abroad. In the event of a crisis, control of the sea is a tool that can be used to maintain the nation's freedom of action and to provide a platform for the application of land and air power to support the nation's political and military objectives.

We Serve with Honor

Tradition, valor, and duty are the Navy's heritage from the past. To these may be added dedication, discipline and control to provide the watchwords of the present and future. At home or at distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities are ours; our obligations are ours. As a result, the Navy is a special privilege.

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 best advantage for the maintenance of peace and for victory in war. Mobility, surprise, flexibility and offensive power are the keynotes of the new Navy. The Navy's success 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 Information Bulletin, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The Bureau invites requests for additional copies as necessary to cover the basic directives. This magazine is intended for all hands and commanding officers. Officers should take steps to assure that copies are available.

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Remittances should be made to the Superintendent of Documents. Subscriptions are accepted for one, two or three years.

* AT RIGHT: SEEING THE WORLD—Navymen from aircraft carrier USS Franklin D. Roosevelt (CVA 42) snap photos of the Eiffel Tower while on liberty in Paris, a "must" on every Navyman's list.
man of
RESPONSIBILITY