TABLE OF CONTENTS

Special in this issue—Ships and Yards: Page
Ship's Service—By the Yard ........................................ 2
How Ships Speak: Talking Arrows ................................ 9
This Yard Is Older Than the Navy .................................. 10
New Construction: What's Coming and Going? ................ 12
Heading for Port ....................................................... 15
A Ship Is Born: 'USS Ranger' ....................................... 16
VP Squadron's VIP ..................................................... 23
Yard Talk: Styles, Trends and Ship News ......................... 24
Shipboard Surgery ..................................................... 29
They're Bigger and Better—Anchors Aweigh ..................... 30
Letters to the Editor ................................................... 32
Navyman Renders Passing Honors to a Great Ship and her Crew: USS Arizona .......... 33
Today's Navy ............................................................ 36
Little Army-Navy Game Sparks Drive Throughout Nation for Memorial Stadium .......... 39
Winners in Golf, Tennis and Baseball .............................. 40
Servicescope: News of Other Services ............................. 44
The Word ................................................................. 46
Bulletin Board .......................................................... 48
How You and Your Family Travel by MATS ...................... 48
Regulations on Wearing of Large Medals .......................... 49
Requirements for WOs Selected for Promotion ................... 50
Directives in Brief ..................................................... 52
Roundup on Sources of Information for the Career Navyman .......... 54
Decorations and Awards ............................................... 57
Book Reviews .......................................................... 58
Special Supplement: For International Defense Report on NATO and SACLANT .......... 59
Taffrail Talk ............................................................. 64

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

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

FRONT COVER: GETTING UP IN THE WORLD — With liberty in mind, Frank Ortiz, SN, climbs up 3"-gun director while USS Murrelet (MSF 372) is moored at Long Beach Naval Shipyard.

AT LEFT: SKY HOOK — Looks as if USS Worcester (CL 144) expects big lift during upkeep period at Long Beach Naval Shipyard while other ships are in for more extensive yardwork.

CREDITS: All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.
On the morning of 19 Mar 1945, USS Franklin (CVA 13) was operating with the Fast Carrier Task Force in the air strike against remnants of the Japanese fleet sighted in the Inland Sea. Many of her planes were still on deck, loaded with bombs, rockets and machine-gun ammunition, ready to take off. Suddenly a Japanese dive-bomber streaked down out of the clouds. Pulling out of his dive at low altitude, he released two armor-piercing 500-pound bombs. Both scored hits. One detonated beneath the flight deck on which the planes were spotted ready for takeoff. The second went on to the hangar deck, where other planes, fueled and armed, were waiting to be taken to the flight deck. Many major explosions followed.

BIG JOBS—Bow from Hornet moves across NYNSY to repair USS Wasp (left) Below Right: USS Franklin (CVA 13) before she was made to look shipshape.
the first blasts. Large bombs exploded and threw men and planes the length of the ship. Smaller bombs, rockets and machinegun ammunition killed dozens of men who had survived the first explosions. Many tons of bombs and ammunition exploded aboard the carrier and the resulting fires were fed by thousands of gallons of aviation gasoline.

The whole after end of the carrier's flight deck had become a mass of flames and smoke. Airplanes disintegrated, as did their pilots and crewmen. Aviation gas poured over the sides of the hangar deck like a blazing Niagara. Bombs, rockets, bullets, splinters of wood and steel fell all around survivors who hugged the decks for safety. Casualties: 341 killed; 431 missing; more than 300 wounded.

What does this have to do with a story on shipyards?

Plenty. Franklin struggled home-wards (under her own power), entered New York Naval Shipyard. Shipyard experts looked at her bucked steel plates, the torn masts, the broken decks—and took over.

At the New York Naval Shipyard all her armament was replaced, 80 per cent of her superstructure rebuilt, the entire ship rewired, and Franklin was ready to serve again.

Here's another example:

In an attack by a German submarine in the Mediterranean a year earlier, uss Menges (DE 320) took two torpedoes that blasted off the after third of the ship. In another action, uss Holder (DDE 819) was struck amidships by an aircraft torpedo, wrecking two enginerooms and surrounding compartments.

Towed to the New York Naval Shipyard, remnants of Menges and Holder were placed side by side. Supported by special cradles, the two vessels were cut, skids were greased, and with the aid of powerful cranes and hydraulic jacks, a 94-foot section of Holder was slipped into position astern Menges. When the keels of the two ships were aligned, there was a difference of no more than one and one-half inches. This slight correction made, the two parts were welded together. A new Menges, so called because the major portion of the hull belonged to that ship, was then ready for service. The same kind of job was done later on uss Wasp (CVA 18) and uss Ernest G. Small (DD 838), the latter a victim of a mine in Korean waters.

These incidents demonstrate the versatility and competence of the typical Navy Shipyard. They also serve to point out the vast distances the shipyards of the Navy have traveled since their establishment in 1800.

At that time, there were only three yards under control of the Navy. Two of these, Portsmouth and Boston, have since grown into industrial giants. The third, at Washington, D. C., later became famous as the Naval Gun Factory. In 1801, three more shipyards, New York, Norfolk and Philadelphia, were added to the list.
It wasn't until more than 50 years later, in 1854, that the Navy began to repair its ships on the West Coast. First to be created was a shipyard at Mare Island, Calif., and an additional yard was later established in 1891 at Puget Sound, Wash., to help handle repairs.

The basic problem—the transition of ships from one technological development to another—faced by the early shipyards is the same as that of today. Except in times of emergency, repairs and maintenance are routine chores.

As naval ships evolved from sailing sloops to the modern nuclear powered vessels, the shipyards have had to maintain their facilities at a comparable level. Then, as today, new types of machinery, trained technicians, adequate docking facilities and a more complex system of paper work were needed to meet the challenge of changing times and methods.

One of the earlier and more impressive feats accomplished in this transition of ships took place at the New York Shipyard during the Civil War. The Union forces needed armed ships to maintain the naval blockade. There wasn't time to build ships, so passenger and mercantile ships had to be converted. The handling of the steamship Monticello provides a convenient illustration. Placed in drydock in New York, she was stripped of all her plush drapes and velvet fineries. In their place armament was installed. With every available man on the job, Monticello was ready to leave the yard 24 hours after she arrived. This was early Navy transition.

Ninety-two years later, this same shipyard was faced with another transitional period. This time, the problem was not the conversion of blockading vessels, but the modernization of the aircraft carrier.

First of the carriers to receive the angled deck was USS Antietam (CVS 36). Installation of the new fangled angle deck created several problems. The flight deck had to be installed at an angle of ten and one-half degrees to the center line. In addition, complex calculations had to be made so that the landing area would be precisely 525 feet long with a width at the landing ramp of 70 feet, narrowing down to 32 feet, eight inches at the extreme forward end. Also, new types of equipment had to be installed to ease landing and take-off operations.

During her trials, Antietam demonstrated that the many hours spent on the alignment of her flight deck had paid. Now, the Navy knew it could adopt its World War II carriers to the jet age.

New York wasn't the only shipyard to be challenged by the carrier problem. San Francisco and Puget Sound went through the same experience. At San Francisco, USS Bon Homme Richard (CV 31) was one of the first to receive the new look. Here, the big problem was the alignment of her steam catapult. It was found that the trueness of the catapult trough varied with the time of day, temperature and the movement of the ship. To minimize distortion, it was installed during the cooler hours of the night.

At Puget Sound, where USS Shangri La (CVA 38) was converted, the elimination of the centerline elevator required a new type, so PSNS designed and fabricated...
the Navy's first all-welded aluminum deck-edge elevator. Its use saved approximately 31,000 pounds of weight as compared to the earlier steel elevator. The aluminum elevator was larger and its capacity was increased from 46,000 to 57,000 pounds.

What is a shipyard? It has been aptly, if somewhat informally summed up by a Norfolk shipyard worker: "A shipyard works something like an oversized garage for ships. It does everything from repairs to major changes or alterations." (Naval Shipyards have built ships completely from scratch, of course, particularly in wartime, when private shipyards have been pushed beyond their capacity. For the job done by America's private shipbuilders, see the Ranger story, page 16).

One of the biggest (in more ways than one) assets to these "oversized garages" is the drydock. There's hardly a ship afloat that has not made a routine visit to a drydock for upkeep. In spite of the many changes made to the rest of the shipyard through the years, the drydock has remained essentially the same. They may have grown in size, but their functions have not altered.

Before the introduction of the drydock, underwater portions of a ship were cleansed or repaired by listing first one side of the ship, then the other, out of the water (called "careening"). It was a difficult and precarious job; never completely satisfactory.

The first "drydock" was built at the Naval Gun Factory, Washington, D.C., in 1822 on the same principle as our present-day marine railway. To demonstrate its usefulness, its inventor, Commodore John Rogers, usn, used the 1725-ton frigate Potomac as his model. It took 150 men to haul the vessel, by sweat and muscle, out of the water and up the inclined plane into the drydock. Their rate of pull during the haul-and-tug phase was four feet a minute. This experimental model is still in use today.

From that time on, the drydock has been a permanent fixture in every shipyard. Its use has made possible the repair of ships apparently beyond the point of recovery.

One of the truly big jobs handled by drydocks was in 1958 at the San Francisco Shipyard, which dry-docked 23 ships of the Great White Fleet in 28 days. This is claimed to be a record which still stands today for single dockings.

During the 7 Dec 1941 raid on Pearl Harbor, Drydock No. 1 was under heavy attack. It was in this drydock that uss Pennsylvania (BB 38) and the destroyers uss Cassin (DD 372) and Downes (DD 375) were resting at the time. The drydock itself was only partially damaged but was put out of service temporarily because of the wreckage of the damaged ships. This left but one drydock in the area to handle the tremendous repair job facing the Navy.

It was in this situation that another phase of shipyard work—salvage—came to the fore. Opera-
greatest repair jobs in modern history.

As they were made reasonably seaworthy, some of the ships found their way to Puget Sound and Mare Island for completion of repairs. Others received the finishing touches at Pearl Harbor.

Throughout World War II, the shipyards shattered one record after another. New York, for example, completed repairs of one kind or another to some 5,000 ships, while converting approximately 280 others; San Francisco drydocked 661 ships for overhaul, serviced 209 others; during the 44 months of fighting, Puget Sound provided repairs for 344 warships, including 18 battle-damaged carriers. Similar jobs were handled by the Boston, Norfolk, Portsmouth, Philadelphia, Charleston, Long Beach and Pearl Harbor yards.

Naval shipyards are big operations, and it is easy to see why. The Norfolk Naval Shipyard in Portsmouth, Va., for example, covers 811 acres of land, has 30 miles of paved streets, 426 buildings, 44 miles of railroad track, nine locomotives, 254 cars, 350 cranes and derricks, two shipbuilding ways, seven drydocks, and is capable of drydock ing and rendering complete service to the world's largest ships. An 8.5 million-dollar electronics building, begun in 1953, was dedicated 24 Aug 1956.

This shipyard is typical of the other 10 shipyards. It is in their shops where they have the equipment, the manpower and the skill which enable them to ready your ship for sea.

Any discussion of shipyards cannot be made without reference to the use of cranes, more specifically to "Herman the German" (YD 171), now at Long Beach, Calif., and claimed to be the largest floating crane in operation today.

Herman is a big boy. He stands 374 feet tall and, when he stretches his muscles, can lift 385 tons. A prize of war, he was used by Germany in the Baltic Sea during World War II. He survived several bombings by the Allies and, during one raid, his 200-ton pendulum was demolished.

After the war, when it was decided to ship the huge crane to the United States, it was necessary to dismantle it and ship the sections to the West Coast. It took 96 days to tow the crane's pontoon across the Atlantic, through the Panama Canal and up the coast of California to Long Beach.

Another "impossible" feat was undertaken when USS Yorktown (CV 5) limped into Pearl Harbor 27 May 1942. It was estimated that the job of repairing her would take 90 days. But the workers of Pearl had other ideas of how long it would take to get her back to sea. The flat-top had barely secured her lines to the dock when 1,400 workers swarmed aboard. Within 45 hours they had readied the "Lady" for action. To make the job a little more difficult, they did
it without the aid of blueprints or plans of any kind.

But that was a wartime emergency. In most cases, repairs cannot be done in a matter of days or weeks. The planning, assembling of job orders and "Shipalts," the meetings and decisions, sometimes require many months. If you are in charge of equipment which breaks down and the ship's force can't fix it, then that particular phase of routine overhaul starts with you. Yours is but one of the many jobs that wind up on the ship's work request priority list.

"Routine overhaul," (actually it's called "regularly scheduled overhaul,"") is a key term at every naval shipyard. Most of the ships you see in any yard are in various stages of a routine overhaul. Overhauls are given every 18 months for some type ships, every 26 months for others, in-between for still others. The overhaul serves as a ship's reconditioning period. All the hull, electronics, ordnance, machinery and other type gear are repaired, reconditioned or replaced so that when your ship leaves the yard she is ready for any assignment. What's more, she is modernized—some of the latest equipment has been added.

Shipyard experts say that the success of an overhaul depends on two main factors: the degree of cooperation between the ship's force and the yard workmen, and the completeness of the ship's work request priority list. This list is just what it sounds like—a list of requests from your commanding officer to the yard to have certain work done. It's like the instructions you give the mechanic when you take your car around the corner to a filling station for a grease job and check-up.

To help compile this list when the time comes for overhaul, your CO asks all department heads to keep a running list of items that need repair. This they do on what is known as CSMP cards. Current Ship's Maintenance Project cards are kept on every item of shipboard gear.

Next, the work request lists from the various departments are assembled into one master list for the ship, a list on which the CO assigns priority to each request showing the order in which the jobs are to be undertaken. About 90 days before the overhaul date, your CO starts the ball rolling by submitting the master list to his type commander and to the scheduled naval shipyard.

Officers, on the staff of the type commander, screen your ship's work request list to determine which items will be accomplished by the shipyard and which will be done at some later date by a tender or repair ship. They also determine which items will be undertaken by the ship's force and which items—for various reasons—cannot be approved. In addition, the shipyard is granted an allotment of money from the type commander's repair funds to cover the work authorized. About 30 to 45 days before the start of the overhaul, the type commander's report reaches the yard. The yard is

PROPPED UP—Navy yard workers replace ship's screw while she rests high and dry in dock during overhaul.
ON THE BOTTOM—Hull section of ship under repairs is swung into place to rest on keel blocks on bottom of drydock as yard workers line up sections. then ready for its own advance planning.

Shipyard planners and estimators go over your ship's work requests to determine what replacement parts and other material will be needed. Orders go out for the yard's Supply Department to obtain the needed parts. For parts it doesn't have at its finger tips, the Supply Department must go to a Naval Supply Center or direct to the manufacturer. This is where the little details in your work requests pay off. They tell the yard exactly how much of what to order.

While such parts are being located and assembled, other shipyard planners pore over various plans and instructions to determine the best way to tackle the trickier jobs. Next, they prepare "job orders" which tell the various shops of the yard what must be done to accomplish each job. Here, the question of funds arises. Estimates of costs are made to show how much of the repair funds will be needed for each job—and how many jobs can be undertaken within the funds granted.

All this is "upstairs work." It is vitally important paperwork that you, as a shipboard sailor, are probably little aware of. But it is advance planning like this that pays dividends in the form of a fast and thorough overhaul.

Shortly before your ship enters the yard, you'll notice certain signs. For example, provisions are allowed to run low and storerooms carry less than their usual amount. This is done to provide elbow room in the storerooms. Ammunition is re-
moved too—it would be dangerous to have it aboard during overhaul.

Your ship arrives at the shipyard and moors to the pier. By the time you get topside, steam lines, water lines, air lines and electric power lines have been run to the ship. This is usually the time when you mutter to yourself, "What a madhouse!"

Most of the ship's machinery is secured. The only machinery that is left running is that which will be tested or used for tests, or perhaps both. The brow is scarcely in place before shipyard planners, design draftsmen and shipworkers swarm on board to acquaint themselves firsthand with the numerous jobs to be undertaken.

To smooth the way for quick work, an arrival conference is held. In this conference, your ship's officers meet with shipyard planning officials. Work requests are discussed. Together they clinch what work will be undertaken and iron out vague points in requests.

After the arrival conference the ship becomes the baby of the yard's production department. It is up to this key department to complete the work within the time—and the funds—allotted. To see that this happens, a ship superintendent is assigned to your ship. He is a naval officer and he acts as liaison between your ship and the shipyard on all points of the overhaul.

Now workmen come aboard in a flood, each workman intent upon fulfilling some part of a job order. In the more advanced stages of an overhaul it is not unusual for a destroyer to have 350 or 400 shipyard workers on board at one time.

These skilled workmen represent a variety of yard shops ashore. Don't let that word "shop" fool you—some are gigantic. At the San Francisco yard, for example, one steel shop covers almost five acres. Constructed at a cost of $4,000,000 it can accommodate thousands of shipfitters, welders and boilermakers. The pride of this shop is the mightiest steel press west of Pittsburgh, Pa.

The many shops of a shipyard, along with the various office buildings, store houses and laboratories form its busy "back yard." There are buildings and shops galore at a typical shipyard. The New York yard, for example, has about 260, the Pearl Harbor yard has about 310 and the Norfolk yard, about 425. Some of these buildings, of course, are up in the "front yard," the waterfront area.

Some typical shops that will be called upon during your overhaul are: Paint Shop, Pattern Shop, Optical Shop, Machine Shop, Boat and Joiner Shop, Galvanizing Shop, Pipe and Cooper Shop, Shipwright (or Wood-Working) Shop and the Forge (or Foundry) Shop. This last named shop is often one of the yard's oldest and was probably known in former years as the Blacksmith's Shop.

Although the question of which came first, the chicken or the egg, remains unanswered, it is known that there can't be one without the other. So it is with ship, shipyards, bureaus and men. When it comes to repairs—you can't get much done without one helping the other.

—Thomas Wholey, JOC, USN
—Ned Goodwin, JO3, USN

ALL HANDS
How Ships Speak

Talking Arrows

Watching the dials go round and round and acting on the info they are continuously passing out is familiar duty for Navymen from bridge to engineroom. Almost every shipboard rating has its own set of dials to keep POs and strikers needled and their gear operating smoothly and safely. It doesn't take long for a sailor to become acquainted with the indicators in his division of the ship, but how much does he know about the complicated dial systems throughout the ship? Here are just a few needle jobs on board a destroyer-type ship. Before reading further, can you gauge what these destroyermen are checking out?

Top left: Throttleman tabulates the rpm readings to determine average shaft rpms for past hour. Top right: Steersman checks compass. Right: Oil, water, and fuel pressure are checked in main engineroom. Lower Right: Boiler technician in fireroom checks manometer gauge to record air pressure in boiler. Lower Left: Electrician's mate equalizes electrical load for diesel generator on main switchboard in engineroom.
This Yard Is Older Than the Navy

It sounds impossible but it’s true. Norfolk Naval Shipyard can claim to be not only the oldest Naval Shipyard in the United States, but also older than the Navy.

The yard was established in 1767 under the British flag on the banks of the Elizabeth river at Gosport, a small town that later became part of Portsmouth. Deep water, tall stands of timber and the many navigable waterways made it an ideal spot. At first the yard was little more than a careening ground with tar pots, timber sheds, and a saw pit for hand-sawing large timbers. Under private ownership the yard grew and prospered as the name of Gosport, borrowed from England, attracted many British ships. At the outbreak of the Revolution Virginia took title to the yard from the owner who fled to the British.

The old Gosport yard was the nucleus from which has grown, in the Hampton Roads area, the largest naval base in the world. It has felt the impact of nine wars, was burned three times and has flown six flags from its staff. During the Revolutionary War period, Gosport built ships for the Virginia Navy and was under this colonial flag until the first U.S. flag was flown. In 1779 the yard was invaded by British troops who burned it.

In 1794 the shipyard was leased from the state of Virginia by the U.S. government. After many delays the keel for the 33-gun frigate Chesapeake was laid and the ship launched in 1799. The federal government purchased the Gosport Shipyard in 1801. Squadrons under Commodores Dale, Truxtun, and Decatur were frequently serviced or fitted out here. Many of the ships that played an important part in our early Navy were built or reconstructed at Gosport.

When the British took Portsmouth during the War of 1812 the yard narrowly escaped capture. Seamen and Marines from the frigate Constellation reinforced the local defenders and defeated a landing attack at the Battle of Carney Island. Constellation had been prevented from sailing through the Capes from Washington by the British blockade but was able to be kedged into a position in the Elizabeth River to

NORFOLK played big part in WW II building and repairing ships. Here, USS Shangri La (CVA 38) is launched 1944. Below: USS Olympia in drydock 1902.
put her landing force ashore.

Between the War of 1812 and the Civil War Gosport Yard continued to grow, and in 1834 one of the country’s first two drydocks was completed. This dock is still in use today. The line-of-battle ship Delaware was built here and was first to use the dock. In 1862 the name Gosport was dropped and the yard became known as U.S. Navy Yard, Norfolk.

During the Civil War the Navy Yard was burned twice and was under three flags, Virginia, Confederate, and U.S. The steam frigate Merrimac which had been burned to the water line and sunk by the Union troops when they evacuated was converted by the South into the famed iron-clad CSS Virginia. While on trial runs near the Norfolk yard she engaged the Monitor in the famed battle.

As wood and canvas gave way to steel and steam the Navy Yard built two of the first ships of the then modern Navy. They were protected cruiser USS Raleigh and second class battleship USS Texas. Throughout the Spanish-American War the Navy Yard at Norfolk was busy converting and fitting out warships.

World War I brought another period of expansion that included three new drydocks as well as many new shop facilities. In addition to servicing the Fleet the yard built four destroyers.

The part played by the Norfolk Naval Shipyard in World War II through service to the U.S. Fleet and many ships of our allies brought about another period of expansion and production that surpassed any of the wildest dreams the old careening ground at Gosport could have imagined.

OCTOBER 1957
ON THE WAYS—USS Triton, SSR(N) 586, shapes up at ship builders. Photo shows sub as she was in early 1957.

NEW CONSTRUCTION

WHAT'S COMING &

You've been hearing a lot about all those Navy ships going into mothballs and, on top of this, of reductions in total manpower.

Sure, Navymen are always sorry to see their great ships leave the Fleet, and short-handed crews will groan over the personnel cuts.

But have you taken a look at the ships to come (see the box on the next page) and did you know that this year alone a group of 32 new construction ships will be delivered to the new Navy?

Of the 86 ships ordered to the mothball Fleet, all but two are of World War II vintage, and their total complement was 20,000 men. The replacement ships will carry about 10,700 men.

In mid-1957 the Fleet strength was approximately 970 vessels supported by 670,000 men, 70 per cent of whom were attached to Fleet commands. The first of the year will find the Fleet strength reduced to approximately 925 ships supported by 655,000 officers and enlisted personnel.

This readjustment in the Fleet structure has resulted in a "new look." The "ship of the line" of 20 years ago—the battleship—has been replaced by the Forrestal class aircraft carrier. The former Fletcher class and Gearing class destroyers that fought many battles in the Atlantic and Pacific during the war and then returned to fire thousands of rounds against North Korean targets, are being moved into the Mothball Fleet as 2800-ton Forrest Sherman class DDs arrive.

Frigates, guided missile cruisers and destroyers have found their way into the Fleet in company with nuclear-powered submarines, as the Navy adjusts to the march of time and progress.

The Fleet is in a constant state of turnover. Outdated vessels are replaced with warships fresh from the builder's yard. Others are converted for new missions while some are stricken from the Navy's list and scrapped.

Keeping a weather eye on the future, the Navy Department at the same time will be ordering new ships for future delivery. The Navy's 1958 Fiscal Year Shipbuilding Program calls for construction of three large and one small nuclear-powered submarine, a nuclear-powered carrier, seven guided missile frigates, five guided missile destroyers and one amphibious assault ship. The conversion program for the same

HEADED FOR THE MOTHBALL FLEET—1957 SHIP INACTIVATION SCHEDULE

<table>
<thead>
<tr>
<th>USS Iowa (BB 61)</th>
<th>USS New Jersey (BB 62)</th>
<th>USS Wisconsin (BB 64)</th>
<th>USS Badoeng Strait (CVE 116)</th>
<th>USS Smalley (DD 565)</th>
<th>USS Dorche (DD 670)</th>
<th>USS Hickax (DD 673)</th>
<th>USS Lewis Hancock (DD 675)</th>
<th>USS Charles J. Badger (DD 657)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USS Cross (DE 448)</td>
<td>USS Haas (DE 424)</td>
<td>USS John C. Butler (DE 539)</td>
<td>USS Grady (DE 445)</td>
<td>USS George A. Johnson (DE 583)</td>
<td>USS Thomas F. Nickel (DE 587)</td>
<td>USS Rombach (DE 364)</td>
<td>USS Weeden (DE 797)</td>
<td>USS Maurice J. Manual (DE 351)</td>
</tr>
<tr>
<td>USS Foss (DE 59)</td>
<td>USS William Seaverling (DE 441)</td>
<td>USS Bass (SSK 3)</td>
<td>USS Bonita (SSK 3)</td>
<td>USS Namokagon (AOG 53)</td>
<td>USS Lening (APD 55)</td>
<td>USS Rochambeau (APD 89)</td>
<td>USS Earle B. Hall (APD 107)</td>
<td>USS Lloyd (APD 63)</td>
</tr>
<tr>
<td>USS Burdo (APD 133)</td>
<td>USS Bassett (APD 73)</td>
<td>USS Weiss (APD 135)</td>
<td>USS Knudson (APD 101)</td>
<td>USS Telfair (APA 210)</td>
<td>USS Algal (AKA 54)</td>
<td>USS Tansey (AKA 93)</td>
<td>USS Warrick (AKA 89)</td>
<td>USS Whiteside (AKA 90)</td>
</tr>
<tr>
<td>USS Weeden (DE 90)</td>
<td>USS Uvalde (AKA 88)</td>
<td>USS Curtiss (AV 4)</td>
<td>USS Whitemarsh (LSD 8)</td>
<td>USS Ashland (LSD 1)</td>
<td>USS Orleans Parish (LST 1069)</td>
<td>USS Pender County (LST 1080)</td>
<td>USS Hampden County (LST 803)</td>
<td>USS Iron County (LST 840)</td>
</tr>
<tr>
<td>USS Yokon (SS 57)</td>
<td>USS Whitmarsh (LSD 8)</td>
<td>USS Whitemarsh (LSD 8)</td>
<td>USS Ashland (LSD 1)</td>
<td>USS Orleans Parish (LST 1069)</td>
<td>USS Pender County (LST 1080)</td>
<td>USS Hampden County (LST 803)</td>
<td>USS Iron County (LST 840)</td>
<td>USS Mineral County (LST 988)</td>
</tr>
<tr>
<td>USS Bennington (APD 49)</td>
<td>USS Annapolis (APD 48)</td>
<td>USS Orange County (LST 1068)</td>
<td>USS Ford County (LST 772)</td>
<td>USS Kent County (LST 855)</td>
<td>USS Hillsborough County (LST 827)</td>
<td>USS Lawrence County (LST 887)</td>
<td>USS Rial (MHC 37)</td>
<td>USS Owl (MHC 35)</td>
</tr>
<tr>
<td>USS Mayflower (APA 4)</td>
<td>USS Bataan (APA 215)</td>
<td>USS Swift (AOG 96)</td>
<td>USS Bataan (APA 215)</td>
<td>USS Donald (APA 96)</td>
<td>USS Gearing (APA 96)</td>
<td>USS Borodino (APA 96)</td>
<td>USS Dumas (APA 96)</td>
<td>USS Dumas (APA 96)</td>
</tr>
<tr>
<td>USS Buck (APA 215)</td>
<td>USS Holland (APA 215)</td>
<td>USS Gearing (APA 96)</td>
<td>USS Bataan (APA 215)</td>
<td>USS Donald (APA 96)</td>
<td>USS Gearing (APA 96)</td>
<td>USS Borodino (APA 96)</td>
<td>USS Dumas (APA 96)</td>
<td>USS Dumas (APA 96)</td>
</tr>
<tr>
<td>USS Bennington (APD 49)</td>
<td>USS Annapolis (APD 48)</td>
<td>USS Orange County (LST 1068)</td>
<td>USS Ford County (LST 772)</td>
<td>USS Kent County (LST 855)</td>
<td>USS Hillsborough County (LST 827)</td>
<td>USS Lawrence County (LST 887)</td>
<td>USS Rial (MHC 37)</td>
<td>USS Owl (MHC 35)</td>
</tr>
<tr>
<td>USS Mayflower (APA 4)</td>
<td>USS Bataan (APA 215)</td>
<td>USS Swift (AOG 96)</td>
<td>USS Bataan (APA 215)</td>
<td>USS Donald (APA 96)</td>
<td>USS Gearing (APA 96)</td>
<td>USS Borodino (APA 96)</td>
<td>USS Dumas (APA 96)</td>
<td>USS Dumas (APA 96)</td>
</tr>
</tbody>
</table>

FORALL HANDS
year includes the conversion of three cruisers for guided missile duties; reworking of seven Liberty ships, four for radar picket duty and three as surveying ships; and the continuation of conversion work started last year on the aircraft carrier USS Oriskany (CVA 34)—see page 24. All the ships included in the 1958 shipbuilding and conversion programs will be delivered before 1962.

The application of the “new look” to the Navy in 1957 resulted in the last of the battleships being ordered to turn its bow toward the inactive force.

USS Ranger (CVA 61), the largest warship afloat, joined her sisterships Forrestal (CVA 59) and Saratoga (CVA 60) in August, while the escort carrier USS Badoeng Strait (CVE 116) left the naval service early in the year.

Nine destroyers will have left the Fleet by 31 December along with 19 DEs, 24 mine craft, 26 amphibious ships, one seaplane tender, an AOG and two SSKs. The two submarines are USS Bass (SSK 2) and Bonita (SSK 3), both delivered in 1952.

Ships delivered or expected by the Navy before the end of the year include Ranger, the nuclear-powered submarine USS Seawolf, SS(N) 575, six destroyers, eight destroyer escorts, nine mine craft, one ammunition ship, six amphibious warfare ships and, returning to service after conversion work, is USS Albemarle (AV 5), Midway (CVA 41) sporting an angled deck conversion and four DEs converted for radar picket duties.

The years ahead hold equal promise for increasing the “new look” in the Fleet. In 1958, 42 new ships will be delivered along with six others that have completed conversion periods. The following year will see 40 new vessels added to the Navy rolls and six more conversions completed. The year 1960 has 22 new ships scheduled for completion and 1961 has two. Of course future shipbuilding programs will increase the deliveries scheduled in 1959, '60 and '61.

The new Fleet units acquired during 1957 and the ones which will be added between 1958 and 1960 are

<table>
<thead>
<tr>
<th>Type</th>
<th>1958</th>
<th>1959</th>
<th>1960</th>
<th>1961</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE Ammunition Ship</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CG(N) Nuclear Guided Missile Cruiser</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CVA Attack Aircraft Carrier</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>DD Destroyer</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>DDG Guided Missile Destroyer</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DE Escort Vessel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DLG Guided Missile Frigate</td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>LCU Utility Landing Craft</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>LST Tank Landing Ship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSC Minesweeper, Coastal (nonmagnetic)</td>
<td>4</td>
<td>17</td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>MSI Minesweeper, Inshore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MSO Minesweeper, Ocean (nonmagnetic)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>SS Submarine</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>SS(N) Nuclear Power Submarine (2310 tons)</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>SS(N) Nuclear Power Submarine (2850 tons)</td>
<td>1</td>
<td>1</td>
<td></td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>SSG Guided Missile Submarine</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>SSG(N) Nuclear Power Guided Missile Submarine</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SSR(N) Nuclear Power Radar Picket Submarine</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>YP Patrol Vessel</td>
<td>10</td>
<td>40</td>
<td>22</td>
<td>2</td>
<td>106</td>
</tr>
</tbody>
</table>

NOTE: In 1957 a total of 38 ships are scheduled to be delivered, of which 21 have already been received by the Navy as of 1 Aug 1957.* Delivery totals for 1960 and 61 will be increased as future shipbuilding programs are instituted.
the results of shipbuilding programs that extend back to Fiscal Year 1953 when 40 new ships were authorized. Eighteen new ships were in the program for 1956 and 31 for Fiscal Year 1957.

During these years, orders were placed for five of the Forrestal-type CVAs, a nuclear-powered cruiser, 18 destroyers, eight guided missile destroyers, 16 missile-equipped frigates, 16 DEs, four conventionally powered submarines including two missile boats, 14 atomic-powered subs including one missile and one picket type, 40 minecraft, 27 amphibious ships and 21 miscellaneous types.

These ships, coupled with those authorized for Fiscal Year 1958, will be the backbone of tomorrow’s Fleet. The Navy’s conversion program has also given additional punch to the Atlantic and Pacific Fleets. The converted former _Essex_- and _Midway_-class carriers are examples of the modification work being done as well as the guided missile cruisers _USS Boston_ (CAG 1) and _Canberra_ (CAG 2). Twelve of the former _Essex_-class carriers have received the angled deck modifications while another, _Oriskany_, is at present undergoing conversion. Two of the three _Midway_-class carriers have already completed their conversion yard period with the last one scheduled for completion in 1959.

In 1958 two of the converted _DER_ models, two _Talos_ missile-equipped light cruisers, a Fleet ballistic missile ship designated as a “miscellaneous auxiliary”, and an attack transport will leave the shipyards. Four more guided missile light cruisers, one with _Talos_ and three _Terriers_ will be added in ’59.

The future of the nuclear Fleet is bright. By 1961 the present nuclear-powered force of two submarines (_Nautilus_ and _Seawolf_) will have expanded into a force numbering 21. Included will be a nuclear-powered carrier, a nuclear cruiser, and 19 nuclear submarines. Many of the underwater craft will have missile-firing capabilities.

The Navy’s future in this atomic age was best summarized by Admiral Arleigh Burke, USN, Chief of Naval Operations, when he said, “Naval power with its tremendous combination of swift mobility, long range and concentrated firepower is an indispensable element in projecting and applying the total military strength of the United States anywhere in the world.

“These wonderful innovations—nuclear power, nuclear weapons, supersonic aircraft, guided missiles—are the harbingers of the Navy of the future. They hold the promise of the new Navy of fantastic power, range and mobility—a Navy which will prove equal to the greatest challenge the maritime world has ever faced. The future is limited only by our imagination and our zeal.”

—Bill Prosser, JOC, USN

### Joining the Fleet This Year — 1957 Ship Delivery Schedule

Note: This listing includes six ships completing conversion and 32 new construction hulls.

<table>
<thead>
<tr>
<th>Ship Type</th>
<th>1953</th>
<th>1954</th>
<th>1955</th>
<th>1956</th>
<th>1957</th>
<th>1958</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE Ammunition Ship</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>AF Store Ship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>CVA Attack Aircraft Carrier</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>CVA(N) Nuclear Power Aircraft Carrier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>CG(N) Nuclear Guided Missile Cruiser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DD Destroyer</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>DDG Guided Missile Destroyer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>DE Escort Vessel</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>DLE Guided Missile Frigate</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>DL Frigate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>MHC Minehunter, Coastal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>MSC Minesweeper, Coastal (nuclear)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>MSI Minesweeper, Inshore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MSO Minesweeper, Ocean (nuclear)</td>
<td>10</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>SS Submarine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SS(N) Nuclear Power Submarine</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>SSG(N) Nuclear Power Guided Missile Submarine</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SSG Guided Missile Submarine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SSR(N) Nuclear Power Radar Picket Submarine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>AKA Attack Cargo Ship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>LPH Amphibious Assault Ship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>LSD Dock Landing Ship</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>LST Tank Landing Ship</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>LCU Utility Landing Craft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>YRBM Submarine Repair, Berthing and Messing Barge</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>YP Patrol Vessel</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>40</td>
<td>18</td>
<td>34</td>
<td>43</td>
<td>31</td>
<td>18</td>
<td>184</td>
</tr>
</tbody>
</table>
Heading for Port

For those of you who would prove the old salty slogan, "Join the Navy and see the world," here is a group of photos of faraway places that should be easily recognizable.

Your ship has undoubtedly dropped anchor in more than one of these ports, if not all. The views might be a little different in some cases from that which you had while waiting for the liberty launch or while you looked out to sea from the high point of a sightseeing tour. Even so, they should start the liberty yarns spinning around the "joe" pot.

Those of you who have not yet been on a world cruise can get an idea of what it will be like to see some of the foreign ports.

Top: Whitehats prepare for liberty as carrier sits in harbor at Naples, Italy. Top right: Crew looks toward Sydney harbor bridge as ship approaches the Australian port. Right: Destroyers pause while Navymen enjoy liberty in the tiny land of Monaco. Lower right: Harbor at Victoria, Hong Kong, welcomes U.S. ships. Bottom: Busy port of Valencia is stopping-off point for good liberty.

—Charles Robertson.
A SHIP IS BORN — 'USS Ranger

MY NAME IS RANGER, U.S.S. Ranger (CVA 61) that is. I don't imagine many of you have met me yet because I'm pretty new. I shipped into the Navy in August at Portsmouth, Va., and I'm still feeling my way around, getting fitted out and taking part in local operations before the big shakedown cruise. I guess I'm still in boot camp so far as you are concerned.

You never heard a ship talk! We all do. We speak with the voice of our crew and in this case it's 2500 officers and men. They sure are a good group. Got a lot of spirit and I'm really picking up some of that esprit de corps I've heard so much about. This bunch brought me through the commissioning ceremony and into the Navy.

I was built at Newport News, Va., in a civilian yard (the Newport News Shipbuilding and Drydock Co.), the same place where they built my daddy, U.S.S. Ranger (CV 4). He was the Navy's first ship designed and built from the keel up as an aircraft carrier, but that's the only way I resemble him. I'm four times heavier and 200 feet longer. I can move faster over a greater distance and my planes and guns can do more damage when I arrive.

Maybe it's not for me to say, but I think I've got a lot of stuff. It took 5000 men three years to build me. They melted more than 2400 miles of welding rod into my seams to hold together the 53,000 tons of steel that form my hull and decks. They strung 290 miles of electric cables through my hull and drilled holes for 2300 telephone installations. And those riveters! I thought they would never stop pounding lumps on me. More than 200,000 before they had finished. But I lived through it, my headache is gone, and here I am, a United States Ship.

I sure was proud about all the nice things they said about me when I was commissioned. ADM Arleigh A. Burke, U.S.N., Chief of Naval Operations, called me the most powerful warship in the world and I guess I am at that. He should know.

My engines whip up more than 200,000 horsepower and, for a young boy my size, I can really move. The Navy is being modest when it admits I can exceed 30 knots—which, for a 60,000-ton ship, is pretty fast. In normal operations I will have a complement of more than 100 fighters and bombers, ranging from the A-3D Skywarrior heavy attack bomber to the supersonic F-8U Crusader.

THE COMMISSIONING activities were really something. But during the months leading up to the actual ceremony, I felt sorry for my crew. They started arriving last March and about 500 came over to the shipyard to serve as a nucleus crew. Others were scattered all over, going to school or working at various locations. They were going to indoctrinate the rest of the crew, so these officers and senior petty officers had to learn where everything was and what was being put into me so they could teach the rest.

I rather think they liked me from the start. Workmen were swarming all over the place welding, painting and putting on the finishing touches, but it was nice to see my own people. Made me feel that I was beginning to belong.

They went to work in an office building at the builder's yard, han-
own duties aboard the ship. It was a big job getting set up, but it went smoothly, thanks to the crew. As I said before, you couldn’t find a better group.

They are proud of being ordered to Ranger because I am the eighth ship to carry this distinguished name. The seven Rangers before me had served the Fleet well, but after completing their missions had gone the way of all ships. I suppose I will myself someday but that’s far in the future. I like to think of myself as a living monument to their achievements and to the growth of the Navy from the days of its birth to the atomic, supersonic, electronic organization of today.

I have quite a line of ancestors. My great, great, great, great, great grandfather sailed under the command of John Paul Jones. His appointment as skipper of my great (four more times) grandfather came on the same day that the Congress recognized the first flag of the United States. It was this flag, flying from the first Ranger’s rigging, that received the first salute rendered to this country by a foreign nation.

Sailing under this same flag, the 18-gun continental frigate (called, by some people a sloop) captured two prizes in 1777 and, in 1778, defeated the heavier gunned British sloop-of-war Drake in a pitched battle.

Next on the Ranger family tree came an armed schooner followed by a 14-gun brig. Ranger Number Four, a full rigged iron gunboat with auxiliary steam power, stayed on the Navy’s list from 1876 until 1940, which is something of a record in itself. It served as a school ship under the names Rockport and Nantucket from 1908 until stricken from the list. The fifth ship to bear the name was an anti-submarine vessel and number six was a minesweeper. Then along came my father and the father of our entire aircraft carrier force as we know it today, CV 4.

Yes, sir, that was a Ranger that ranged far and wide between 1934 and 1946. I hope I can do as well. The first landing on its deck was made by the late Fleet Admiral Ernest J. King, USN, then Chief of the Bureau of Aeronautics. CV 4 served for a time as a training vessel, but it was in 1943 that the most noted event of its career took place. Steaming into enemy waters off the coast of Norway, Ranger sent more than 40,000 tons of Nazi shipping to the bottom. This, only a short time after the Germans had reported CV 4 sunk.

During most of the war my father was the only aircraft carrier in the Atlantic. Ranger planes covered the initial assault at Casablanca and when work was completed in the European theatre, CV 4 joined the Pacific Fleet.

How did it all end? Well, the first American carrier to cross the Arctic Circle, the first carrier to have a jet-propelled plane landing and the carrier that logged the second greatest number of landings was sold for scrap. Yes sir, uss Ranger (CV 4) which came through World War II without being hit by a single bomb, torpedo or shell was finally beaten by time—but with missions completed.

My crew knew all this when they reported on board so they had a built-in pride and when I completed all my sea trials with flying colors they knew they had a good ship.

While I was still being completed most of the crew was learning the latest methods of doing things the Navy way. They went to damage control, ABC, fire fighting and a whole list of other Fleet training schools so they would know how to use my new equipment when they came on board.

Back at the office, plans were being made for commissioning day, the day when I would officially join the Navy. Kind of like being sworn in. An invitation list was made up,

DOWN TO THE SEA — Reasuring a stretch of super highway USS Ranger heads out to sea on trials to test her performance before joining the Navy.
guest speakers invited, bands arranged for and a flyover requested. Each member of my crew was allowed to invite as many guests as he desired so a big crowd was expected for the ceremony. But I'm getting ahead of my story.

You know they laid my keel in a drydock on 2 Aug 1954. When my shipmate the USS Forrestal (CVA 59) was launched they floated the completed portion of my hull into the dock she had vacated. I was christened and launched in September of 1956. That was the day I really became a ship. I was floating—and when the traditional bottle was smashed against my bow I was pulled into the stream. Everybody cheered and whistles blew.

TORCH SONG — Welders melted more than 2400 miles of welding rod into Ranger's seams to hold together 53,000 tons of steel that form hull and deck.

They moved me down to another dock where they added the final touches and then in July they said, "Ranger, we think you are ready. Now let's go to sea and find out."

A crew of 1600 shipyard workers (all civilians, you know), came aboard and prepared to take me out to sea. The day we left, about 225 members of the Navy crew came on board to observe the tests that I was about to run. This was called the Builder's Trials and it would last more than two days. The builders were going to put me through my paces to see if I had developed any flaws or if they had made any mistakes.

Well, I want you to know I worked during that short trip to sea. I hope my Navy crew didn't get ideas. They watched how fast I drank fuel oil at cruising and at full speeds. They made me dizzy turning in the tightest circle possible and jumped my turbines into full astern while going ahead at nearly top speed. Very nerve-ting-making. Then they checked everything else to make sure it was working right.

During these trials I began to develop cold chills in one part of my hull while other parts were burning up. An investigation showed that the work of the seven different air conditioning systems aboard was not coordinated. One unit was sending the temperature down in one area and not another. These units are capable of completely air conditioning two Empire State Buildings and so a lack of initial adjustment was understandable.

I developed a few more aches and pains during the voyage, but who wouldn't? It was my first time at sea and I had really been put

ALL HANDS
through my paces, but I did the family name proud. My prospective commanding officer said that I responded beautifully to the wheel. I think he was really satisfied and I know the builder was.

About this time people started comparing me with my shipmates Forrestal and Saratoga (CVA 60). I was longer than CVA 59 and about the same as Sara. Down below the water line I sported only two rudders, both weighing 45 tons. The other two ships in my family have three rudders (two of 45 tons and one smaller one). My island was changed from those worn by the others. I have only one mast and a slanted stack top, while they are flat across the top with two masts.

My weapon handling system is improved and my port elevator is made entirely of aluminum. That, by the way, is the world's largest welded aluminum structure. Weighs about 105 tons. Way down in my engineering spaces you will find new types of turbines. They run at higher pressure and temperature than those on Forrestal. They decrease my fuel consumption.

After we got back to my berth at Newport News they fixed up the minor ailments, including the air conditioning system, that I had incurred during the Builders Trials. A couple of weeks later the Navy's Board of Inspection and Survey arrived for the Navy Preliminary Acceptance Trials. I was going to sea again, this time for four days. These officers, each one an expert in his field, had to decide if I was ready for service with the Navy and to find the faults, if any, in my construction or equipment.

OCTOBER 1957

I still didn't have my permanent Navy crew when we went out for the acceptance trials, but I did the best I could. A crowd of harbor tugs pushed and pulled me away from the dock and into deep water. When I got underway down the channel a small force of Coast Guard patrol boats surrounded me, insisting that I received the proper respect due a ship of my ancestry and, on second thought, my size. Going down Thimble Shoals Channel I heard the pilot say that it was only 500 feet wide. I have a beam of 252 feet which looks good to an aviator, but doesn't leave much room for passing in a narrow channel.

The Coast Guard kept everybody out of my way and stopped traffic in the channel just as they did when I went out for my Builder's Trials. Once out to sea, I sighted my escort, the radar picket destroyer USS O'Hare (DDR 889), who stayed with me until the trials were over and I was safe back in port. She had been my escort during the earlier trials. One of my oldest Navy friends.

The board really put me through my paces and I don't think they missed a spot. Did you ever stand an inspection where the skipper looks up one side and down the other, peers into each seam and pocket and asks you questions about your work or the Navy? Well, that is just what happened to me. They crawled around in spaces I didn't even know I had and tried out every piece of equipment that had been installed.

Damage control officers looked over the fire fighting gear and pumped thick clouds of foam over the side. Medical officers checked the hospital and dental area before launching a sanitary inspection. Down in the fire room engineers kept a close watch on my boilers, turbines and the operation of every bit of associated gear.

My windlass screamed as the inspecting officers let my 30-ton anchors, suspended on chains with links weighing 360 pounds, roar out into 55 fathoms of water. As the brakes took hold to stop the rushing fountains of steel the whole forecastle strained and as the windlass began pulling the mass of metal back on board I thought my bow was going to rip off. On the bridge cold water from the window washing system poured over the tinted glass and was sprayed onto my paint work by the windshield wipers as they were turned on for testing. The hangar deck echoed with a loud rumble as the hangar division...
NAVY CREW on board for familiarization and training while their carrier was under construction. Below: Finishing touches are made to USS Ranger.

door was opened and closed and the refrigeration and scuttlebutt systems worked overtime as they came under the scrutiny of the Board.

DOWN IN THE ENGINE ROOM, full speed was rung up and for four hours I charged through the sea at top speed and then I was thrown into tight high-speed turns which twisted my hull, strained the frame members and caused me to roll 15 degrees.

And then it happened. Full astern was rung up. As the more than 200,000 horsepower was reversed I could feel every part in my turbines absorbing the blow. My propeller shafts screamed as the five-bladed props took a firm bite and began to stop my forward motion. It seemed like forever before they stopped the forward charge of my 60,000 tons, but according to the Board I made the crash stops and also the quick reversals in excellent time. I'm glad they liked it, but I hope they don't form a habit. It didn't cause any physical damage but my psyche will never be the same. With full astern indicated on the engineroom telegraph I went charging across the sea backward on an endurance run and then swung into more hard left and right maneuvers. The Board knew that I would never be faced with maneuvers such as this in normal operations, but they wanted to see if I had the necessary stuff for an emergency. I showed them I did.

The Board members observed the night lighting on the flight deck and watched the operation of the tailor shop, cobbler shop and Marine press shop equipment. All of my flight deck gear was checked including the four steam catapults, the arresting gear, bomb elevators and jet blast deflectors.

I tell you this, the Navy Acceptance Trials are the most complete physical that a ship can be given. When the Navy puts the stamp of acceptance on your hull, you are the best ship possible. The Board even got a chance to watch me in rough weather, not a hurricane, but plenty of rain, wind and wave action. Felt real good to meet the sea and those high waves didn't bother me.

WE HEADED BACK to port after completing the four days of sea trials 12 hours ahead of schedule. I understand that the Preliminary Acceptance Trials were highly successful—in fact they were so good that Secretary of the Navy Thomas S. Gates sent my builders a letter of congratulation.

When I returned to the civilian yard a few last minute details were taken care of and the discrepancies noted during the trials were repaired. It was about this time that supplies really began to arrive on board. I heard the Supply Officer talking to some magazine person one day and he said that we would have about $310,000 worth of general stores items aboard when commissioning day rolled around and that did not include clothing, provisions or ship's store goods. I understand that it included nearly

ALL HANDS
6000 items, with all but 300 loaded in quantities sufficient for two years. He called this "endurance loading" which would increase my combat readiness and provide a great dollar saving too. The Supply Officer said that a study had been made of the two-year supply usage data of other attack carriers to arrive at the selection of general store items that would be ordered for two years. In doing this the number of different items stored on me was reduced to about half of what you would find aboard one of my other type-ships. An example of this saving can be found in my many file cabinets. There you will find only one type and color of folder. Most other Navy ships carry five or six different types. The space saved by carrying only one, allowed them to load enough aboard for two years. Of course the stock will be replenished every quarter, but I'm ready for a long cruise to far-off waters any time. I've got plenty of file folders.

Having a supply system like this allows for "one stop shopping" instead of the complicated stub requisition system.

As I understand it, each department or division will have one petty officer designated as the supply P.O. He will find out what his division needs and go down to the supply room where he will tell the man his troubles. The supply clerk will fill out an invoice similar to those used by auto part distributors, get a signature and issue the needed equipment. I think that a system like this will stop hoarding because each department will know that the supplies will be available when needed. Also, all of the departmental supply spaces have been given to the Supply Department.

They saw to it that my library was well stocked with books. About 3800 volumes worth about $9000, were brought aboard. The Chaplains conducted their first services on the Sunday after commissioning. I was ready for my crew, now.

By early August the majority of my crew had arrived and about 110 officers had reported. The crew moved across Hampton Roads and occupied quarters on the ship in August. The first meal served from my galley was at noon on that day. It was a good feeling to have those men on board and I felt even closer to the Navy when I could hear the word being passed through the ship and feel the crew moving about.

I remained a "civilian ship" until the next day when the civilian crew backed me out of the Newport News berth and with an escort of tugs and Coast Guard boats, steamed me across Hampton Roads where Monitor and Merrimac fought, up the Elizabeth River and backed me into berth five at the Naval Shipyard. As I slipped into my spot alongside the pier I was within hailing distance of Forrestal. Her crew was out on deck to give me a welcome and to see what the newcomer to the Fleet looked like.

As my last line was doubled up and the civilian crew started ashore, the Commandant of the Fifth Naval District handed a letter to the builder's representative accepting the ship for the Navy. I didn't realize it then, but that piece of paper was worth about $180 million because that is what it cost to build and equip me. I was now the property of the Navy and was soon to be a commissioned member of the Fleet.

Those last 48 hours were rugged for my crew. During that period they had to execute the plans drawn up weeks before for the commissioning ceremony. Replies to the invita-
Carriers have been important in the Navy since these planes winged from deck of CV 4. Below: CVA 61 has single mast and slanted stack.

Situations indicated that thousands would attend. The crew was as anxious as I to put on a good show before ADM Burke and Secretary Gates, and ADM Arthur W. Radford, USN, (Ret.), then Chairman of the Joint Chiefs of Staff, who had accepted an invitation to be the guest speaker. (It was Mrs. Radford who christened me when I was launched.)

The speakers' platform was set up on my flight deck where the ceremony was going to be held, along with stands for newsreel and TV cameramen. As the hours slipped past, thousands of chairs were carried to my flight deck and placed in formation on my wide runways.

Boxes of programs had been brought aboard along with napkins, reception menus and match box covers, each one bearing my insigne. This emblem, which identifies me, has its roots buried deep in the heritage of the Ranger name.

Based on the insigne of CV 4, the emblem is basically a shield with the upper portion a field of blue holding seven gold stars. These stars are symbolic of the first seven ships to bear my name and also is the number of stars in the Commission Pennant. Diagonal red stripes cover the lower two thirds of the shield, surrounding a figure of the Revolutionary War Minuteman. Beneath the shield are the words "USS RANGER CVA 61" displayed on a ribbon of gold.

This is the insigne that I will be known by in future years of service.

After the nearly 8000 guests arrived and were seated, the official party took its place on the speakers stand in front of the island and the ceremony began. The Ensign, Union Jack, and Commissioning Pennant were hoisted with the playing of the National Anthem, the skipper assumed command of the ship and the watch was set. I was a commissioned member of the finest Navy in the world.

At the end of the ceremony Mrs. Radford presented my crew with two presents: a framed map of the world on which to log my voyages, and a painting showing the first Ranger receiving the first salute ever rendered to the flag of the United States.

It was during the ceremony that I first learned that I was going to join the Pacific Fleet next summer. I'll be the first ship of my class to steam with PacFlt and I'm sure that my added capabilities will strengthen the already fine carrier force operating there.

Well I just wanted to introduce myself and give you an idea of what happens before a ship is commissioned and all the work that the crew must do even before their ship is an official part of the Navy. But most of all I wanted to let you know that the traditions established by John Paul Jones on board the first Ranger will be continued on board this Ranger, the eighth United States warship to bear the name.

This is my story, as told to

—William Prosser, JOC, USN.

ALL HANDS
VP Squadron's VIP

Primarily a skilled machinist's mate, usually a petty officer and always a leader—the Navy patrol plane captain must be and is trusted by those who depend upon him.

From rocker box drain to hydraulic strut, from wing tank to tail turret, it's the plane captain's job to check the plane from bow to stern and see that its complicated equipment is functioning properly.

Several Navy squadrons of jet-boosted P2V-5F Neptune patrol planes based at Barber's Point Naval Air Station, Oahu, T. H., fly daily in the Hawaiian area. While based in this area these "VP" squadrons conduct training flights involving aerial reconnaissance, anti-submarine warfare and mining operations.

Of the enlisted crew members who assist the plane commander in forming a "flying team," the plane captain by the nature of his job stands closest to the skipper. For the plane commander knows that a "thumbs-up" from his plane captain means "take her up, sir!" He knows his aircraft is ready.

It's easy to reason why the Navy has established high qualifications for all prospective plane captains. For into his custody are placed the lives of his flying shipmates and an aircraft valued at over a million dollars.

Top: Whitehat works on No. '6' P2V-5F Neptune patrol plane before starting on mission. Center: Plane captain Jim Roark, AD1, USN, traces an oil leak near starboard engine during post-flight check. Bottom right: The plane commander, LT M. L. Claude, USN, establishes aircraft-to-ground radio contact, while Roark stands by at flight panel station where he has responsibility for maintaining and checking circuit breakers controlling electrical instruments. Bottom left: Jim must check and recheck every operational and structural part of the plane when it is on the deck.
The Big Three in the CVA force are the three 60,000-ton carriers **uss Forrestal (CVA 59)**, **Saratoga (CVA 60)** and the recently commissioned **Ranger (CVA 61)**. However, numerically, the backbone of the attack carrier force is a modernized version of the Essex carrier series that came through World War II without a loss.

Twelve of the ships are now fitted with the angled flight deck and streamlined bow. They have played host to the Navy's most modern jets in both Fleets. Included in the listing of those fitted with steam catapults are **uss Intrepid (CVA 11)**, **Ticonderoga (CVA 14)**, **Lexington (CVA 16)**, **Hancock (CVA 19)**, **Bom Homme Richard (CVA 31)** and **Shangri La (CVA 38)**.

Six other long and short hull Essex types have improved hydraulic catapults instead of the new steam models. The class ship, **uss Essex (CVA 9)**, heads this list of angled deck flattops which includes **Yorktown (CVA 10)**, **Hornet (CVA 12)**, **Randolph (CVA 15)**, **Bennington (CVA 20)** and **Kearsarge (CVA 33)**.

The entire nine-ship antisubmarine warfare support force is made up of Essex carriers, all veterans of thousands of miles of steaming. Included in the listing is **uss Boxer (CVS 21)** which has logged more than 79,000 landings, **Leyte (CVS 32)**, **Princeton (CVS 37)**, **Tarawa (CVS 40)**, **Valley Forge (CVS 45)** and **Philippine Sea (CVS 47)**. None of these axial (straight) deck carriers have received any of the modernizing touches such as those applied to **uss Antietam (CVS 36)** which received the first angled deck and hurricane bow, and **Wasp (CVS 18)** fitted with these same improve-
ments, or Lake Champlain (CVS 39) which had its original flight deck strengthened, and improved hydraulic catapults installed.

The future of these Essex-class carriers, some of which date to 1942 and ’43, has already been sealed. As new CVA types are commissioned (at present about one a year) they will slip into specialized assignments with the antisubmarine or amphibious forces. Some may go into the Reserve Fleet where they will stand by for future emergencies.

One new carrier joined the Fleet only last month, the 60,000-ton Ranger. The eighth ship to bear the name Ranger, she responded beautifully to the rudders as she went through her paces during builder and acceptance trials. Built at a cost of nearly $175 million, the new Ranger could hold three ships the size of the World War II Ranger (CV 4) side by side on her 232-foot wide flight deck. CV 4 had a beam of 80 feet.

With the commissioning of CVA 61 at the Norfolk Naval Shipyard, Portsmouth, Va., only three of the Forrestal class carriers are now under construction. They are Independence (CVA 62), Kitty Hawk (CVA 63) and Constellation (CVA 64). However, funds for a nuclear powered carrier have been requested in the fiscal year budget.

Forrestal has returned home after the first overseas deployment of this class of carrier. Some 65,000 visitors in 13 ports of call came aboard during her six-month tour with the Sixth Fleet. Carrying a force of A3D Skywarriors, F3H-2N Demons, FJ-3 Furies and prop driven AD Skyraiders, Forrestal steamed about 40,000 miles including trips into the Eastern Mediterranean.

Carrier Air Group One was embarked aboard the ship which served as flagship to RADM Murr E. Arnold, ComCarDiv Four.

Next assignment for CVA 59 and for Lake Champlain will be a restricted availability during the late summer and fall months. Both ships will occupy berths at the Norfolk Naval Shipyard.

Also in the yard is Shangri La, but it took the efforts of six Puget Sound Naval Shipyard tugs to move her into dry dock No. 4. Two of the
tugs guided the ship onto the keel blocks while four others pushed against a barge pressing on the stern. She is scheduled to spend four months in Puget Sound while being overhauled.

More than 6000 steaming hours logged since her last overhaul made the renewal of her superheaters necessary. Included in the revamping job on her eight boilers will be the installation of new fire brick and other work.

Saratoga has completed her first yard period since commissioning in 1956 and rejoined the Atlantic Fleet. Another large carrier, Midway, has had 284 miles of new cable installed during her recent conversion at the Bremerton Navy Yard. About 60 per cent of the new cable is of the unarmored type. Large power cable is the only application of armored types aboard CVA 41.

A four-month availability for Bennington will end in November after 70,000 working hours are expended making a total of 523 repairs and alterations to the ship. About 45 days will be spent in dry dock by CVA 20 in her first major yard period since 1954.

For two of the smaller types of carriers it was goodbye when the Colors, Union Jack and Commissioning Pennants of USS Badoeng Strait (CVE 116) and Saipan (CVL 48) were hauled down. Both were the last of their types, which played important roles in World War II. CVL 48 was the first carrier to operate with a squadron of jets in regular Fleet operations. She served in the Korean conflict; and twice took part

MORE ATOMIC POWER—Another nuclear powered submarine, USS Sargo, SS(N) 583, as she looked some time back. Sub is nearing her launching date.
in October to begin the voyage to the mothball fleet. Sister ships in the 45,000-ton class are uss Missouri (BB 63) and New Jersey (BB 62), both already in reserve.

From the cruiser forces comes word that uss Bremerton (CA 130) is in the Puget Sound Naval Shipyard for an overhaul. Commissioned in 1945 she served for a short time with LantFFt before reporting to the Pacific in 1946. Placed in reserve in 1948, CA 130 emerged in 1950 for duty with the Seventh Fleet.

New hull numbers have been assigned to six light cruisers now under conversion for missile duties. uss Galveston, former CL 93, will join the Fleet in early 1958 as CLG 3. Little Rock (CL 92) will be CLG 4 and Oklahoma City (CL 91) will be number 5. The three are being armed with the Talos missile. Torrter missiles are being placed on CLGs 6, 7 and 8. They are uss Providence, former CL 82, Springfield, ex-CL 66, and Topeka which carried the designation of CL 67 on active duty.

The heavy cruiser uss Saint Paul (CA 73) had welcome visitors on board for Sunday church services—the 949 and 951 will be commissioned with the names Providence, former CL 82, Springfield, ex-CL 66, and Topeka which carried the designation of CL 67 on active duty.

The girls next went to the hospital ship uss Haven (AF 12) where, it was reported, they caused gratifying therapeutic results. Never before, claimed their press agents, had so many bedridden patients suddenly become ambulatory.

Additional fire power has been added to the destroyer force with the commissioning of the 2800-ton uss Jonas Ingram (DD 938) and DuPont (DD 941). New automatic, rapid fire guns controlled by the latest in fire-control devices mark the ships as potent weapons. Available to the crew aboard the two ships will be the last word in submarine detection gear. Also packed into the 418-foot hulls are the latest habitability improvements designed to make the ships the most comfortable among destroyer types.

uss DuPont (DD 941) is the third ship to bear the name of RADM Samuel F. DuPont, a hero of the Mexican and Civil War. The first DuPont was a torpedo boat used to carry dispatches during the Spanish-American War. Sold in 1920, she was followed by one of the famous four stack DDs that carried the name into the North Atlantic during the war and earned the Presidential Unit Citation for her convoy escort assignments. Her designation changed to that of a miscellaneous auxiliary, DuPont was used as a target vessel for fledgling torpedo bomber pilots before being sold after the war.

uss Ingram (DD 938) also bears the name of a famous admiral, Medal of Honor holder and former CinC LantFFt, the late ADM Jonas H. Ingram, USN. He was cited for "distinguished conduct in battle" during the Vera Cruz, Mexico, engagement, 22 Apr 1914. He landed with the battalion from the battleship uss Arkansas (BB 33) and, during the second day of fighting, the service performed by him was eminent and conspicuous. He was specially commended in reports for his skillful and efficient handling of the battalion's artillery and machine guns. ADM Ingram died in 1952, but his name will again be carried into the Fleet by DD 938.

In other construction news, names have been assigned to four more of the 2800-ton DDs now being built. The 947 will become uss Somers, while 948 will be christened Morton. The 949 and 951 will be commissioned with the names Parsons and Turner Joy respectively. DD 950 will be Richard S. Edwards.

The keel for the future uss Mahan (DLG 11) has been laid at the San Francisco Naval Shipyard. She will be the first major combatant ship built at the West Coast industrial plant and will carry the surface-to-air Terrier missile as will nine sister ships. Mahan is the third ship to bear the name of the famed naval author RADM Alfred Thayer Mahan. Both of the earlier ships were DDs.

The Navy's first guided missile destroyer uss Gyatt has been assigned an appropriate hull number and designation. She is now DDG 1.

Other new additions to the Fleet include the 1300-ton escort vessels uss Evans (DE 1023), Hartley (DE 1059) and Joseph K. Taussig (DE 1058).
1030). **Bauer** (DE 1025) is scheduled for a late fall delivery to the Navy while **Bridget** (DE 1024) is being readied for an October commissioning. **Hooper**, DE 1026, is scheduled for commissioning in December. Only four of the anti-submarine search and attack warfare, scouting, convoy escort and antiaircraft defense ships will be left under construction.

This class of ship is 314 feet long, 37 feet across the beam and draws 18 feet of water. A low silhouette will make detection by submarines difficult, but her hull will permit high speeds in rough seas. Crew strength will be 11 officers and 159 enlisted.

**Evans** is already serving with Pacific Fleet Escort Squadron Three.

Other destroyer force items include the completion of a three-month overhaul period by the **Pillsbury** (DER 133). Overhauled at the Philadelphia Naval Shipyard, **Pillsbury** was one of three ships converted for radar picket duties there.

Five seasoned radar picket ships have arrived in the Pacific after duty on the Atlantic seaward extension of the Distant Early Warning Line. The new arrivals, which will be home-ported at Pearl Harbor, are **Strickland** (DER 333), **Harveson** (DER 316), **Brister** (DER 327), **Fossenden** (DER 142) and **Joyce** (DER 317).

**Wilkinson** (DL 5) has been assigned Long Beach, Calif., as its home port. She will be tactical flagship of ComDesFlot Three.

Transferred from DesDiv 601 to CortRon 12 is **Chester T. O’Brien** (DE 421) which is equipped with eight sonar booths to facilitate group training of students at the Fleet Sonar School, Key West, Fla. Cort-

**Evans** is already serving with Pacific Fleet Escort Squadron Three.

Other destroyer force items include the completion of a three-month overhaul period by the **Pillsbury** (DER 133). Overhauled at the Philadelphia Naval Shipyard, **Pillsbury** was one of three ships converted for radar picket duties there.

Five seasoned radar picket ships have arrived in the Pacific after duty on the Atlantic seaward extension of the Distant Early Warning Line. The new arrivals, which will be home-ported at Pearl Harbor, are **Strickland** (DER 333), **Harveson** (DER 316), **Brister** (DER 327), **Fossenden** (DER 142) and **Joyce** (DER 317).

**Wilkinson** (DL 5) has been assigned Long Beach, Calif., as its home port. She will be tactical flagship of ComDesFlot Three.

Transferred from DesDiv 601 to CortRon 12 is **Chester T. O’Brien** (DE 421) which is equipped with eight sonar booths to facilitate group training of students at the Fleet Sonar School, Key West, Fla. Cort-

**Evans** is already serving with Pacific Fleet Escort Squadron Three.

Other destroyer force items include the completion of a three-month overhaul period by the **Pillsbury** (DER 133). Overhauled at the Philadelphia Naval Shipyard, **Pillsbury** was one of three ships converted for radar picket duties there.

Five seasoned radar picket ships have arrived in the Pacific after duty on the Atlantic seaward extension of the Distant Early Warning Line. The new arrivals, which will be home-ported at Pearl Harbor, are **Strickland** (DER 333), **Harveson** (DER 316), **Brister** (DER 327), **Fossenden** (DER 142) and **Joyce** (DER 317).

**Wilkinson** (DL 5) has been assigned Long Beach, Calif., as its home port. She will be tactical flagship of ComDesFlot Three.

Transferred from DesDiv 601 to CortRon 12 is **Chester T. O’Brien** (DE 421) which is equipped with eight sonar booths to facilitate group training of students at the Fleet Sonar School, Key West, Fla. Cort-
SUB SEEKS SOUNDS—USS Baya (AGSS 318) sports removable sonar test tank used for underwater sound work.

Two other missile boats are on the way—Growler (SSG 577) due in mid-1959, and the nuclear powered Halibut, SSG(N) 587, which will be delivered in 1959. Funds for three additional nuclear powered guided missile submarines have been requested in the 1958 budget.

uss Nautilus, SS(N) 571, has returned to New London, Conn., after showing the Pacific Fleet her capabilities in operations off the coast of California.

uss Jallao, SS 368, has been termed the quietest boat in the Atlantic by a sound survey at the Submarine Base, New London.

A recent addition to the Silent Service is the recommissioned uss Aspro (SS 309). She rejoined the Pacific Fleet at the Mare Island Naval Shipyard. Built in 1943, she was decommissioned in late 1945, rejoined the Fleet in 1951 and was decommissioned again in 1953.

Boosting the striking power of the Pacific Fleet is Pearl Harbor-based SubDiv 91, consisting of uss Cusk (SS 348), Carbonero (SS 337) and Tunny (SSG 282). The three are fitted for the launching or guidance of the Regulus missile.

Another missile boat, Barbero, recently demonstrated her missile abilities to the officers and men of the Key West Submarine Force. In minutes after surfacing, her crew can roll out and launch a Regulus missile at targets hundreds of miles away and then disappear beneath the surface.

The 2310-ton, nuclear-driven Skate, SS(N) 578, has been launched at Groton, Conn. Smaller than Nautilus and Seawolf, SS(N) 575, Skate has one emergency diesel power plant and an improved atomic power unit. She is due to join the Fleet in 1958.

Sporting a new paint job and much new equipment, the submarine tender uss Nereus (AS 17) has returned to her San Diego, Calif., buoy after being overhauled at Hunter’s Point.

From the auxiliary types comes word that the seaplane tender uss Floyds Bay (AVP 40) has returned to North Island after a tour of duty in the Far East. Upkeep and leave will keep her occupied until transferred to Naval Air Station Whidbey Island near Seattle later this year.

The San Diego based attack transport uss Cavalier (APA 37) completed her overhaul period at Mare Island and has embarked on a training program before getting underway for the Far East late this year. Another transport, APA 248, now under construction, has been assigned the name Paul Revere.

Making her first appearance in the Pacific since commissioning last March is uss Monticello (LSD 35). Constructed at Pascagoula, Miss., LSD 35 conducted shakedown cruises in the Atlantic and Caribbean, then made the voyage from Boston to San Diego in 20 days.

In the Atlantic, uss Launcher (YV 2), the only drone aircraft control ship in LantFlt, is at the Norfolk Naval Shipyard for repairs. At Portsmouth, N.H., the oiler uss Neosho (AO 143) was drydocked and an experimental torpedo tube installed. After test firing for the Bureau of Ordnance, the tube was removed and the ship returned to regular operations.

On the Military Assistance Program scene, six warships were loaned to the Chinese Nationalist government. Five patrol craft and an LST are in the order which will replace over-age vessels now in use. The PCs were turned over to Chinese crews at Seattle, Wash., with the LST being delivered at Long Beach.

New ships are launched and commissioned, others conduct routine operations, and some are scrapped, but all in keeping with fulfilling the Navy’s mission of contributing directly to the defense of the U.S., supporting our foreign policy and maintaining control of the seas.

NEW SUB HUNTER—USS Evans (DE 1023) has joined the Pacific Fleet. Her new silhouette is not only sleek but helps prevent detection by submarines.
Shipboard Surgery

A highline transfer, two soup spoons and a Naval Reserve doctor on active duty for training played major roles in an emergency appendectomy at sea recently.

When James D. Maxwell, YNT2, was stricken with appendicitis on board a Reserve training ship, Uss Goss (DE 444), there was no doctor on board. Transferred by highline to Uss Rombach (DE 364), the yeoman was placed under the care of Capt L. A. White, MC, USNR, serving on AcDuTra.

The doctor quickly turned the wardroom into an operating room. With the aid of the cook and a shipfitter, two soup spoons were converted into prongs needed to hold the incision open. Two corpsmen—one a Rombach crewman, the other a Reservist on AcDuTra—acted as assistants. The operation was a success.

Reserve Corpsman (left) goes for a ride. Below: Patient and doctor look at jury-rig instruments.
EVEN BEFORE YOUR FIRST NAVY cruise, if you ever did any river or lake fishing, you realized the value of an anchor. Perhaps in those days your anchor was a rock attached to your boat with a piece of clothesline, but it did the job and kept your boat somewhere near your favorite fishing hole.

The Navy has to be a great deal more careful about the way it anchors and moors its ships, but the principle is still the same. A ship is anchored when it is held in place by a weight dropped to the bottom of the stream; it is moored when secured alongside a pier or to a mooring buoy, when it is swinging on a bight of a chain between two anchors in line, or when it is secured alongside a dock or another ship.

The collection of equipment used in connection with anchoring is called ground tackle. In many respects it is the most vital part of a ship's equipment. A ship's safety depends upon the design, construction, condition, management, and handling of this gear. The Navyman must know his ground tackle, understand its use, its limitations, and the many elements that enter into its effective operation. In fact, on board Navy ships the officer who is responsible for maintenance of this equipment keeps a complete history log of each piece.

Members of the ground tackle family have evolved out of a function necessitated by the anchor and its chain. Some of the gear which belongs to this family grabs and
pulls the chain up into the ship, stops the chain, releases the chain, holds the chain secure, provides smooth runways and openings for it to pass upon and provides storage for the chain when not in use.

Lower left: Anchor is examined while ship is in drydock. Top left: EMs look at anchor over side of ship. Top center: Whitehats battle salt corrosion under flight deck of carrier. Top right: This 60,000-pound anchor was made for USS Forrestal (CVA 59). Right center: A chain made of 360-pound links supports Forrestal's giant anchor. Lower right: Fathoms of anchor chain await paint job. Left center: Destroyermen work with anchor chain after mooring ship to buoy.

—Delbert Cass, SN, USN.
Submarine Nuclear Training

Sun: BuPers Inst. 1306.53A limits applications for submarine nuclear training to MMs, ENS, ETs, ENs, ICs, HMs (E-6 and E-7) who are qualified in submarines. Obviously, these aren't the only ratings needed in the crews of atomic submarines, so what about the others?

Could a submarine-qualified sonarman, for instance, be assigned to duty in a nuclear submarine without completing the Nuclear Power Training Program? Is there any way he could possibly get in on the nuclear training program even if he didn't have to complete it in order to get atomic sub duty? And, how would he apply for either the training program or duty in a nuclear sub?—J. C. S., SOC (SS) and O. R. P., SO1 (SS), USN.

• Yes, he could be assigned to nuclear-sub duty without completing the training program. And he might possibly get in on the training program if there weren't enough MMs, ENS, ETs, ENs, ICs and HMs available for it. However, there are plenty of men available in these ratings at present.

Except for the ratings listed in the instruction, applications for either nuclear submarine duty or nuclear power training are not being accepted now, since so few men in other ratings are needed. When they are, a call will go out for nominations by Submarine Force Commanders.

So, your best bet is to sit tight until the call goes out for men in your rating. Then, let your CO know that you'd like to be nominated.—Ed.

Awards for Eldorado

Sun: I would like to know what awards was Eldorado (AGC 11) earned between 6 Nov 1950 and 19 Oct 1953. I was a member of her crew during that period and have run into a disagreement with several other former crew members over this subject.—R. J. B., RM1, USN.

• Eldorado picked up quite a few awards for her Korean service. During the period you were on board she won the Korean Presidential Unit Citation, the Korean Service Medal and the United Nations Service Medal, plus, of course, the National Defense Service Medal.

Before the Korean fighting she did pretty well too. Commissioned 25 Aug 1944, she earned the first battle star on her Asiatic-Pacific Service Medal in February 1945 at Iwo Jima. There, she served as flagship of Commander Amphibious Forces, U. S. Pacific Fleet.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington, D. C. 25, D. C.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from bow here in all possible instances. Do not send postage or return envelopes. Sign full name and address.

Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington, 25, D. C.

Of the 2228 enemy planes that made the attacks, 1438 were destroyed—either by gunfire, combat air patrols or their own suicide tactics.

Between World War II and the Korean conflict, Eldorado went on to add the Navy Occupation and China Service Medals to her collection.

We know you didn't ask for all that information, but we figure a ship like yours deserves a plug once in awhile.—Ed.

Mines and Minemen

Sun: A friend of mine claims that the mineman rating did not exist before 1947 or 1948. Earlier, he says, minemen were specialists in other ratings such as gunner's mate or torpedoman's mate.

I disagree with him because I distinctly remember the mineman rating being approved in either late 1945 or early 1946. Also, I remember men aboard uss Shea (DM 30) receiving mail addressed to them as MN3c.

We would appreciate your assistance in this light disagreement.—R. C. C., San Diego, Calif.

• You are closest to being right. The mineman rating was established in 1943. This rating is a mere youngster when compared with the gunner's mate rating, established in 1777 with pay grades being added in 1893, or the torpedoman rating set up in 1917 and changed to torpedoman's mate in 1942.

You might point out to your friend that mine warfare in the U.S. goes back to 1877 when a triggered powder keg was set adrift in the Delaware River. Its target, the blockading British Squadron, was saved from possible danger by an unfortunate (for the Rebels) current. Robert Fulton invented a torpedo-mine. After it was rejected by the French he took the undersized weapon to England, and in 1804 destroyed an enemy vessel during the invasion of Boulogne. When the mine came into general use in this country during the Civil War it was already established weapon in Europe.

We might note here that when Admiral David Farragut shouted the immortal "Damn the torpedoes! Full speed ahead!" he was referring to mines laid in Mobile Bay by the Confederate forces.

Mine warfare assumed great importance in World War I when American and British forces planted 70,000 mines in the North Sea. During World War II and the Korean conflict mines were used by both opposing forces.—Ed.
Sir: As one of my collateral duties, while attached to the Naval Base at Pearl Harbor during 1950-52, I was in charge of the care of the uss Arizona (BB 39) Memorial. I used to go out to her for inspection purposes at least one morning each week. I never failed to feel humbled when I boarded her.

Arizona is a tomb, containing hundreds of our Navymen who gave their lives on that Sunday, 7 Dec 1941, when Pearl Harbor was attacked. It was decided to leave the men in her, as a final resting place and a perpetual memorial to their sacrifice for their country.

Arizona is still carried on the Navy rolls as a ship of the Navy. A fund is set aside, at the Pearl Harbor Naval Shipyard, for the maintenance of the platform, flagstaff and exposed portion of her hull. Hundreds of visitors board her each year by means of a Navy boat which makes daily trips for this purpose. A small detail of Navymen is charged with raising the colors on her each morning and lowering them at sunset. In addition, they police the platform and keep a high polish on the commemoration plaques honoring the men entombed in her.

Whenever I saw this once grand ship I would feel a twinge of sadness mixed with pride because, even in her present condition, with her colors flying high, she still had a proud bearing about her. She stands as a symbol of the Navy's defiance in one of its darkest hours.

Maybe my emotions at that time were because of the memory of my shipmates I knew who rested there. However, I would rather think it was the significance of what she represented.

While standing on the platform, I would see other U. S. ships pass from time to time. Except for idle curiosity, it appeared that this once great ship would be almost ignored — yet passing honors would be exchanged with other ships. I couldn't help but think to myself — isn't this ship manned just as surely as those who pass, even though her crew is not seen? Should she be ignored, because of her rusty, battered hull and because there was no visible person to return the honors? Doesn't she mean anything but a landmark of Pearl Harbor to the Fleet passing by?

We are fond of tradition in our Navy and take pride in carrying out the traditions we have. But each must be started by someone.

Couldn't our Navy start a tradition of rendering passing honors to Arizona? Surely she is a Navy ship with a Navy crew, as much as those who pass by. She is certainly symbolic of all ships and shipmates lost in the war she represents.

This salute to our Navy dead would not only serve as a mark of respect for a gallant ship and crew, but would also serve as a reminder to our younger sailors in the saluting ships that the greatest of all gifts to our country — life itself — is not forgotten.

And make no mistake. The honors will be returned. You may not see it, but you will know it. — F. E. Bailey, CHBOSN, USN.

Speaking only unofficially of course, we think your suggestion (which was most moving in its presentation) is one of the finest we've heard in a long time.

Unlike many of our Navy traditions, whose origins have often been obscured by time, this tribute's origin would remain alive.

Personally, we'd like to see such a tradition come about but it seems to us that, as a rule, "tradition" is not the result of official authoritative action but rather, a natural growth from a number of spontaneous actions which eventually do receive official recognition. However, that's only our opinion. We have taken it upon ourselves to pass your letter to better informed and more authoritative sources to see what they have to say on the subject. We'll let you know.—Ed.
Ratings of RK, ChH and LM Are Older Than You Think

Sm: The item on page 57 of your August issue, by JO3 Vernon, leads an old timer to wonder, once again, why these youngsters always think they have dreamed up something new.

You might like to know that the specialty rating of Rackman was established on board USS Seawolf (SS 197) when Seawolf had just joined the Asiatic Fleet in the capacity of the newest (and, of course, the best) submarine in the U.S. Fleet. The rate came into existence when the commanding officer then LCDR (now RADM) Frederick B. Warder, USN, decided to abolish reveille on Sunday in order to let the Seawolves have enough sack time to recover from a hard week's work and a Saturday night ashore in Manila.

There was a minority who preferred to strike for Chow Hounds (ChH) but these were generally limited to the off-going and oncoming watches. The ship's cook generously loaned them the free use of his galley (and with no small-minded squabbles about cleaning up afterwards) to prepare their breakfasts while he, with the rest of the crew, assiduously pursued the assignments required for advancement in rating for Rackman.

Some of those who finished the full course, including practical factors, included that sterling innovator Fearless Fred himself. J. O. Souza (already a qualified RKC and Chief of the Boat) hoped to be promoted to Warrant Rackman and thus become Sacktime Supervisor on a bigtime submarine tender; John Sullivan, then YN1 (now CDR) could sleep equally well horizontally or propped up behind the typewriter in the ship's office; and Jim Mercer, then ensign, (now CDR) had majored in inactivity at the Submarine School and had reported on board already fully qualified to act as Sacktime instructor.

I would also suggest that you have one of your younger writers do a little research on the rating of Libertyman (LM) which, I believe, also originated on board Seawolf. She was quite a ship. I know. I was there.—J. A. Adkins, (then LT), CAPT, USN.

• The way you tell it, Seawolf sounds like good duty. However, we suspect during the week you earned your extra Sunday sack time.

We've learned through bitter experience never to lay claim to anything the first time. And we would never, no never, be rash enough to attribute to any period the first Rackman. Chances are pretty good that Rackmen, Chow-hounds and Libertymen could be found on board Santa Maria, Pinta and Nina and we wouldn't be surprised if, when galleys were in their prime, some way couldn't be found to take ten under the benches.—Ed.

HMs with Fleet Marine Force

Sm: Why are Hospital Corpsmen and Dental Technicians serving with the Fleet Marine Force required to wear the Marine Corps uniform? Was the request for uniforms back.
Warrant Officer Exams

Sir: The May 1957 issue of ALL HANDS contains information regarding the Warrant Officer Program and mentions the A to N type as part of the examination. Since it is my intention to take the examination and the I&I officer on board is unable to locate any information about this part of the examination, I would appreciate your help on this subject.—D. L. F., BM1, USN.

Hospital Corpsman School

Sir: When I was in boot camp I requested that I be sent to the Class A Hospital Corpsman School. The request was not granted and I was sent on to the Fleet. Now I am a Commissaryman, third, but I'd still like to become a Corpsman.

Is it possible for me to have my rate changed to Corpsman, third, or would I have to revert to seaman in order to make the switch?

My GCT is 47 and my arithmetic score is 45. I understand that the two combined should total 100 for corpsmen. However, according to BuPers Inst. 1306.55A this factor could be waived.

I am very anxious to make this change because of the strong interest I have in the Corpsman rating. I would certainly put forth every effort to do a good job at it.—R. D. L., CS3, USN.

You would have to revert to Corpsman, third, if the waiver of rating is granted, you'd be able to attend the school through channels, of course) a waiver of rating will be considered.

This means that if the request is granted, you'd be able to attend the school while retaining your present rate of CS3. Then, when you successfully completed your training your rate would be changed to HM3. Should you fail, you'd still have your CS3 rate to fall back on.

As for your test scores, they would be waived when and if the waiver of rating is granted.—Ed.

Transfer from Other Services

Sir: After my present tour of two years in the Army, I plan to enlist in the Navy. Could you answer the following for me: (1) Would I lose my present grade? (2) Would I have to go through boot camp? (3) How soon before I go on active duty? (4) Would I be retained in my present specialty of supply? (5) Would I have to take any tests?—L.F.G., Pvt., USA.

Here are the answers, "by the numbers:" (1) If you enlist in the Regular Navy after discharge from another branch of the armed forces in pay grade E-4 or below, you may be enlisted in a pay grade no higher than E-3 as an SN, FN, AN or TN. Those who are in grades E-5, E-6 or E-7 in another service may be enlisted in the Regular Navy in pay grade E-6. But they must do this within 12 months of the anniversary date of last discharge. (2) If you have advanced to pay grade E-4 or above by the time your Army enlistment is up, there will be no boot camp.

(3) You would be placed on immediate active duty after processing for enlistment. (4) Since the Navy feels that you have already picked up experience in another branch of the service, chances are you would be placed in the same general service rating as your specialty. (5) You would be given the Armed Forces Qualification Test and, since you've had previous service other than Navy, would have to make a score of at least the 31st percentile.—Ed.
SEARCH ME—Members of the deck gang of USS Shangri La (CVA 38) man signal searchlight while the attack carrier makes passage through Pacific.

High Up with Aerobee-Hi

Aerobee-Hi, the rocket which usually carries satellite instruments aloft, has already zoomed 190 miles above the earth, breaking the old altitude record of 164 miles for single-stage booster rockets. During its test, Aerobee-Hi reached a speed of slightly more than 4900 mph.

One Aerobee-Hi was launched at Fort Churchill, Manitoba, Canada, in July by scientists from the Naval Research Laboratory. Sixteen other firings will be spaced throughout the 18 months of the International Geophysical Year. The research rocket that was fired carried a payload of 145 pounds of scientific instruments in its nose to obtain new data on the ionosphere, that part of the earth's atmosphere which begins at an altitude of about 50 miles and affects radio communication.

A timer opens 14-foot antennas on the rocket and also turns on a radio transmitter in the nose section within approximately a minute after take-off. During firings, two signals are sent out from the transmitter. One is not changed by its passage through the ionosphere; the second is considerably affected by the conditions its encounters.

Comparison of the two signals allows the scientists to gather new information on such matters as electron density, ion density, the intensity of the earth's magnetic field and the frequency of electron collisions. All of this is expected to be of practical value in improving long-range radio communications.

Hanna Gets Around

They call her "Hurrying Hanna" and hurry she did. uss Hanna (DE 449) claims to have established a new CruDesPac, if not Fleetwide, record for the number of places visited during one five and one-half months' cruise. From the time she left San Diego until her return, she steamed almost 28,000 miles and visited 50 islands and ports, 61 if you want to count those visited more than once.

Hanna's itinerary looks like a page from a Western Pacific atlas. Highlights of the trip were stops at Hawaii, Australia, Korea, Japan and the Philippines.

During her cruise, Hanna took part in "Operation Broadside," a combined U.S.-Philippine exercise, and conducted in-port and underway training with Korean naval personnel. In addition, while she was in Yokoate Shima, in the Ryukyu Islands, Hanna helped a merchantman in distress.

Just for the record, here's a list of the places she visited:

Pearl Harbor, Territory of Hawaii; Pago Pago, American Samoa; Brisbane, Australia; Manus, Admiralty Islands; Guam, Mariana Islands; Gagatul, Paralep, Eauripik, Woleai, Ifalik, Olimarao, Elato, Lamotrek, Satawai, West Iwo, Pulot, Puluwak, Pulap, Ulul, Pisaras and Magur Islands in the Central Carolines groups.


Also: Yokosuka and Sasebo, Japan; Chinhae, Korea; Yokota Shima and Okinawa in the Ryukyu Islands; Hong Kong, British Crown Colony; Manila, Subic Bay and Sangleys Point in the Philippines; and Midway Island.

Bet you didn't know the Pacific was so crowded—or that there were so many places to visit.

YESTERDAY'S NAVY

On 6 Oct 1884 the U. S. Naval War College was established at Newport, R. 1. On 13 Oct 1775 the first official step toward the establishment of the U. S. Navy was taken. Silas Deane, Christopher Goddard and John Langdon were appointed a committee by Congress to fit out two warships to cruise against the British. On 27 Oct 1864 LT Cushning rammed and destroyed the Confederate ship Albemarle. From 24 to 26 Oct 1944 one of the biggest naval actions ever fought occurred in the Battle for Leyte Gulf, where the U. S. Navy destroyed Japanese naval power.
Dining Deluxe in De Haven

"On the light blue rolling waters of the western Pacific, at dusk, with warm evening breezes blowing gently over the fantail, the crew of the destroyer uss De Haven (DD 727) celebrated its second month in the Far East." That’s what the news release said.

In true luxury-liner fashion, De Haven’s men had a buffet dinner, the release added. Enticing smells came from delicious charcoal-broiled steaks being grilled in the shadows of mount 53 while the chief cook busily sliced ice watermelon.

The menu of steaks, potato salad, freshly sliced tomatoes, fresh corn and watermelon amply provided for all hearty appetites. After a satisfying repast the crew returned to various duties with the feeling that this should happen more often. And there are indications that it will.

Arrangements for the affair were made by the ship’s executive officer, LCDR Robert Kirk, usn. Coincidentally, he has collateral duty as De Haven’s reenlistment officer.

Prototype of Earth Satellite

The Navy’s efforts to place a 20-inch artificial satellite in an orbit around the earth, moved closer to the giant leap into space with the delivery of a prototype of the first-stage launching vehicle to the Air Force Missile Test Center, Cape Canaveral, Fla.

For eight weeks the rocket was studied during static trials. Its newly developed 27,000-pound-thrust, first-stage engine is to be test flown at the end of the ground trials.

When the first flight tests are made, dummy second and third stages will be used. They will be filled with enough instruments and ballast to achieve realistic performance. The second stage of the three-stage rocket will contain a prototype of the guidance system of the launching vehicle when the space attempt is made some time during the International Geophysical Year (IGY) which ends 31 Dec 1958.

The first stage will provide the initial force necessary to push the satellite to an altitude of 30 to 40 miles where it will drop off. The second stage will then fire and the rocket will continue climbing to about 140 miles and a speed of 11,000 mph.

Coasting upward to 300 miles, the third stage will fire, boosting the satellite to its orbital velocity of 18,000 mph.

After the small shiny metal ball packed full of instruments falls away from the launching vehicle, it will circle the earth about once every 90 minutes. Its altitude will vary from 200-300 miles to 800-1500 miles because of the elliptic-shaped orbit.

All previous flight tests conducted over the ocean rocket range at the Missile Test Center, were made with Viking rockets simulating the first of the rocket’s three stages. With the arrival of the prototype Vanguard rocket, Naval Research Laboratory personnel were able to study for the first time the actual equipment that will be used in the attempt.

The technical responsibility for placing a scientific earth satellite in space was given to the Navy under the U. S. IGY program.

Wooden Ship for Nuclear Navy

When uss Bittern (MHC 43) was commissioned 26 Aug 1957 in New York, it showed that the era of “wooden ships and iron men” is not entirely a thing of the past in spite of the advances in nuclear-powered vessels.

The 360-ton all-wooden hull Bittern is the first of her class to be designed and built as a coastal minehunter.

She is constructed of wood to reduce magnetism—a vital necessity in performing her mission of hunting mines.

In places where wood could not be used, bronze, aluminum, and stainless steel were substituted.

The 138-foot long minehunter was named for uss Bittern (AM 36) which was lost by Japanese horizontal bombing at Cavite, P. I., in December 1941.

Samoan Servicemen Return Home on South Seas Visit

The Navy recently played host to more than 100 native Samoans serving throughout the Pacific as members of the U.S. armed forces, when it provided them with free transportation home.

It all came about when uss Sussex (AK 213), based at Pearl Harbor, was scheduled for a cruise in the South Seas. The word got around that many U.S. servicemen who live in Samoa were unable to visit their homes on leave because of the time, distance and money involved in making the trip. So, a message was sent out to the effect that Sussex would furnish transportation to Samoa for men who lived there and had the necessary leave due them. The crew then got busy preparing additional berthing, washing and lighting facilities for their expected guests.

On sailing day, Sussex had embarked Samoans representing all the services and stationed either in ships or with units on Kwajalein, Midway, Hawaii and Guam. From Samoa, Sussex continued to Tahiti and on her return trip picked up the leave-takers and brought them back to Pearl.

"HAPPY TRIP" is wish given Fatu Suesue, HM1, USN, by Oahu chief. Right: Niniva Tupua, BM2, USN, says goodbye as he leaves to visit relatives.
Edward H. Cahill, FTC, USN, and Joseph W. Carroll, GF 1, USN, have disappeared from the decks of USS Saratoga (CVA 60).

Conrad Weiser, MMC, USN, is no longer on board USS Meredith (DD 890). And John W. Branin, MMC, USN, no longer is at Great Lakes, Ill.

In their places are ENS Cahill, ENS Carroll, ENS Weiser and ENS Branin. They won their commissions after successfully completing the battery of rigid Limited Duty Officer examinations, making them eligible to join the Navy's commissioned ranks.

The four new ensigns are characteristic of the 631 enlisted men who were selected for commissions in the 1957 LDO program. About one-third of the first class and chief petty officers nominated for the program were selected.

This is the first year that appointments under the program have been for temporary service.

The Limited Duty Officer tests are given annually to eligible warrant officers, chief and first class petty officers. Eligibility requirements state that you must have at least 10 years of naval service and be under 35 years of age.

After each candidate's record and application is reviewed by a Selection Board convened in the Bureau of Naval Personnel, those selected are appointed ensign for temporary service in the category for which selected.

Hornet also claims to possess the only ceramics kiln afloat. The ship receives the already molded figures, known as "green ware"; the men then smooth them off, apply the ceramic paint, and then fire the ware in the ship's kiln. The kiln, purchased with Special Services funds, is fired three times a week or more often if necessary.

The jigsaw and kiln, together with $4000 worth of other shop facilities, supply nearly every need of the do-it-yourself sailor.

Even during holiday routine, "air operations" continue aboard Hornet, for amateur pilots file up to the Flight Deck to launch their model aircraft. Other Hornetmen are building their "dream homes" in the form of scale model houses which they themselves design and then build, using the supplies and facilities of the Hobby Shop.

Since the early part of the year, Hornetmen have spent more than 25,000 hours working on their favorite projects, and these same men spend up to $790 an evening just to purchase the basic materials for their hobbies. Hornetmen exhausted a six months' supply of airplane glue in less than three months and now airplane glue is more popular than a five-dollar bill before payday.

Despite the large number of officers and enlisted men who've been bitten by the "do-it-yourself" bug and who are taking advantage of the ship's facilities, hobby shop personnel have done a top job in keeping supplies on hand to meet the constant demands.

**Hornets in the Hobby Shop**

Ever since USS Hornet (CVA 12) has made the Far East her home, the ship's Hobby Shop has been one of the most popular spaces of the ship. Built to accommodate 28 men, the Hobby Shop well-nigh bursts with nightly crowds of up to 60, and Hornetmen who cannot find room inside the Hobby Shop can be found working from the tops of peacoat lockers to the No. 4 Fire-room.

The reason? Hornet claims to have the most complete hobby facilities in the Fleet. In addition to the usual offering of leathercraft kits, models, and painting kits, the Shop also boasts of a jigsaw which was donated by members of the Navy League who made a guest cruise on the ship last year.

Hornet also claims to possess the only ceramics kiln afloat. The ship receives the already molded figures, known as "green ware"; the men then smooth them off, apply the ceramic paint, and then fire the ware in the ship's kiln. The kiln, purchased with Special Services funds, is fired three times a week or more often if necessary.

Hornetmen have spent more than $4000 worth of other shop facilities, supply nearly every need of the do-it-yourself sailor.

Even during holiday routine, "air operations" continue aboard Hornet, for amateur pilots file up to the Flight Deck to launch their model aircraft. Other Hornetmen are building their "dream homes" in the form of scale model houses which they themselves design and then build, using the supplies and facilities of the Hobby Shop.

Since the early part of the year, Hornetmen have spent more than 25,000 hours working on their favorite projects, and these same men spend up to $790 an evening just to purchase the basic materials for their hobbies. Hornetmen exhausted a six months' supply of airplane glue in less than three months and now airplane glue is more popular than a five-dollar bill before payday.

Despite the large number of officers and enlisted men who've been bitten by the "do-it-yourself" bug and who are taking advantage of the ship's facilities, hobby shop personnel have done a top job in keeping supplies on hand to meet the constant demands.
BENEFIT ATHLETIC contests throughout the Fleet will help keep Memorial Stadium drive moving down field.

**Little Army-Navy Game Sparks Drive Throughout Nation for Memorial Stadium**

Individual and group efforts by Navymen and Marines to enlist the support of private citizens have done much to help put the fund-raising drive to build the Navy-Marine Corps Memorial Stadium in Annapolis, Md., over the $700,000 mark.

The latest activity to blossom forth is Key West, Fla. Here over $6000 has been raised already. Fund raisers have interested the local citizens in their drive and they expect to finish in a blaze of glory in October with a grand "Hoedown" which, they hope, will attract everyone south of Miami.

Other activities are planning fall and winter carnivals, shipwreck parties, minstrel shows and benefit athletic contests. The majority of the large veterans organizations have passed resolutions at their national conventions endorsing the project and recommending that their posts contribute $100 each for a memorial chair.

The stadium committee has enlisted the voluntary help of a large number of civilians on an unpaid basis. Professional fund-raisers are not being used and thus ninety-nine cents of every dollar will go into construction.

Two new souvenir items have been made available. One is a sword letter-opener which will be mailed to anyone who contributes $5.00 or more and requests the opener.

The other is a recording of a new arrangement of Anchors Aweigh and the Marine Corps Hymn, which will be mailed to anyone requesting it and who contributes $1.00 or more.

All proceeds from the inaugural "Little Army-Navy" football game on 26 October, at Annapolis, will go into the Memorial Fund. A Navy band from Washington and an Army band from Fort Meade will play for the rooters. Half-time entertainment is being provided by the Sunset Paraders, the Marine Corps Drum and Bugle Corps and crack drill team; and the exhibition Army Pipe and Drum Corps known as the "Kilties." High government and foreign dignitaries will attend.

**Tickets are general admission at $2.00.**

Of the $700,000 referred to above, a total of $227,875 has been contributed from the services. The drive will continue until the total amount of $2,100,000 is reached.

Military contributions have been broken down as follows:

<table>
<thead>
<tr>
<th>Navy District</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Fleet</td>
<td>$71,291</td>
</tr>
<tr>
<td>Pacific Fleet</td>
<td>60,587</td>
</tr>
<tr>
<td>Misc. Sea and Foreign</td>
<td>8,767</td>
</tr>
<tr>
<td>First Naval District</td>
<td>5,413</td>
</tr>
<tr>
<td>Third Naval District</td>
<td>9,349</td>
</tr>
<tr>
<td>Fourth Naval District</td>
<td>4,743</td>
</tr>
<tr>
<td>Fifth Naval District</td>
<td>10,307</td>
</tr>
<tr>
<td>Sixth Naval District</td>
<td>9,863</td>
</tr>
<tr>
<td>Eighth Naval District</td>
<td>1,635</td>
</tr>
<tr>
<td>Ninth Naval District</td>
<td>9,200</td>
</tr>
<tr>
<td>Tenth Naval District</td>
<td>9,107</td>
</tr>
<tr>
<td>Eleventh Naval District</td>
<td>2,848</td>
</tr>
<tr>
<td>Twelfth Naval District</td>
<td>5,550</td>
</tr>
<tr>
<td>Thirteenth Naval District</td>
<td>811</td>
</tr>
<tr>
<td>Fourteenth Naval District</td>
<td>1,244</td>
</tr>
<tr>
<td>Fifteenth Naval District</td>
<td>88</td>
</tr>
<tr>
<td>Seventeenth Naval District</td>
<td>100</td>
</tr>
<tr>
<td>Severn River Naval Command</td>
<td>11,034</td>
</tr>
<tr>
<td>Potomac River Naval Command</td>
<td>5,938</td>
</tr>
</tbody>
</table>

**80 Miles Up**

Navy Dan rockets, combinations of a Deacon rocket and a Nike booster power unit, are standing by at the Naval Air Missile Test Center, Point Mugu, Calif., ready to roar off on a minute's notice to gather information on solar flares.

The study of the flares—tremendous outburst of energy radiating from the sun—is a part of the International Geophysical Year (ICY) activities of the United States.

The Dan rockets will climb to a peak altitude of 80 miles to gather and transmit telemetered data on ultraviolet and X-rays caused by the flares. On 1 Jul 1957 an IGY rocket soared up to an altitude of 70 miles to obtain information on normal solar radiations to be used as a background against which flare effects can be compared.

Scientists hope to learn why the flares cause disturbances which disrupt communications in the ionosphere (a blanket of electrified atmosphere some 50 miles above the surface of the earth). Disturbances can cause blackouts of shortwave and broadcast transmissions.

Because flares reach their peak in a matter of minutes, the Dan rockets are kept standing by in their launchers.

Scientists at three U.S. observatories are carrying on a continuous visual flare watch and when one occurs, they notify the missile unit by radio or teletype. In addition, at the launch site on San Nicholas Island, radio signals of six distant short-wave stations are being monitored. As they fade out the receivers automatically alert the rocket station.

Fourteen firings are scheduled in the solar flare study program.
The new All-Navy and Inter-Service Senior Golf Champion is a veteran Navyman who is a former football player and coach.

He's Chief Warrant Officer Walter Axcell, USN, of NAS Barbers Point, Oahu, T. H. After winning the All-Navy Senior Division at Memphis, he went on to the Marine Corps Recruit Depot at Parris Island, S. C., where he repeated his winning performance (21-24 Aug) and emerged as the Navy's only winner in the Inter-Service Golf Championship.

Mr. Axcell, who also won the 1948 All-Navy Championship at Parris Island, won this year's title with rounds of 76-76-74-79 for a 305 total in the 72-hole medal play event —11 strokes ahead of the runner-up in the Senior Division.

Winner of the 1957 All-Navy Men's Open Crown was LCDR James Kinder, USN, a veteran golfer from NAS Pensacola. He fired a one under par 287 to capture the title, while Estelle St. Clair, PN2, USN (W), NTC Bainbridge, won the All-Navy Women's Division with 357.

Here's a rundown on the top finalists in the 1957 All-Navy Golf Championship. The asterisks indicate players who represented Navy in the Inter-Service Golf Tournament.

<table>
<thead>
<tr>
<th>Score</th>
<th>Player</th>
<th>Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>287</td>
<td>LCDR James W. Kinder, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>288</td>
<td>Brucie H. Cudd, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>287</td>
<td>LCDR Robert O. Wallace, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>282</td>
<td>John F. Kolinka, ETT, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>294</td>
<td>James Taylor, SN, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>295</td>
<td>LCDR William G. Whiler, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>296</td>
<td>William C. Mitchell, BMI, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>300</td>
<td>LCDR Adam A. Brevault, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>301</td>
<td>LTJG Donald R. Glass, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>301</td>
<td>LTJG Harold E. Jacobson, PNSN, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>301</td>
<td>Ben F. Jennett, AMC, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>301</td>
<td>Arthur H. Neely, ADC, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>301</td>
<td>LCDR Bedford C. Bradley, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>302</td>
<td>Eavon Scott, EM1, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>303</td>
<td>USS Fidelity (MSO 443)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>305</td>
<td>LT Robert M. Ware, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>307</td>
<td>LT James A. Lohm, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>307</td>
<td>LT J. M. Hernandez, SN, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>309</td>
<td>LT James C. Wiseman (DE 667)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>LCDR Ben F. Jennett, AMC, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>NTC Great Lakes, Ill.</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>LCDR Gene D. Breault, SN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>LCDR Clement L. Letournel, ERM, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>LCDR Estelle St. Clair, PN2, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>LCDR LT J. W. Kinder, USN</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS John F. Kennedy (CVA 67)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Saint Louis (LST 1134)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Constellation (CGN 60)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Midway (CVA 41)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Canberra (CVA 34)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Lake Erie (LST 1138)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS San Diego (LPD 22)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Yorktown (CVA 10)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Bremerton (AS 35)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS Boston (CL 41)</td>
<td>OPEN DIVISION</td>
</tr>
<tr>
<td>310</td>
<td>USS USS San Diego (CL 40)</td>
<td>OPEN DIVISION</td>
</tr>
</tbody>
</table>

While the gallery speculated on his chances, the steel-nerved Open champion carefully studied the green, lined up the putt, stroked the ball and watched it drop in the left side of the cup for his second All-Navy crown in three years. He posted rounds of 75, 71, 68 and 73.

A veteran of 30 years' service, LCDR Kinder won his first championship in the San Diego City Tournament in 1935 and has been winning ever since. Some of his more important titles include All-Navy Eastern Championship in 1955, Sixth Naval District runner-up in 1957 and the South Atlantic Regional Championship. LCDR Kinder has been invited to play in the Bing Crosby Pro-Amateur Golf Tournament at Pebble Beach, Calif., 9-12 Jan 1958.

The runner-up All-Navy spot was jointly occupied by LTJG Fred S. Blackmar, USN, a pilot from VAAV-35, NAS North Island, Calif., and LTJG Arthur H. Cudd, USN, Special Services Officer with the Naval Administrative Unit, Clarksville, Tenn. Both shot even par golf —288. LTJG Blackmar, who hails from Luling, Texas, placed third in the National Caddie Tournament in 1950, won the Texas left-handers Tournament in 1950 and 1951, joined the Navy in 1955 and won the South Eastern Regional Tournament the same year. He took runner-up honors in the South Pacific Regional Golf Tournament in 1957.

ENS Cudd, a native of Portland, Ore., reached the semi-finals of the U. S. Amateur in 1953. He won the Western Amateur Championship in 1954 and was a member of the U. S. Walker Cup Team in 1953. ENS Cudd joined the Navy in Sept 1956, was a runner-up to LCDR Kinder in the South Atlantic Regional Tourney and the 1957 All-Navy, one stroke off the pace in each case.

In the Senior Division, CAPT Richard C. Harwood, USN, from NAVSta Newport, R. I., captured runner-up honors with a 316. Before coming to the All-Navy, CAPT Harwood won both the First Naval District and the North Atlantic Regional Senior Championships.

In the Women's Division, Wave Estelle E. St. Clair, PN2, established an eight-stroke lead at the end.
NAVY'S SENIOR players in Inter-Service Golf Tournament were CW03 Axcell, CAPT Harwood, CDR Sias.

of the first 18-hole round and was never seriously threatened after that. During a practice round before the tournament, she had the distinctive honor of qualifying for a Navy Hole-in-One Achievement Award by dropping her tee shot in the 132-yard 14th hole. Wave St. Clair also won the Fifth Naval District Women's Open Championship and the All-Navy Women's Championship for a Navy Women's Gold grand slam.

Runner-up honors went to Sarah J. Jackson, PNC, USN (W), RecSta San Diego. Chief Jackson played good steady golf throughout the tournament but was unable to catch the new All-Navy Women's Champ. She is a native of Bellwood, Pa., and a graduate of Penn State.

Shortly after the last score was posted, RADM Frank Akers, Chief of Naval Air Technical Training, presented All-Navy Golf Trophies to LCDR Kinder, CWO Axcell and PN2 St. Clair.

Tennis Championships

A RMY had the biggest guns in this year's Inter-Service rivalry on the tennis courts.

If you don't believe that, just ask any of the 10 All-Navy finalists or the Airmen and Marines who literally took the white-washing of their lives in the recent Inter-Service Tennis Championships held in Washington, D. C.

Not only did Army win the coveted Leech Cup—symbol of team supremacy in Inter-Service Tennis—but for the first time in tournament history, they swept all the individual and doubles as well.

This year's victory enabled the Army to take home the Leech Cup for the fifth time since it was donated in 1924. To date, Navy has won it 10 times—the first nine in a row before bowing to Army in 1939. The Air Force has won it twice out of its three bids while the Marine Corps has yet to win the title.

All-Navy finalists who participated in this year's Inter-Service Tennis Championships at the famed Army-Navy Country Club in Washington, D. C., 20-24 August included:

Richard D. Klitch, SN, usm, from ComServPac and Roger M. Bielefeld, YNT3, uss, of the destroyer escort USS Sproston (DDE 577), the All-Navy open doubles champs; CAPT Jesse B. Gay, Jr., usn, CO of the Fleet Sonar School at San Diego, the All-Navy Senior Singles and

Rumdown of Players in All-Navy Tennis Tourney

SOUTH PACIFIC

Open Division
John Hironimus, SN, USN, ComAirPac
David Inman, SA, USN, USS Kearsarge (CVA 33)

CDR John R. Behr, USN, NAMTC Point Mugu
ENS Roy Entz, USN, San Diego

Seniors
CAPT Jesse B. Gay, Jr., USN, Fleet Sonar School, San Diego
CWO Glendice B. Tindall, USN, NavSta Long Beach

NORTH PACIFIC

Open Division
ENS Seth Petersen, USN, NAS Moffett Field
LTJG Lawrence Zaitzoff, USN, 13 ND

LCDR William O. Foukes, USN, ComFair Alameda
LTJG Robert Nott, USN, NAS Whidbey Island

Seniors
CAPT William L. Maloney, USCG, 13 ND
CAPT Albert Kohlias, USN, 12 ND

WESTERN PACIFIC

Open Division
Richard Klitch, SN, USN, ComServPac
Roger Bielefeld, YNT3, USN, USS Sproston (DDE 577)

LTJG Arthur Fish, USN, PatRon-6

Seniors
None

ATLANTIC FLEET

Open Division
William Cullen, SN, USN
CDR Kendall Jones, USN
Lorey Hunt, SN, USN
LTJG Arthur Jeff, USN, USN
Seniors
CAPT William Siedel, USN

NORTH ATLANTIC

Open Division
ENS Duane E. Gomer, USN, Rhine River Patrol, NELM
Cecil L. Wilson, ADC, USN, VV-24, Port Lyndsay, French Morocco
ENS George Kesel, USN, NavSecSta Washington, D. C.
ENS Michael Schwartz, USCG, Washington, D. C.

Seniors
CDR John Ramee, USN, NYGruLantResFlt.
CDR Fred Kriz, USN, Naval Gun Factory, Washington, D. C.

SOUTH ATLANTIC

Open Division
LTJG Richard T. Gaskill, USN, NAAS Corry Field, Pensacola
ENS Kingdom Van Nostrand, USN, NAS Pensacola
David Rosenbaum, AN, USN, NAS Corpus Christi
ENS Richard Daniels, USN, NAS Pensacola

Seniors
CDR Joseph T. Watson Jr., USN, Ellyson Field, Pensacola
CAPT Robert B. Hutchins, USN, NAS Pensacola
BEARING DOWN — All-Navy Open Singles Division title was copped by ENS Seth Petersen, NAS, Moffett.

of DesLant, who was the All-Navy open singles runner-up; LTJG Richard T. Gaskill, usn, WestPac; ENS Duane E. Comer, usn, Rhine River Patrol, NELM; John Hironimus, SN, usn, AirPac; and CDR Joseph T. Watson, Jr., usn, Ellyson Field, Pensacola.

ENS Seth Petersen, usn, of NAS Moffett Field, won the All-Navy open singles division. He was unable to compete in the Inter-Service matches because of his scheduled flight training.

Representing the North Pacific region in the All-Navy finals, ENS Petersen downed Bill Cullen from the Atlantic Fleet in the finals in three straight sets—6-3, 6-1 and 7-5. Petersen lost only one set in the entire open singles tournament and that was against Seaman Dick Klitch in the quarter-finals.

DesLant's Bill Cullen earned the right to play Petersen for the open championship by defeating ENS Duane E. Comer of the Rhine River Patrol in the semi-finals 6-3, 3-6, 6-0, 14-12, 6-2 after coming back from behind in a tight fourth set.

In the All-Navy open doubles tournament, Klitch and YN3 Bielefeld, playing in WestPac colors, had a tougher time in taking the title from SouthLant's LTJG Dick Gaskill and ENS Kingdon Van Nostrand but claimed the laurels with a 6-8, 4-6, 6-4, 10-8, 6-2 score after being down two sets. To gain their notch in the finals, Klitch and Bielefeld had to come from behind to beat Hironimus and Dave Inman, SA, usn (USS Kearsarge, CVA 33), 5-7 3-6, 6-2, 7-5, 6-3.

Gaskill and Van Nostrand took three straight sets from LTJG Art Fish, usn, of PatRon Six, and LTJG George Woods, VW-16, winning handily by 6-4, 6-3, 6-2 to qualify.

CAPT Jesse B. Gay, Jr., usn, retained the senior singles title (open to players over 40 years of age) which he won a year ago at Newport, R. I., by downing co-finalist CDR Joseph T. Watson, Jr., of SouthLant, 6-0, 6-2. He also repeated in the senior doubles, but with a new partner, CWO Glendice B. Tindall, usn, NavSta Long Beach, downing CDR Fred Kriz, usn of Naval Gun Factory, Wash., D. C., and CDR John Ramee, usn, (NYGunLanResFlt) 6-2, 7-5.

THIEF GETS CAUGHT—Coast Guard's Reider is tagged out by Pensacola's Karpwicz as he tries to steal home.

All-Navy Baseball

SubPac captured the 1957 All-Navy Baseball Championship by torpedoing its opponents, one-two-three.

The tourney was completed too late for the full report of the game to be made before this issue went to press.

The Pacific Fleet Submariners scored 35 runs in the three games they played during the Navy's "World Series" while their outclassed opponents registered a mere six.

The opening day of play at the U.S. Coast Guard Receiving Center, Cape May, N. J., saw SubPac down the host Coast Guard...
nine 13-3, while the Amphibs from Little Creek, Va., swamped NAS Pensacola 11-1.

NAS North Island, who drew a bye in the first day of play, downed the Amphibs, 1-0, while Pensacola bounced back and eliminated the Coast Guard from the tournament by a 12-3 score to complete the second day of the double elimination tournament.

The third day of action was highlighted by the air-dales from Pensacola defeating the Gators, 3-1, to take them out of the race. SubPac continued its victory march by defeating North Island 12-0.

In the semi-finals, Pensacola eliminated NAS North Island with a 5-3 win and earned the right to face SubPac in the finals.

SubPac took Pensacola in stride—to the tune of 10-3, and with it the 1957 All-Navy Championship.

—H. George Baker, JOC, USN

**Edisto Indoctrinates Blue Noses**

All ships in the Navy—the ice-breaker *Edisto* (AGB 2) included—have a serious mission to perform. And, as with all of these ships, it never becomes so serious that some time during the trip a few hours can’t be set aside for a little skylarking.

*Edisto’s* horseplay was brought on by the Arctic Circle Line crossing ceremony when Boreas Rex convened his Court of the Royal Order of Blue Noses. The formal initiation ceremony, set up under his direction, brought 127 of the uninitiated 219-man crew into the select order.

The serious part of *Edisto’s* mission centers about her tough bow. She smashes a path through heavy ice concentrations ahead of escorting ships carrying cargo, petroleum, oil, and lubricants to military installations dotting the top of North America from Alaska to Greenland.

For the “Wind” class icebreaker *Edisto* this was not her first resupply expedition to the Arctic. She has participated each year since 1948. In 1955 she doubled up by taking part in similar operations at the opposite end of the world.

In 1955 she formed a part of Task Force 43 on Operation Deep Freeze I, in the Antarctic. Many of the crew still aboard were initiated at that time in the Royal Order of the Emperor Penguin (Neptune’s southern name), the honor bestowed on those crewmembers crossing the Antarctic Circle Line for the first time.

---

**FOOTBALL SEASON**

Football season is here and don’t underestimate Navy’s own “big” blue and gold eleven. If the results of spring practice are any indication, then the Mids’ opponents should take heed. According to John Cox, Director of Naval Academy Sports Information, here are a few reasons why:

- The Mids halted their spring drills after only 17 days of practice when Coach Eddie Erdelatz said, “We accomplished our mission” and it was “The best spring practice we ever had.”
- The 1957 line, which averages 213 pounds, will be the heftiest in Navy’s football history.
- Tom Forrestal, who was in a three-way race for the Navy quarterback assignment last year, has exhibited new-found poise and finesse in ball handling and passing, and is now the Navy’s No. 1 signal caller.
- Twenty-four players, 16 of them letter-winners, are back from the ‘56 squad which lost only to Tulane. To this group has been added a dozen of last year’s plume team who have shown “varsity potential.”
- Big Bob Reifsnnyder, a 235-pound tackle who made All-America honorable mention last year as a sophomore, successfully made the switch from tackle to center thereby filling a gap that figured to be a trouble spot this season.
- Captain Ned Oldham, fullback. Swanson is the first unit’s only non-letterman.

---

**Seaman Apprentice Al Wharton, usn, who is playing tackle for the NTC Bainbridge “Commodores,” played in the Annual All-Star Game against the New York Giants at Soldiers Field, Chicago on 9 August. In addition to the All-Star Game, he played in two Sugar Bowl Classics and a post-season Blue-Gray Game.**

---

**During the recent U.S. Navy Rifle and Pistol Championships, Caspar P. DeFino, TM2, usn established a new All-Navy Pistol Record by firing a 564 out of a possible 600.**

—H.G.B.
A NEW LIGHTWEIGHT, DURABLE ASSAULT BOAT has been developed by the Army Corps of Engineers, Fort Belvoir, Va. Carrying its full crew of 15, the pneumatic-type craft can attain speeds of more than 7 miles per hour by use of a 25-hp outboard motor, or 3.3 mph by hand-paddling.

Constructed of neoprene-coated nylon, the boat consists of a main flotation tube, an air-mat bottom, a thwart tube connecting the main flotation tube amidship, and a four-inch spray rail.

The main tube is 18 inches in diameter and is divided into six compartments by hemispherical bulkheads. Division of the tube permits as many as four compartments to be damaged with the boat still remaining in action.

The boat is equipped with two large and one small inflation-deflation pumps, a repair kit and 11 five-foot paddles. A carrying case fabricated of cotton duck is also provided. With equipment, it weighs 255 pounds. Inflated size is 17 feet long, 5 feet 8 inches wide.

The boat may be dropped from planes and can be readily carried by six men.

THE AIR FORCE NOW HAS the world’s first vertijet. Called the X-13, the pure jet VTOL research plane has the unique ability to take off vertically, quickly make the transition to high speed horizontal flight, then return to vertical hovering at zero air speed and hook on to its ground service trailer.

Rising and descending on a column of seething exhaust gases, the X-13 depends solely upon thrust from its jet engine for both direct lift and high speed conventional flight.

Most unusual feature of the X-13 and the key to jet VTOL flight is its ingenious jet reaction control system which provides complete control of the airplane during hovering and near-zero speed flight.

A MISSILE-TRACKING CHAIN of floating bases in the Atlantic Ocean is being established by the Air Force.

To be located between the islands of St. Lucia and Ascension, it will fill the missile tracking gaps that now exist along the Air Research and Development Command’s 5000-mile missile test range, which is used for firing long-range missiles.

Links of the chain will be six “telemetry ships,” spaced out along a 3000-mile line. Special electronic equipment aboard these “Ocean Range Vessels” will record data concerning missile tests and transmit the information to the Range Control Station of ARDC’s Air Force Missile Test Center at Cape Canaveral, Fla.

The ships selected for this purpose are modified, 178-foot Army FS (Freight Supply) vessels, which will be able to remain at their stations for as long as three weeks, if necessary. Usually, however, they’ll be on station only while missiles are actually being tested. Between missions they’ll return to the South American ports of Recife and Belem, Brazil; and Georgetown, British Guiana.

The electronic brain of each ship will be the telemetry center in her Number Two Hold, which has been de-humidified, air conditioned, soundproofed and insulated to insure the accuracy of data recorded by the ship’s telemetry antennas. The antennas are housed in twin plastic radomes above the bridge.

Modification of the six ships and installation of electronic equipment in them cost more than two million dollars.

In addition to these craft, five 340-foot Maritime Service CIMA V1 ships are now undergoing modification and are due for commissioning early in 1958. They will be used to supplement the telemetry operations by recording impact data on missile tests.

A “ROBOT” TRACTOR that can be operated anywhere within range of the radio by which it is controlled is undergoing tests by the Army.

From a jeep or helicopter equipped with a standard military radio transmitter and a special control box, the operator can start and stop the machine, engage

WATT A LOT—Army’s tiny ‘helmet’ radio is dwarfed by mighty ‘world-spanner’ transmitter-housed 50-foot room.

A REAL BOOST—Air Force’s new X-13 Vertijet depends solely on thrust from jet for lift, flight, and landing.
and disengage the gears, operate in forward and reverse, manipulate the dozer blade up and down, and activate the steering mechanism.

Normal operations can be performed from distances up to 15 miles simply by manipulating the buttons on the control box. Army Engineers believe that the installation of small television cameras on the tractor will give the remote operator additional knowledge and observation of the machine, and give him the ability to work it without the need of information relayed by a visual observer.

The prototype is the standard commercial bulldozer. The only visible change to the machine is the substitution of a standard military radio receiving set for the operator's seat. Manual controls have been retained for conventional operations.

As a safety precaution, early tests have been conducted with the tractor and control point within viewing distance. It will be operated from greater distances as the test schedule progresses.

* * *

THE BULKY CANISTER-TYPE GAS MASK SOON MAY BE ELIMINATED FROM THE ARMY.

A "revolutionary" protective mask designed to give the soldier complete protection against inhalation of war gases, germ warfare agents and air-borne radioactive fall-out particles is under limited production.

A small number of the new masks have already been delivered to the Army Chemical Center, Edgewood, Md., for final engineering tests. At the same time, production models are being tested before large scale production for troop use.

The mask is made of a new lightweight, pliable aerosol filter material. Pads of the material are inclosed within cavities molded into the mask's facepiece.

The new mask is claimed to be more comfortable than current model, affords better vision and transmission of speech, and allows wearer to breathe easily.

* * *

THE ARMY HAS DEVELOPED a new spark and flame arresting muffler to reduce the fire hazard created by truck exhaust in congested areas where combustibles are stored.

The new device is a combination consisting of two separate sections—the muffler and the spark and flame arrester. It was designed primarily for use on gasoline-engined fork-lift trucks of 4000-pound capacity, which work in warehouses and other storage spaces.


OCTOBER 1957
Frank, Authentic Advance Information
On Policy—Straight From Headquarters

- **NOVEMBER EXAMS**—The date for the service-wide competitive examinations for advancement to pay grade E-4 in specific ratings has been scheduled for 7 November. This exam will be used for advancement of USN and USNR personnel on active duty with the Regular Establishment only. The November exams will not be administered to TAR personnel.

The rates for which examinations will be given are:

The CAA Control Tower Operator Certificate requirement for advancement to ACT3 may be waived in the case of personnel assigned to those few overseas stations where it is not practicable for them to be examined by a CAA representative.

Regular Navy personnel competing for advancement to pay grade E-4 of those ratings in which selective emergency service rates have been activated will be recommended for and advanced only to the selective emergency rates. Regular Navy personnel examined for other rates will be advanced in the general service rates. Reserve personnel on active duty will be advanced to that related emergency service rate which is in their normal path of advancement or for which they have been trained.

Changes of rating examinations will be administered for horizontal changes of rating at all pay grade levels as individually authorized by the Chief of Naval Personnel.

Those who took part in the August exams may not compete in November.

- **ADVANCEMENT INFO**—Your path of advancement will soon be open if you are an E-4 in the ACR, ACT, PRS or PRM Selective Emergency Service Rates which are to be activated for second class petty officers this fall, or if you are striking for the already open ACW2 rate.

The activation was effective for Air Controlman W (airborne CIC operator) on 1 Jul 1957. Air Controlman R and T (radar and tower) and Fire Controlman R and S (maintenance and survival) will become effective Nov 1957. Regular Navy and TAR personnel may use the rates.

The three Air Controlman rates were opened because of the lack of available facilities to permit E-4 personnel in the rates to complete their practical factors for advancement to AC2. Their formal training was so specialized that difficulties were experienced in completing practical factors for advancement. (Example: ACW3 personnel received formal training at the Radarman Class A School and were examined for advancement through use of the RD3 examination.)

In the Fire Controlman rates, many of the men advanced to PRM3 have not had the opportunity to complete the fireman pack and jump course necessary for advancement. Consequently the Navy has opened the PRS2 and PRM2 rates so that opportunity to advance will be available to men in these rates.

The first service-wide examination for ACW2 was held last August. Second class exams for the other four rates will be conducted next February.

Announcement of the opening of the rates was made in BuPers Notice 1223, 28 Jun 1957.

- **REQUIREMENTS FOR ATOM SUB TRAINING**—Your chances to qualify for the Submarine Nuclear Power Training Course have been increased. USN Hospital Corpsmen in pay grades E-6 and E-7 and Machinist’s Mates, Engineers, Electronics Technicians, Electrician’s Mates and I. C. Electricians in pay grades E-3 through E-7 are still needed for training in the field of nuclear power.

Here are the changes in the eligibility requirements:
- Up to now, you must have had a minimum of 48 months of obligated service at the time you reported for the course. Now, you are required to have a minimum of only 40 months of obligated service at the time you report, or be willing to extend your enlistment or reenlist. Extensions for 30, 60, 90, 120, 150, 180, 210, 240, 270, 300 or 330 days are authorized in order to have the total of 40 months’ active obligated service.
- Previously, you must have been a high school graduate. This requirement no longer exists.
- Before the change went into effect, the maximum age limit was 30 years. This requirement also has been removed.

The remaining eligibility requirements are still the same. You must:
- Be designated “Qualified in Submarines.”
- Be physically qualified for submarine duty.
- Volunteer for the program.
- Have a minimum combined ARI/MECH score of 105.

Additional information concerning the program and application procedure is in BuPers Inst. 1540.33A.

**DON’T HOLD UP OPERATIONS**—Remember, nine men are waiting for you to pass on this copy of ALL HANDS.
• NEW COURSES FOR ATs, AQs AND GFs—Two new courses have been established to replace the 23-week Class C Air Launched Guided Missiles (General) Maintenance Course which was outlined in the March 1957 issue of All Hands (page 52).

They are a 10-week AERO 19C Control System Maintenance Course and an eight-week Sparrow III Guided Missile Maintenance Course. Both are rated as Class “C” Schools and are conducted at NATTC Jacksonville, Fla.

Personnel eligible to attend these courses are ATs, AQs, and GFs in pay grade E-5 and above, or Marines of equivalent ratings. Personnel in pay grade E-4 of these ratings are also eligible if they are specifically recommended by their commanding officer and have had one-year Fleet experience in armament control systems or guided missiles and associated test equipment.

Classes for the AERO GI9 course, requiring Confidential clearance, convene every two weeks while those for the Sparrow III course, requiring Secret clearance, begin every six weeks.

Requests for both these new courses are desired from personnel now serving ashore. However, consideration will also be given to eligible personnel on sea duty.

Individual requests should be submitted, via the chain of command, to the Chief of Naval Personnel (Pers 8213) or on the Shoreway Data Cards.

• GOT A SENSAYUMA? — Don’t forget to enter the Third All-Navy Comic Cartoon Contest.

Your entries must be submitted to the Chief of Naval Personnel (Pers GI1) in time to be judged on 31 December.

• HONORABLE DISCHARGE STANDARDS—New minimum standards, based on the Enlisted Performance Evaluation marks, have been set for future issuance of an Honorable Discharge.

In order to receive an Honorable Discharge at the end of an enlistment, a member of the service will have to post a 2.7 over-all average and a 3.0 average in military behavior. Also his record must be free of any general court-martial conviction or more than one conviction by a special court-martial.

However, during the first enlistment provisions relative to court-martial will be disregarded provided an average of 3.0 in military behavior is maintained during the last 24 months of active duty.

If a commanding officer feels that a man should receive the Honorable Discharge even though these requirements are not met, he may submit a recommendation to the Chief of Naval Personnel.

• NEW HAMPSHIRE BONUS—If you are eligible for a WW II or a Korean bonus from the State of New Hampshire and haven’t applied for it yet, you’d better hurry. The deadline for mailing your application is 1 Jul 1958.

To be eligible for the WW II bonus you must have served more than 90 days between 7 Dec 1941 and 31 Dec 1946, inclusive, and must have received a discharge under conditions other than dishonorable. You must also have been a bonâ fide resident of the State of New Hampshire at the time of entry into the service.

Eligibility requirements for the Korean bonus are: a minimum of 90 days’ service between 25 Jun 1950 and 27 Jul 1953; one year pre-service residency in the state.

Application blanks may be obtained from most veterans’ organizations or from the State Adjutant General’s Office, State Military Reservation, Concord, N. H.

• MINNESOTA BONUS FOR KOREAN VETS—The Minnesota state legislature has voted a bonus for veterans of the Korean conflict.

Veterans who qualify for the Korean Service Medal will be entitled to $15 for each month of overseas service, and $7.50 a month for stateside service—up to a maximum of $400—between 27 Jun 1950 and 27 Jul 1953.

Other veterans who did not serve in Korea between these dates will be entitled to $7.50 per month for both overseas and stateside service, up to a maximum of $200.

Servicemen who were on continuous active duty in the armed forces for four years before 27 Jun 1950 will not be eligible for the bonus.

Applications may be obtained from the Department of Veterans Affairs, St. Paul, Minn. However, bonus payments will not begin until 1 Jan 1959.
How You and Your Family Travel by MATS to Overseas Station

A PETTY OFFICER, first class, who was on duty on board a destroyer in the Atlantic, steps off a MATS plane with his wife and two children in Paris, France, to begin a new tour of duty. Suppose you were this man. Just what would you have to do, and what would have been done for you, to get this MATS flight?

In order to be eligible for the transportation of your family, you must be E-5 or above, or E-4 with over four years in service, and the orders must specify that government transportation is authorized. Right here you have a choice. You can request surface or air transportation for your dependents (and get it).

You may travel by yourself, leaving your dependents behind until you get established in your new duty station. Then you may send for them, letting them travel (at your choosing) by surface or air transportation.

Or suppose you decide to travel to Paris by MATS and take your dependents with you. After you have discussed the situation with your wife, found out when your household effects could be shipped, and agreed on a specific date when you would be at the port of aerial embarkation, you fill out DD Form 884 and send this, together with three certified copies of your orders to the Chief of Naval Personnel (Pers B313).

Make sure that you have allowed your family plenty of time to receive the necessary immunization shots and, once you have set a departure date far enough ahead to allow for planning purposes, the Bureau will take over. They will assign an Air Movement Designator, allotment of space, a reservation assignment and establish a priority. All of this information and more, including the flight number and information on living conditions in the area where you are to be assigned, will be sent by mail to your wife. You will be notified of the arrangements by message.

Since passports are needed for dependents in all areas west of Honolulu and everywhere in Europe, the Bureau of Naval Personnel, acting on your application, will send passport forms to your wife and notify her where she can make application for her passport.

Don't fret too much when you see a Class 3 priority on your orders. Of course, you can be bumped. But you are almost guaranteed that you and your dependents will not be bumped.

For air transportation to points overseas in the Pacific area, the procedure is the same. Only exception is that the three certified copies of your orders and the DD Form 884 would be sent to the Commandant of the 12th or to the 13th Naval District for travel to Alaska. From there, everything will be taken care of just as the Bureau does for areas off the eastern coast.

You will be allowed a baggage allowance of 65 pounds. Your wife and each child will be authorized 100 pounds of baggage.

If you are being transferred to an area where entry approval is required, Pers B313 in the Bureau of Naval Personnel will make this request for you. Suppose this entry is denied to your dependents. When you leave your old duty station, you are authorized, at government expense, transportation for your dependents from the place where they are located (when you received your change of station orders) to any place in the United States you designate. The same holds true if you are permanently transferred to a station where dependents are not permitted to accompany you, or if you are assigned to a non-rotated ship or unit overseas forcontemplated periods of more than 12 months.

Later, when and if the restriction is lifted, your dependents can get transportation from the place where they are living to a port of debarcation and join you by way of government air or surface transportation, again depending upon your decision on how they should travel.

You can cause yourself and your dependents quite a bit of distress by reporting to the port of aerial embarkation without your necessary shots or by arriving earlier or later than the date specified. If this happens, you will be held until the clearance is negotiated or, if time does not permit, may be diverted to surface transportation.

If you are already overseas and are homeward bound, the cognizant overseas commander will assign Air Movement Designators, space and reservation for travel to the nearest port of aerial entry to CONUS.

Once you are at the aerial embarkation port and have the necessary clearance, you will receive a briefing, board the plane, take off and be assured of a pleasant journey and a happy landing at the hands of competent MATS personnel.
Deadlines Set for Wearing Large Medals, Rules Given For Free Reissues, Purchases

Here are procedures for obtaining a reissue of the large medals which are now required on the full dress CPO uniforms, and which will also be required in the future for all enlisted personnel for wear on formal occasions. The regulations were announced in BuPers Notice 1020, 25 Jun 1957.

A needed medal will be replaced without charge only if it has been lost, destroyed or rendered unfit for use without fault or negligence on your part. In any other case a replacement charge will be made (according to charges listed in an enclosure to the notice).

Your commanding officer will determine whether you are eligible to receive a reissue without charge or whether the replacement must be purchased. If the medal is to be purchased, the CO will collect the proper amount. He will forward requests for bulk issue of medals for CPOs in his command as soon as possible. Requests for medals for other pay grades will be submitted no earlier than 60 days before the date that medals will be required.

The larger medals will be required for wear on the following dates, according to rating:
- E-6, 1 Jan 1958
- E-5, 1 Jul 1958
- E-4, 1 Jan 1959
- E-3 and below, 1 Jul 1959.

The initial distribution of all medals except the Korean Service Medal and National Defense Service Medal has been made and it is assumed that all enlisted personnel have received their initial issue. If an original medal issue was not received, however, you may apply through your commanding officer to the Chief of Naval Personnel (Attn: Pers E3) for the appropriate awards.

The Korean Service Medal and National Defense Service Medal are not available for distribution to naval personnel. Additional instructions will be issued concerning their distribution, possibly about 1 Jan 1958.

The wearing of large medals by enlisted personnel was concurred in by the Permanent Naval Uniform Board and approved by SecNav after many requests were received for a full dress enlisted uniform. The full dress officers' uniform with sword and large medals was authorized in 1954.

Course for Medics On Control of Disease

The Medical Department correspondence course, Control of Communicable Diseases in Man (NavPers 10772) is now available to Regular and Reserve officers and enlisted personnel of the Medical Department. This course covers both rare and common diseases, discussing etiological factors, transmission, incubation, communicability, susceptibility, and resistance; laboratory diagnosis and clinical manifestations of the disease; the treatment of infected individuals, and factors which are associated with preventive measures.

This course consists of six assignments, evaluated at 18 points credit for purpose of Naval Reserve retirement and promotion. Applications for this course should be forwarded on form NavPers 992 (Rev 10/54 or later), with appropriate change in the "To" line, via official channels to the Commanding Officer, U. S. Naval Medical School, National Naval Medical Center, Bethesda 14, Maryland.

HOW DID IT START

From Supercargo to BuSandA

The present system of maintaining a constant flow of needed supplies to ships, shore and distant bases which was devised by the Bureau of Supplies and Accounts wasn't brought about overnight.

The Supply Corps had its origin in the British and American merchant marines of colonial times, when the purser, or "supercargo," directed the business operation of a ship as the representative of the vessel's owner. These men were business experts.

In 1794, the first Navy pursers were given a military rank of warrant officer grade and they became part of the complement of the four new 44-gun frigates. On 23 Feb 1795, a Congressional act established a Purveyor of Public Supplies and instituted Navy procurement and supply ashore. With this act, the Navy's Supply Corps was born.

Supply functions ashore were administered by civilian Navy agents. Through the years the Navy's supply system was modified and grew as the Fleet increased in size. A Bureau of Provisions and Clothing was formed in 1842. Fifty years later that name changed to the present title of Bureau of Supplies and Accounts.

The officers who administered the Navy's supply system were banded into the Supply Corps in 1919. In 1941 the group consisted of 2200 commissioned officers. So tremendous were the demands of supply, by the end of World War II the Supply Corps had mushroomed to 16,800 officers.

After the war an appraisal was made of the Navy's radically changed requirements. It was apparent that Navy supply would have to undergo a major change.

As a result of experience gained, detailed planning in BuSandA embodied many modern business principles and, in 1947, an integrated Navy Supply System was devised and the present system came into being.

Today a coordinated supply system based on "intelligence centers" covers all categories of equipment from a paper clip to high-octane fuel.

These "intelligence centers" are really inventory control offices that can locate any one of the 1.3 million items used by the Navy. Although these inventory control offices do not actually receive, warehouse and issue supplies, they do determine quantities to be bought of specific categories of material and direct the distribution of this material directly from manufacturers to Naval Supply Centers, Depots and other outlets. For example, the Aviation Supply Office at Philadelphia is responsible for controlling the inventory of all aviation material. Other items such as ordnance, medical, electronics or general supplies, fuel and printed forms and publications are controlled by similar inventory control offices.

But the stockkeeper who needs a gizmo or gadget immediately can still go to the nearest Supply Center and requisition all his supplies, from radio tubes to pencils.
SUCCESSFUL COMPLETION of written examinations or specified courses of instruction will be required of warrant officers on active duty selected for promotion in fiscal year 1959 (which begins 1 Jul 1958).

The new program, outlined in BuPers Inst. 1416.6, is designed to stimulate the professional growth of warrant officers.

The new program is very similar to the advancement program already in effect for other officers. Either examinations or several specified correspondence courses or schools must be completed if you are selected for promotion. The examinations and the courses will assure that a warrant officer is qualified in the executive and technical areas of his category.

In order to complete successfully the executive area of the examinations you must have a basic understanding of the principles and policies of the Department of Defense and the planning, control and administration of the Naval Establishment. Questions on the technical area will carry you into duties characteristically assigned to warrant officers of your category.

Examinations will require no more than five days to administer and will be based on the bibliography contained in an enclosure to the Instruction. However you can expect questions on equipment and methods too new to be covered by the bibliography material, but which have been introduced into operational use.

Examination exemptions may be gained by completing correspondence courses or resident courses of instruction or in some cases by preparing a formal paper.

The Navy will phase the professional requirements over a three-year period (fiscal years 1959-60-61). This is being done to avoid placing an undue load on warrant officers selected for promotion during the first years of the plan’s effectiveness.

During FY 1959 there are no requirements listed in the technical area. In 1960 a few will be added along with more subjects in the executive field and the total load will be applied in 1961.

For example, take a W-2 Boatswain (713) selected for promotion to W-3. In FY 1959 his examinations will contain questions selected from material found in the Manual for Naval Instructors (NavPers 16103B) and the Manual for Courts-Martial U.S. 1951 and the 1955 Naval Supplement to the Manual for Courts-Martial. If the warrant officer has completed the Education and Training, Part II (NavPers 10968) correspondence course and the Military Justice in the Navy (NavPers 10993) course, he will have gained exemption from examination.

If selected for advancement in 1960 a warrant officer in the same category would find in addition to the 1959 requirements, another added in the executive area and two in the technical area. He would find that his examination might also include material from Education and Training (NavPers 10827); Shipboard Training Manual (NavPers 90110); and The United States Navy (NavPers 92419). To obtain exemption from this portion of the examinations he would be required to take the Education and Training, Part I (NavPers 10965), correspondence course.

The technical area examination could include questions on practical damage control obtained from BuShips Manual, Chap. 88, Sec. II, and cargo handling as described in Cargo Handling, NavPers 10124 and Handling and Stowage of Cargo, 1949.

Exemption from both examinations could be gained by taking the Practical Damage Control course (NavPers 10936) or attending the Officers’ Basic Damage Control course (eight to 10 weeks), and by completing the Cargo Handling correspondence course (NavPers 10973).

In 1961 the same executive area subjects would apply and two additional requirements would be found in the technical area. Additional questions during that fiscal year will be found on shiphandling and radiological defense. The questions for the former will come from Naval Shiphandling, Naval Institute, 1955, and correspondence course exemption will be obtained by completing Shiphandling (NavPers 10738). Radiological Defense, Vol. II, and NWIP 50-1 will be the basis for questions in the latter area, and exemption requirements are completion of Radiological Defense (NavPers 10771) or attendance at the ABCD five-week course alone or combined with Damage Control course at Philadelphia or Treasure Island.

This example of what a W-2 Boatswain will be examined on, is given here to acquaint you in general with the nature of the professional fitness program.

Senior petty officers who hope to make warrant officer in the future should find it profitable to study the instruction. Courses taken while in the E-6 and -7 pay grades will serve as promotion exemptions in the warrant officer grades.
List of Motion Pictures Scheduled for Distribution To Ships and Bases Overseas

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, 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 processes by (WS). Distributions began in August.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

Battle Hymn (859) (C) (WS): Drama; Rock Hudson, Martha Hyer. Cast of the Badmen (860) (C) (WS): Drama; George Montgomery, Meg Randall.

The Bide Back (861): Drama; Anthony Quinn, Bill Conard.

Abandon Ship (862): Drama; Tyrone Power, Mai Zetterling.

Full of Life (863): Comedy; Judy Holliday, Richard Conte.

Anastasia (864) (C) (WS): Drama; Ingrid Bergman, Yul Brynner.

Kelly and Me (865) (C) (WS): Drama; Van Johnson, Piper Laurie.

The Burglar (866): Crime Drama; Dan Duryea, Jayne Mansfield.

The Girl in the Kremlin (867): Drama; Lex Barker, Zsa Zsa Gabor.

The Kettles on Old MacDonald's Farm (868): Comedy; Marjorie Main, Parker Fennelly.

Hot Rod Rumble (869): Drama; Leigh Snowden, Richard Hartunian.

War Drums (870): Western; Lex Barker, Joan Taylor.

Gun Duel at Durango (871): Western; George Montgomery, Ann Robinson.

The Iron Sheriff (872): Western; Sterling Hayden, Darryl Hickman.

Dino (873): Drama; Sal Mineo, Brian Keith.

Designing Woman (874) (C) (WS): Drama; Gregory Peck, Lauren Bacall.

The Barretts of Wimpole Street (875) (C) (WS): Drama; Jennifer Jones, Sir John Gielgud.

The Badge of Marshall Brennan (876): Western; Jim Davis, Carl Smith.

Daughter of Dr. Jekyll (877): Horror; John Agar, Gloria Talbott.

The Delicate Delinquent (878): Comedy; Jerry Lewis, Darren McGavin.

The She-Devil (879): Drama; Mari Blanchard, Jack Kelly.

Gunfight at the OK Corral (880) (C): Drama; Burt Lancaster, Kirk Douglas.

Man on Fire (881): Drama; Bing Crosby, Inge Stevens.

Monster That Challenged the World (882): Drama; Tim Holt, Audrey Dalton.

The Strange One (883): Drama; Ben Gazzara, James Olson.

New Course on Methods and Procedures in Blood Transfusions

The Medical Department correspondence course, Special Clinical Services, Blood, (NavPers 10998) has been revised and reissued under the title, Blood Transfusion, Methods and Procedures, (NavPers 10998-1) for enrollment by Regular and Reserve officers and enlisted personnel of the Medical Department. The course covers collection and storage of blood, the preparation of plasma, laboratory procedures including blood grouping and crossmatching, and the administration of blood and blood substitutes.

This course consists of eight assignments, evaluated at 24 points credit for purposes of Naval Reserve retirement and promotion.

Applications for this course should be made on form NavPers 992 (Rev. 10/54 or later), with appropriate change in the “To” line, forwarded via official channels to the Commanding Officer, U.S. Naval Medical School, National Naval Medical Center, Bethesda 14, Md.
Sailors May Be in the Dark and on Ice, But Exams Go On

When Navymen the world over sat down in August to take the Fleet-wide advancement examinations, they were joined by approximately 100 men living in total darkness at the "bottom of the world."

These Bluejackets are members of the Operation Deep Freeze II wintering-in party. The Navy made every effort to insure that any member of the 210-man party who became eligible for the tests would have an opportunity to take it. Their needs for exams were determined last year and the tests were either taken down with the party or traveled in the first mail.

After the tests were taken, they were scored by the commanding officers of the various stations and the results radioed to the Navy Examining Center, Great Lakes, Ill. Officials there will supply the names of those to be advanced to the Antarctic party by radio.

The men "down under" face many obstacles in their efforts to advance. Those who prepared for the February tests had little time for study. Winter was fast approaching with its days of 24-hour blackness and the schedule was crowded with work as construction jobs were rushed to completion and stores were brought ashore from Task Force 43 ships. When test day did roll around only a few hours could be set aside for the examination sessions.

One group took the tests on the bleak plains of Antarctica, several hundred miles from their base camp. They were in a tractor train moving along the frozen trail to Byrd Station. The exams were airlifted to the train which stopped its forward motion long enough to complete the tests and then the trek through the wilderness resumed.

Other groups faced long working hours unloading supplies from the ships. This work went on around the clock with Navymen working 12 on—12 off shifts. Little time was left for the exhausted men to prepare for the examination as they worked to get the Task Force started home before the hull-crushing ice blocked the way.

However, the Deep Freeze II party scored very favorable results. Of the 15 men at the Knox Coast Station, nine took the test and five were rated. Their test results failed to make the last mail so the answers to questions were radioed out to the Examining Center where they were graded and the results returned by dispatch.

At Little America V, 18 men were advanced one pay grade and in the entire party, nine were selected for advancement to CPO as a result of the February test.

Plans have already been made in the Bureau of Naval Personnel for administering the tests to Operation Deep Freeze III personnel. Tests and answer keys will be taken to the Polar Continent by the wintering-in party. The February test will not be given until March when unloading operations will have been completed and time will be available for studying. Radio will again be used to transmit scores and advancement information.

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 Instructions, 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. 31—Announced approval by the President of the report of a selection board which recommended USN and USNR officers for temporary promotion to the grade of captain.

No. 35—Announced approval by the Secretary of the Navy of the report of a selection board which recommended USN warrant officers to the permanent grades of chief warrant officer, W-4, W-3, W-2 and the temporary grade of chief warrant officer W-3.

Instructions

No. 113.3C — Emphasizes the need for reenlistment of qualified Navy enlisted personnel and outlines an effective reenlistment pro-

QUIZ AWEIGH ANSWERS
QUIZ AWEIGH IS ON PAGE 47
1. (c) Can buoys.
2. (b) Black.
3. (a) Starboard.
4. (b) Quarantine.
5. (a) Not less than 60 times per min.
6. (c) No preferred channel.
gram for use by commands.

No. 1520.4—Invites applications from men who are USN or USNR unrestricted line or limited duty officers (except those in the aviation classifications) for deep-sea diving training.

No. 1920.8—Outlines the procedure for appointment of commissioned or warrant officers resigning from the Regular Navy to commissioned or warrant grade in the Naval Reserve.

Notices

No. 1088 (24 July)—Informed naval activities of certain changes in procedure to be used in connection with notification to next-of-kin concerning casualties.

No. 1520 (6 August)—Announced Change No. 1 to BuPers Inst. 1520.6G, which is concerned with applications for officer submarine training.

No. 1111 (8 August)—Provided information concerning the NROTC program.

No. 1410 (15 August)—Described modifications of qualifications required for advancement in rating to be used in the February 1958 service-wide examinations for Air Controlman.

No. 1120 (20 August)—Announced changes to the obligated service requirements for graduates of Flight training programs.

No. 4650 (21 August)—Advised naval personnel traveling to or from an overseas area to arrange for transportation well in advance whether traveling unaccompanied or accompanied by their dependents.

New Time Requirements
For Flight Trainee Grads

Beginning 1 Jan 1958, active duty officers and aviation officer candidates who enter flight training programs will be required to execute an agreement to serve for a period of three and one-half years instead of the present two years after completion of training.

This ruling will not affect Naval Aviation Cadets, who will continue to serve for a total period of not more than four years until such time as a statute, which controls their obligated service, is changed.

More information on the change in obligated time requirements is in BuPers Notice 1120 of 20 August.

New Correspondence Courses
Now Ready for EMs

Seven new Enlisted Correspondence Courses are now available. One course has been discontinued.

Enlisted Correspondence Courses will be administered (with certain 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>
<thead>
<tr>
<th>Course</th>
<th>NavPers No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery Repairman 3</td>
<td>91506-1</td>
</tr>
<tr>
<td>Fire Control Technician 1, Volume 3</td>
<td>91345</td>
</tr>
<tr>
<td>Molder 1</td>
<td>91555</td>
</tr>
<tr>
<td>Lithographer 3, Volume 2</td>
<td>91470</td>
</tr>
<tr>
<td>Parachute Rigger 3, Volume 1</td>
<td>91640-1</td>
</tr>
<tr>
<td>Personnel Man 1</td>
<td>91421-1</td>
</tr>
<tr>
<td>Personnel Man Chief</td>
<td>91422-1</td>
</tr>
</tbody>
</table>

May be retaken for repeat Naval Reserve Credit.

Fire Controlman 1, Volume 1 (NavPers 91321) has been discontinued.

WHAT'S IN A NAME

Red Snapper Snoopers

"Hands behind your back.—Take a deep breath.—Hold it.—That's all.—Next."

Chances are, you've heard those words before. They're the battle cry of the "Red Snapper Snoopers"—the doctors and corpsmen helping the Navy to fight tuberculosis as members of chest X-ray units.

The "red snapper" is Mycobacterium tuberculosis, the germ which causes TB. It gets its nickname from its ability to pick up and hold a red dye when it is stained for identification purposes. Usually, it gets around through the droplets spread into the air by an infected person's coughing or breathing.

The "Snoopers" are in business to detect the disease in its early stages, when TB is easier to treat and less likely to be transmitted to other persons. To do this, they make chest X-rays of all Navy and Marine Corps personnel when they enter or leave the service and at yearly intervals whenever possible. They also X-ray Navy and Marine Corps civilian employees and the dependents of Navy men and Marines.

Last year the Snoopers X-rayed 1,453,345 persons. Of these, 1,613 were studied further for possible tuberculosis. And, since the X-rays are also checked for other abnormalities, 2,113 other chest conditions were also detected.

More than likely, you were one of the people who had his picture taken last year by a Navy X-ray unit. If so, you may want to know what became of that photo of your innermost self.

First, it was developed by the corpsmen attached to the unit and studied by the unit's doctor. If it was normal, a report of it was filed in your health jacket. If there were suspicious findings, or if the film wasn't good enough to be read accurately, you would have been called back for another X-ray, the report of which would also have been filed in your jacket. The survey X-rays and reports were forwarded to the Bureau of Medicine and Surgery in Washington, D. C., where doctors studied them a second time to make sure nothing was overlooked in the first reading. Then, your X-ray was filed away where it can be referred to in the future if needed.

Besides the X-ray, another important weapon in the Navy's fight against TB is the skin test, which shows whether or not you have been exposed to the disease. Nowadays everyone in the Navy gets one of these tests along with a chest X-ray, the day he enters the service. This is to make sure he isn't bringing active tuberculosis in with him.

And, thanks to the Red Snapper Snoopers, he probably won't have it when he leaves the service either.

OCTOBER 1957 53
Roundup on Sources of Information for the Career Navyman

Naval directives are of necessity constantly changing, and many of the changes that are made affect your Navy career in some way. Although the information concerning your service advantages, opportunities and benefits appear in manuals, regulations, or notices, you may have difficulty in locating them because of frequent changes or unintentional oversight.

Here’s a list of up-to-date directives dealing with career opportunities and programs available to officers and enlisted men classified according to subject matter. It supersedes the list presented in February 1957 All Hands pp. 55-57.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Pertinent Directive or Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment to Commissioned Grade</td>
<td>BuPers Inst. 1111.4B</td>
</tr>
<tr>
<td>Nomination of Qualified Enlisted Personnel for the NROTC Program</td>
<td>BuPers Inst. 1112.9A</td>
</tr>
<tr>
<td>Appointment to Commissioned Grade of Enlisted Women in the U.S. Navy Reserve</td>
<td>BuPers Inst. 1120.24</td>
</tr>
<tr>
<td>Appointment in the Field of Sciences</td>
<td>BuPers Inst. 1120.18A</td>
</tr>
<tr>
<td>Law Specialist Program for USNR officers</td>
<td>BuPers Inst. 1120.28</td>
</tr>
<tr>
<td>Reenlistment in the Regular Navy or Reserve</td>
<td>BuPers Inst. 1133.8A</td>
</tr>
<tr>
<td>Discharge up to One Year in Advance</td>
<td>BuPers Inst. 1133.9A</td>
</tr>
<tr>
<td>Tuition Aid Program</td>
<td>BuPers Inst. 1140.12</td>
</tr>
<tr>
<td>Assignment of Enlisted Personnel to the Medical Service Corps, Naval Reserve</td>
<td>BuPers Inst. 1140.21A</td>
</tr>
<tr>
<td>Typewriter Training for Enlisted Women</td>
<td>BuPers Inst. 1140.31A</td>
</tr>
<tr>
<td>Program for the NROTC Program</td>
<td>BuPers Inst. 1140.32A</td>
</tr>
<tr>
<td>Reenlistment in the Regular Navy for Inducted Personnel</td>
<td>BuPers Inst. 1140.33A</td>
</tr>
<tr>
<td>Reenlistment of Regular and Reserve Personnel on Active Duty</td>
<td>BuPers Inst. 1140.34A</td>
</tr>
<tr>
<td>Tuition Aid Program; resumption of enlistment</td>
<td>BuPers Inst. 1140.35A</td>
</tr>
<tr>
<td>Assignment of Enlisted Personnel to the Medical Service Corps Reserve</td>
<td>BuPers Inst. 1140.36A</td>
</tr>
<tr>
<td>U.S. Naval Reserve; policy, eligibility</td>
<td>BuPers Inst. 1140.37A</td>
</tr>
<tr>
<td>Law Specialist Program for USNR officers</td>
<td>BuPers Inst. 1140.38A</td>
</tr>
<tr>
<td>Reenlistment in the Regular Navy or Reserve</td>
<td>BuPers Inst. 1140.39A</td>
</tr>
<tr>
<td>Discharge up to One Year in Advance</td>
<td>BuPers Inst. 1140.40A</td>
</tr>
<tr>
<td>Tuition Aid Program; resumption of enlistment</td>
<td>BuPers Inst. 1140.41A</td>
</tr>
<tr>
<td>Assignment of Enlisted Personnel to the Medical Service Corps Reserve</td>
<td>BuPers Inst. 1140.42A</td>
</tr>
<tr>
<td>U.S. Naval Reserve; policy, eligibility</td>
<td>BuPers Inst. 1140.43A</td>
</tr>
</tbody>
</table>

All Hands
<table>
<thead>
<tr>
<th>Subject</th>
<th>Pertinent Directive or Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reenlistment in the Regular Navy of Naval Reserve Personnel Serving on Active Duty; policy, eligibility</td>
<td>BuPers Inst. 1130.4C</td>
</tr>
<tr>
<td>Assignment to a School as an Incentive for Reenlistment; policy, eligibility</td>
<td>BuPers Inst. 1133.5</td>
</tr>
<tr>
<td>SPECIAL DUTY AND ASSIGNMENT</td>
<td></td>
</tr>
<tr>
<td>General Policy</td>
<td></td>
</tr>
<tr>
<td>Training and Administration of the Naval Reserve; duty in; policy, eligibility</td>
<td>BuPers Inst. 1001.7A</td>
</tr>
<tr>
<td>Retention on Active Duty and Recall of Enlisted Naval Reserve and Fleet Reserve, information concerning Assignment and Rotation of Enlisted Women; policy</td>
<td>BuPers Inst. 1306.10B</td>
</tr>
<tr>
<td>Special Assignments</td>
<td></td>
</tr>
<tr>
<td>Transfer and Assignment for Humanitarian or Hardship Reasons; policy, eligibility</td>
<td>BuPers Inst. 1306.24A</td>
</tr>
<tr>
<td>Assignment to Duty of Sole Remaining Sons; policy</td>
<td>BuPers Inst. 1300.11</td>
</tr>
<tr>
<td>Assignment to Naval Missions, Attaches, Military Aid Groups, Joint Staffs, SHAPE; policy, eligibility</td>
<td>BuPers Inst. 1306.6B</td>
</tr>
<tr>
<td>Assignment to Recruiting Duty; policy, eligibility</td>
<td>Art. C-5208, BuPers Manual, BuPers Inst. 1326.1A</td>
</tr>
<tr>
<td>Assignment to Duty as Instructors; policy, eligibility</td>
<td>BuPers Inst. 1306.22B, BuPers Inst. 1306.42 (applies to musicians only)</td>
</tr>
<tr>
<td>Assignment with Naval Security Group Activities; policy, eligibility</td>
<td>BuPers Inst. 1306.23C</td>
</tr>
<tr>
<td>Assignment of Enlisted Personnel to Initial Submarine Training and Duty; policy, eligibility</td>
<td>BuPers Inst. 1540.2C</td>
</tr>
<tr>
<td>Assignment to Reserve Training Submarines; policy, eligibility</td>
<td>BuPers Inst. 1306.38</td>
</tr>
<tr>
<td>Assignment to Duty Involving Demolition of Explosives; policy, eligibility</td>
<td>BuPers Inst. 1320.3A</td>
</tr>
<tr>
<td>PAY, ALLOWANCES, INSURANCE</td>
<td></td>
</tr>
<tr>
<td>Soldiers’ and Sailors’ Civil Relief Act of 1940; summary of benefits under Uniform Services Contingency Option Act; options under Social Security Benefits for Military Service; summary of benefits under Obtaining and Recording Social Security Account Number Cards for active duty members of the Armed Forces; procedures Mortgage Insurance for Servicemen to Aid in the Construction or Purchase of Homes; policy, eligibility</td>
<td>BuPers Inst. 1760.4, BuPers Inst. 1750.18, BuPers Inst. 1741.10, BuPers Inst. 1741.8, SecNav Inst. 1741.4</td>
</tr>
<tr>
<td>SEPARATION AND RETIREMENT</td>
<td></td>
</tr>
<tr>
<td>Review of Undesirable and Punitive Discharges; information concerning Early Separation of Certain Enlisted Personnel Serving on Active Duty; information concerning Early Separation of Enlisted Personnel to Attend College; information concerning Retirement, Voluntary and Naval Reserve, With or Without Pay; policy, eligibility</td>
<td>BuPers Inst. 1626.16, BuPers Inst. 1910.11A, BuPers Inst. 1910.12A, BuPers Inst. 1820.1A, BuPers Inst. 1820.2A, SecNav Inst. 1811.3A</td>
</tr>
<tr>
<td>SEPARATION AND RETIREMENT</td>
<td></td>
</tr>
<tr>
<td>Review of Undesirable and Punitive Discharges; information concerning Early Separation of Certain Enlisted Personnel Serving on Active Duty; information concerning Early Separation of Enlisted Personnel to Attend College; information concerning Retirement, Voluntary and Naval Reserve, With or Without Pay; policy, eligibility</td>
<td>BuPers Inst. 1626.16, BuPers Inst. 1910.11A, BuPers Inst. 1910.12A, BuPers Inst. 1820.1A, BuPers Inst. 1820.2A, SecNav Inst. 1811.3A</td>
</tr>
<tr>
<td>MISCELLANEOUS</td>
<td></td>
</tr>
<tr>
<td>GENERAL INTEREST</td>
<td></td>
</tr>
<tr>
<td>Navy Relief Society, services by</td>
<td>Art. C-9207, BuPers Manual, BuPers Inst. 1747.1A</td>
</tr>
<tr>
<td>American Red Cross, services by</td>
<td>Art. C-9207, BuPers Manual, BuPers Inst. 1747.1A</td>
</tr>
<tr>
<td>Voting by Members of the Armed Forces; policy</td>
<td>BuPers Inst. 1742.2A</td>
</tr>
<tr>
<td>Immigration and Nationality Act of 1952; alien spouses, naval personnel, information</td>
<td>SecNav Inst. 1750.1</td>
</tr>
<tr>
<td>VA Hospitals; transfer of naval active and retired personnel to; policy Marriage of USN and USMC Personnel Outside the United States and Within Far East Command; policy</td>
<td>SecNav Inst. 1750.1</td>
</tr>
<tr>
<td>Visas for Alien Wives and Children of Naval Personnel; information concerning Participation of Enlisted Personnel in Inter-Service and International Athletic Events and Competitions; policy, eligibility</td>
<td>SecNav Inst. 1750.2</td>
</tr>
<tr>
<td>Transportation of Dependents; policy</td>
<td>BuPers Inst. 4650.6A, BuPers Inst. 4650.8A</td>
</tr>
<tr>
<td>Summary of State Bonuses</td>
<td>BuPers Inst. 1760.3B</td>
</tr>
<tr>
<td>PROGRAMS AND OPPORTUNITIES OF PARTICULAR INTEREST TO OFFICERS TRAINING</td>
<td></td>
</tr>
<tr>
<td>GENERAL TRAINING</td>
<td>Catalog of U. S. Navy Activities and Courses</td>
</tr>
<tr>
<td>Schools and Courses</td>
<td>(NavPers 91769-B), BuPers Inst. 1500.25B</td>
</tr>
<tr>
<td>General Line School; policy, eligibility</td>
<td>BuPers Inst. 1520.43</td>
</tr>
<tr>
<td>Postgraduate Instruction; policy, eligibility</td>
<td>BuPers Inst. 1520.15C</td>
</tr>
<tr>
<td>Five-Year College Training Program; policy, eligibility</td>
<td>BuPers Inst. 1520.48A, BuPers Inst. 1520.37</td>
</tr>
<tr>
<td>Completion of Naval Aviation College Program for USN Officers; policy, eligibility</td>
<td>BuPers Inst. 1520.28</td>
</tr>
<tr>
<td>Officer Correspondence Courses; summary</td>
<td>Catalog of Officer Correspondence Courses</td>
</tr>
<tr>
<td>Tuition Aid Program; resumption of SPECIALIZED TRAINING</td>
<td>(NavPers 10800-A)</td>
</tr>
<tr>
<td>Flight Training (HTA); policy, eligibility</td>
<td>BuPers Inst. 1520.20A</td>
</tr>
<tr>
<td>Underwater Demolition Training; policy, eligibility</td>
<td>BuPers Inst. 1520.7</td>
</tr>
<tr>
<td>Deep Sea Diving Training; policy, eligibility</td>
<td>BuPers Inst. 1520.4B</td>
</tr>
<tr>
<td>Training and Administration of the Naval Reserve; policy</td>
<td>BuPers Inst. 1001.10A</td>
</tr>
<tr>
<td>Nuclear Power Training Program; information concerning Assignment of Officers of Nuclear BuPers Inst. 1501.28</td>
<td></td>
</tr>
<tr>
<td>Powered Submarines</td>
<td></td>
</tr>
<tr>
<td>ASSIGNMENT TO SPECIAL DUTY</td>
<td></td>
</tr>
<tr>
<td>Assignment to Submarine Duty; policy</td>
<td>BuPers Inst. 1520.6G</td>
</tr>
<tr>
<td>Assignment to Special Weapons Program; policy, eligibility</td>
<td>BuPers Inst. 1331.1A</td>
</tr>
<tr>
<td>Assignment with a Navy Security BuPers Inst. 1331.2B Group; policy, eligibility</td>
<td></td>
</tr>
</tbody>
</table>

OCTOBER 1957
Vanguard Computing Center Will Calculate Movements of Earth Satellites

An electronic computer, as complicated and intricate as it is fascinating, has been set up in Washington, D. C., for the Vanguard Project.

It will have a job to do that will be as difficult as locating a golf ball traveling at the speed of sound at a 60,000-foot altitude. Naturally, the device was not designed to track golf balls—its high speed electronic calculations will predict future orbits of U.S. scientific satellites.

The center will be operated under a Navy contract with a business machine corporation.

Initial U. S. satellites, planned for launching under Project Vanguard, will be 20 inches in diameter and will speed at more than 18,000 mph in an elliptical course at altitudes of from 250 to 1500 miles above the earth.

The machine's computing units are rigged to whip out complicated calculations fast enough to anticipate the path of the tiny artificial satellite hurtling around the world every 100 minutes. The computer is magnetic tape-operated. Not only is tape used for data storage, but it is also the primary means of input and output to and from the heart of the computer. It has to be fast since information flows in and out of a central unit via tape at the rate of 2500 words per second. As many as three tapes can be read at once.

As the satellite crosses the area of a station, Minitrack equipment will measure its angular position by phase comparison techniques, recording its "signature" automatically. Analysis of these signatures will give the complete angular history of the satellite's passage. The data will be flashed to a Vanguard control center at the Naval Research Laboratory. Here it will be relayed to the Vanguard Computing Center for the complicated job of calculating and compiling satellite ephemerides (timetables of the expected locations of the satellite at regular intervals during its future life).

These schedules, signaled to optical tracking stations around the world, will tell watchers when and where to train their instruments for precise observation of the tiny, speeding artificial moon.

Vanguard is one of the most ambitious projects ever to be undertaken. It is an attempt to probe the fringe of outer space, so necessary before man himself can take the big jump. Many problems must be answered before this first satellite can be launched. The electronic computer equipment and Minitrack are steps in this direction.
For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . .

★ Dufek, George J., RADM, USN (Ret.), as Commander United States Naval Support Force, Antarctica, during Operations Deep Freeze I and II from 1 Feb 1955 to 22 Mar 1957. Admiral Dufek was directly responsible for the preparation of plans and operations of Deep Freeze I and II which led to the establishment of seven widely dispersed bases to support the Antarctic programs of the U. S. National Committee for the International Geophysical Year.

For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . .

★ Wilkinson, Eugene P., CAPT, USN, for exceptionally meritorious conduct as commanding officer of the uss Nautilus, SS (N)-571, the world’s first nuclear-powered submarine. While under his command (from 30 Sep 1954 to 18 Jun 1957) Nautilus steamed more than 67,000 miles without a major breakdown or failure to meet an operational commitment. CAPT Wilkinson’s leadership significantly contributed to the advancement of anti-submarine warfare through imaginative operations with naval surface and air forces. He also directed a public relations program which has greatly benefited the Navy and the U. S. government.

For heroism or extraordinary achievement in aerial flight . . .

★ Anderson, Robert L., LCDR, USN, awarded posthumously for heroism and extraordinary achievement in aerial flight as pilot of a jet aircraft, attached to and serving with Air Transport Squadron Thirty-Two, during a routine flight on 1 Aug 1956. When his aircraft caught fire immediately after taking off from the El Paso, Texas, International Airport, Lieutenant Commander Anderson skillfully avoided a densely populated housing area and school building. He crashed-landed his flaming aircraft in an open and deserted field, sacrificing his own life in order to save the lives of others.

★ Barber, Donald W., AT2, USN, for heroism while participating in aerial flight on 20 Aug 1956.

★ Kay, Warren E., AO2, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Cox, Dale W., Jr., CDR, USN, as pilot of an A3D Skywarrior, established the U. S. transcontinental (East to West) aerial speed record of five hours, 22 minutes, 30.34 seconds, and the round trip record of nine hours, 31 minutes, 34.4 seconds, on 21 Mar 1957.

★ Curtis, Jack A., AT3, USN, awarded posthumously for heroism while participating in aerial flight on 23 Aug 1956.

★ Deane, James B., Jr., LTJG, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Flood, Francis A., Jr., LTJG, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Haskins, William F., AT1, USN, awarded posthumously for heroism while participating in aerial flight on 23 Aug 1956.

★ Humbert, William M., Jr., AO3, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Hutchinson, Milton, LCDR, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Lowenshury, Harold E., AD1, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Mattin, Albert F., AT1, USN, awarded posthumously for heroism while participating in aerial flight on 23 Aug 1956.

★ Messenger, Carl E., AT2, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Fonsford, James W., LCDR, USN, awarded posthumously for heroism while participating in aerial flight on 23 Aug 1956.

★ Powell, Wallace W., AE2, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Sprinkle, Donald E., AT3, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Strykowski, Raymond, AT2, USN, for heroism while participating in aerial flight on 23 Aug 1956.

★ Berry, Donald E., DN, USN, for heroic conduct in rescuing a service-woman from drowning in waters off Hunting Island State Park, South Carolina, on the afternoon of 2 Sep 1956.

★ Boulet, Leland F., SN, USN, for heroic conduct in rescuing a shipmate from drowning while serving on board the uss Floyd B. Parks (DD 884) in the Philippine Sea, on 11 Mar 1956.

★ Davis, Albert Joseph, AD3, USN, for heroic conduct in assisting in the rescue of a drowning shipmate, while serving on board the uss Langley (CV 1) in Guantanamo Bay, Cuba, on 5 Apr 1931.

★ Dietlin, Robert, SN, USN, for heroism in rescuing a fifteen-year-old boy from drowning at Sandy Beach, Koko Head, Oahu, Hawaii, on the afternoon of 28 Oct 1956.

★ Dunn, Francis C., BM2, USN, awarded posthumously for heroic conduct while serving on board the uss Bolette (AKA 99) at the Mare Island Shipyard, Vallejo, Calif., on 20 Apr 1956.

★ Franklin, Charles H., SN, USN, for heroism in rescuing a fifteen-year-old boy from drowning at Sandy Beach, Koko Head, Oahu, Hawaii, on the afternoon of 28 Oct 1956.

★ Kiel, Max R., CD2, USN, awarded posthumously for heroic conduct while serving with United States Construction Battalion (Special) in the Antarctic from 29 Dec 1955 to 5 Mar 1956.

★ Lawrence, Kenneth W., LT, USN, for heroic conduct while serving as Crash and Fire Officer, United States Naval Auxiliary Air Station, Kingsville, Texas, on 16 May 1956.

★ Manor, Teddy J., SN, USN, for heroism in rescuing a fifteen-year-old boy from drowning at Sandy Beach, Koko Head, Oahu, Hawaii, on the afternoon of 28 Oct 1956.

★ Spector, Abraham, AD3, USN, awarded posthumously for heroic conduct while attached to Helicopter Utility Squadron TWO, temporarily based aboard the uss Franklin D. Roosevelt (CVA 42) in attempting to rescue a ditched fighter pilot on 6 Apr 1957.
BOOKS

THIS MONTH’S SELECTIONS
RANGE FROM EAST TO WEST

WHETHER you like to read about the Civil War or the Korean conflict, UDT type operations or earth satellites, you have your choice in this month’s selections. Here are short accounts of some of the many books available to you at your ship or station library.

Sea stories of the “now it can be told” variety abound in The Sea War in Korea by CDR Malcolm W. Cagle, USN, and CDR Frank A. Manson USN. Here, for the first time, are the facts behind such hush-hush incidents as the air battle between Navy and enemy jets over Vladivostok and the behind-the-lines intelligence missions which made the Inchon success possible. Sea War in Korea will become a “must” for students of military and international affairs, not so much for its value as a history, but for its value as an interpretation of the results and of the lessons learned in the action. Much of the material was compiled from interviews with every major military commander of the conflict including Generals MacArthur and Van Fleet and Admirals Joy, Burke, Briscoe and others. Commanders Cagle and Manson have managed to weave in excerpts portraying individuals at war which adds the sympathetic twist to an already exciting narrative.

Much has been said and written about man’s first attempt to launch an earth satellite. Martin Caidin’s Vanguard covers the whole story of Project Vanguard, the attempt by the United States to send an artificial moon to orbit around the earth. This highly technical and scientific subject doesn’t leave you up in the air for a minute. It is written in a manner which leaves the layman with a clear understanding of the background research, the construction of the satellite and its three-stage-rocket launching system, and of the knowledge which, it is hoped, will be gained from this experiment. All the reader’s questions are anticipated and answered with the latest official information.

Dropping from the ethereal to the liquid medium, Major Willy-Charles Brown takes us under the surface of the ocean...with his Combat Beneath the Sea. This is the story of the development and usage, by various combatants during WW II, of human torpedoes, midget submarines and frogmen. It begins with the introduction of the Italian version of the human torpedo in 1935, which was successfully used in 1940, and with this as a point of departure, leads into Britain’s exploits with Human Torpedo Mk I, Germany’s “Kampfschwimmer,” Japan’s Happy Dragons and our own underwater demolition teams. Combat is the account of men who subject themselves to icy waters, isolation and extreme hazards beyond the ordinary risks of war.

For those who prefer to read battle accounts on more solid ground, The Battle of Cassino is the right choice. Fred Majdalany presents a blow-by-blow, shot-by-shot account of that part of the Italian campaign which ended with the capture of the monastery-fortress on the summit of Mt. Cassino. Majdalany points out that in modern warfare the word “battle” is almost a misnomer, because there are neither the orderly formations of opposing forces nor a specific beginning or end to any particular battle. Rather, today’s “battle” is a phase of the whole campaign with a specific object, such as the capture of a certain city, or in this case of a mountain, as its goal. Therefore he feels it necessary to lead up to the eventual capture of Mt. Cassino and to describe several other operations which had a definite bearing on the final outcome. In addition, The Battle of Cassino gives you an insight into the behind-the-scenes thinking and planning of the military and civilian leaders of allied forces and Germany.

Burke Davis, in Jeb Stuart: The Last Cavalier, has added another top-notch biography to his string of portraits of Civil War leaders. General James Ewell Brown Stuart, CSA, is shown as the swashbuckling gallant, with his black-plumed hat and flying cape, fearless, bold, brilliant in the field and devoted to his cause. On the other hand, you see Jeb as a family man, light hearted and as a lover of music. General Stuart has been acclaimed as the South’s most outstanding cavalry commander and you ride with him in the raid on Chambersburg, the First and Second Manassas, Gettysburg and his last battle at Yellow Tavern. The Last Cavalier has been reconstructed from contemporary letters and diaries, from dispatches, and from the accounts of men who fought with him. In order that you may better understand Stuart, the Southern gentleman, Davis portrays the culture of the period, with its frivolous gaiety, dancing and gambling of the men who fought to preserve their society.

The old chestnut that truth is stranger than fiction is convincingly bolstered in Mysteries of the Pacific. Robert de la Croix has collected a series of 11 real-life puzzlers dealing with disappearances of ships and people in the vast Pacific. He begins with an expedition in the late eighteenth century which was sent out to explore and map the ocean and was never heard from again and with the mysterious disappearance of Amelia Earhart. Thrown in for a little added flavor are accounts of castaways, ghost ships and desert islands which will satisfy the saltiest among you.

This month’s selections finish in a cloud of dust and the smell of burning rubber with John Bentley’s exciting novel The Faster They Go. The author, one of the top racing writers and himself a well-known driver, has you sitting in the co-pilot seat as the hero drives the thrill-packed Carrera Panamericana, Sebring, Le Mans and others. You feel as if you are keeping up the revs, making the pit stops, downshifting and planning the strategy of the race. The story is fictional but many of the names and incidents are recognizable as prominent makes of cars and famous racing figures. This is “real man” writing and a one-course lesson on the ins and outs of driving Grand Prix and sports cars.

58

“Shall I let him go now Chief?”
FOR INTERNATIONAL DEFENSE

report on NATO and SACLANT

No longer need one country face the forces of aggression alone. By means of SACLANT, the seagoing arm of NATO, many of the free countries of Europe in combination with Canada and the United States have combined forces.

Training exercises and maneuvers are part of a tradition as old as the Navy itself, but within recent years a new element has been added. For the first time in history, a sizeable number of U. S. Navymen are learning to work with their opposite numbers of other free nations during times of peace.

Perhaps you've taken for granted the presence of a British cruiser or a French destroyer working out a problem with our own ships during a Mediterranean exercise. Or perhaps you've noticed a squadron of foreign aircraft bound on the same mission as ours.

Not spectacular or showy perhaps, but this may well be one of the most significant sights you're likely to see in your lifetime.

This has been brought about through NATO (North Atlantic Treaty Organization). Where do you, and the U. S. Navy, fit into the picture?

Here's the story of NATO and SACLANT, as told to ALL HANDS by the office of ADM Jerauld Wright, USN, Supreme Allied Commander Atlantic.

The bitter experiences of two World Wars convinced the countries of the free world that a strong alliance was necessary for the survival of all. History had proven that an attack upon one of the countries of the Atlantic community threatened the security of the whole North Atlantic area.

The victorious Allies of 1945 knew that some kind of defensive arrangement would be necessary among nations if the world were to avoid another disaster like World War II.

Out of this hope for world security and peace was born the United Nations at San Francisco in 1945. However, it gradually became evident that the creation of the United Nations did not mean that international tensions and open hostilities were at an end. The United Nations alone could not assure security and peace.

Under these circumstances it was natural, therefore, for the group of free nations to try to gain additional security under the framework of the United Nations which guarantees its members the continued right of individual and collective self-defense. Although the Western nations were slow to realize the dangers that faced them, it was apparent that collective defense gave them their best chance for security.

They had already learned that nations working together toward a common goal could accomplish much more than those working independently.

OCTOBER 1957
On 4 Apr 1949, one of the most revolutionary experiments in international relations took place with the signing of the North Atlantic Treaty Organization, or NATO. At that time, 12 widely-spread nations, varying in size from the United States to Luxembourg—and representing two continents—agreed to work together, not only in the military, but in the political, economic and social fields. North America was represented by the United States and Canada. On the other side of the Atlantic, Belgium, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal and the United Kingdom signed the treaty. Greece and Turkey accepted the Treaty in 1952 and the Federal Republic of Germany followed in 1955.

With the Treaty as a foundation, NATO has developed an elaborate structure which has focused on economic, political, social and cultural, as well as military activities. Basically, it is a political alliance aimed to prevent war. An armed attack against one or more of these 15 nations is considered an attack against them all.

No nation lost any part of its sovereignty by joining NATO. It is not a federation, but an alliance among 15 independent nations who have agreed to make defense plans together.

The North Atlantic Council

The work of NATO is carried on by two kinds of agencies—civilian and military.

A civilian group called the North Atlantic Council, is the top policy-making body. Each member is represented on the Council, which meets several times a year at NATO headquarters in Paris, with the chairmanship rotating on an alphabetical basis. The Council has no powers to make decisions binding on its respective governments. It is an organization through which the governments themselves can reach voluntary agreements with each other.

The Military Committee

The Military Committee is the supreme military authority in NATO. Similar to our own Joint Chiefs of Staff, it is composed of officers of Chief of Staff rank of each NATO power. (Iceland, having no military establishment, is represented by a civilian.) The Military Committee concentrates on planning broad military policies and has turned over the day-to-day military routine to two full-time bodies, the Standing Group and

EVERYBODY'S IN THE ACT—All branches of the service team up at NATO. Here, Army and Navy check message.
The Supreme Commands

The European Command stretches from the northern tip of Norway to the eastern corner of Turkey and this area is under the Supreme Allied Commander, Europe, or SACEUR. Headquarters are in Paris. This command includes most of the land, sea and air forces concerned with the defense of the European continent.

Supreme Allied Commander Atlantic (SACLANT) is the other major NATO command and is of primary interest to you. Eight nations, including Canada, Denmark, France, the Netherlands, Norway, Portugal, the United Kingdom and the United States furnish officers to SACLANT's staff and are the principal contributors of forces and bases. SACLANT headquarters are at Norfolk, Va., and the present Supreme Allied Commander is ADM Jerauld Wright, USN. The Atlantic Command extends from the North Pole to the Tropic of Cancer and from the coastal waters of North America to those of Europe and Africa, including Portugal, except for the Channel and waters around the British Isles. The area covers some 12 million square miles.

The area surrounding the British Isles is common to both SACEUR and SACLANT and is under control of the Commander-in-Chief, Channel, who has a committee of naval experts from the United Kingdom, France, the Netherlands and Belgium to assist him.

Defense of Europe

The defense of NATO falls naturally into three categories: The defense of Europe; the defense of North America; and the defense of the Atlantic and its sea lines of communication which link these two. If one fails, they all fail.

The Supreme Allied Commander, Europe, is responsible for the defense of the allied countries of Continental Europe against invasion. He would, in time of war, control all land, sea and air operations in Europe.

He has a large number of Allied ground and air forces under his command today and others, including naval forces, which are earmarked for him in time of war. A large part of these NATO forces are organized and equipped for mobile warfare and they possess fire power far greater than previously known.

Defense of the American Continent

To defend the American continent is the responsibility of the Canadian-U. S. Planning Group. This is the group responsible for the establishment of the Distant Early Warning or DEW Line and the Pine Tree Line to give early warning of an enemy air attack. (See ALL HANDS, September 1956).

Defense of the Atlantic

The defense of the Atlantic is entrusted to the Supreme Allied Commander, Atlantic (SACLANT). In wartime, his job is to guard the sea lanes and deny the use of the Atlantic to an enemy. SACLANT has responsibility for islands in this area, such as Iceland and the Azores, and his duties also include assistance in the defense of Europe.

Primarily, his job is to prevent the enemy from driving a wedge down the Atlantic in an attempt to separate North America from Europe. The sea lanes must be maintained to assure that North America can help Europe in case of war.

All NATO nations bordering on the Atlantic who possess deep sea naval forces have assigned them, in case of war, to the NATO Allied Command Atlantic. This includes almost the entire Atlantic Fleets of both the United States and the United Kingdom. The defense of territorial waters, ports and harbors remains a national responsibility and the coastal forces remain under national control.

During peacetime, the Allied Command Atlantic develops defense plans, conducts training exercises, and advises on logistical requirements.

Allied Command Atlantic

Here's a further breakdown of the organization and responsibilities of the Allied Command Atlantic, the first international command in history.

The second of the two NATO commands organized under a Supreme Commander, the Allied Command Atlantic was officially established in April 1952. It is an operational, rather than an administrative, command.

Its wartime forces would include units of the armed forces of eight different nations—Canada, Denmark, France, the Netherlands, Norway, Portugal, the United Kingdom and the United States plus the base facilities of Iceland. These forces are predominantly naval.

Unlike SACEUR, SACLANT has no forces permanently attached to his command. For training purposes and in the event of war, forces are assigned to him from the United States.

So far as is known, SACLANT is the only Allied military headquarters ever to be established in peacetime in the United States. The headquarters is manned by Army, Navy, Air Force and Marine Corps officers of the eight NATO nations contributing to the defense of the Atlantic. An additional force of enlisted personnel are men and women from the U. S. Navy (See September 1952, pp. 31-35; October 1952, pp. 28-34; May 1955, pp. 16-19 of ALL HANDS) plus a U. S. Marine Corps detachment which performs guard duties.

The staff of SACLANT is divided into seven divisions: Personnel and Administration; Intelligence; Plans; Policy and Operations; Logistics; Communications; Budget and Finance; and Public Information.

Here are the lines of communications which reach out to all ships in all corners of the Atlantic. Intelligence on all aspects of the military threat to the Atlantic region are centered here. Plans and instructions by which the naval forces of NATO would operate in time of war, are formulated here.

SACLANT Plans and Operations

SACLANT planners are faced with four big problems:

- All the nations in Europe are dependent upon the
heavy tonnage of seaborne traffic by cargo ships, passenger ships, and tankers for their economic support in peace-time and for reinforcements and survival in time of war.

- If the European nations were denied access to the seas they could not survive.
- If the United States were denied use of the seas, she would soon lose her overseas allies and would be forced back to her own shoreline to fight the war alone from her continental bases.
- The loss of the seas would result in loss of any initial advantage from an atomic superiority because this advantage could not be followed up in Europe through use of military and economic support of North America.

The concept of defense of the Atlantic can be summed up as: Strike and—at the same time—defend.

The Allied Command Atlantic is essentially a mobile, elusive airfield complex at sea, with its own offense, defense, and support built in. It is geared for atomic war: the Fleet would be well dispersed against atomic attack and would cover an area about the size of the state of Maine.

Because it is always on the move it would not be subject to pin-pointing for guided missile attack like the stationary targets ashore. The Fleet could project its offensive power right into the heart of enemy naval bases and airfields that are the main source of threat to SACLANT’s control of the Atlantic.

The defense aspect of SACLANT includes the use of modern anti-submarine forces specifically equipped and trained to hunt and kill submarines. This team of ships and aircraft can be moved quickly from one spot to another. They should produce the biggest payoff when used in a forward defense role to operate in the narrow seas around Iceland through which the enemy submarines must pass before they can get to merchant shipping further to the south.

Some of these same forces could also be used for close-in protection of NATO merchant ships against those submarines that have penetrated the forward defense and have gotten into the broad Atlantic. For this job, the convoy system would be used, with groups of merchantmen guarded by escort destroyers and covered by long-range shore-based patrol planes.

Briefly, the SACLANT concept for defense of the Atlantic is:
- To strike, with the maximum capacity, the enemy airfields and naval bases which support the forces which would seize control of the seas.
- To defend the broad Atlantic as far forward as possible.
- To provide close-in protection of our trans-Atlantic sea lanes.

**Combat Readiness**

To be effective, NATO cannot be a mere collection of national units. They must be welded into a smoothly working, coordinated fighting team. Of the several ways combat efficiency can be improved, the most important is by training. SACLANT is constantly conducting two types of exercises: Those involving operations by the fighting forces themselves; and the “indoor” command post exercises.

Each year there are many of the former, both small and large scale. Periodically, a large-scale exercise is held involving the three major NATO commands—SACLANT, SACEUR, and CHANNEL. The small-scale exercises cover such fields as convoy escorting, anti-submarine warfare, mine laying and mine sweeping, and Fleet operations.

An example of the character and scope of the major exercises is Mariner. This was the largest international naval exercise ever held, involving nine nations, and lasting 19 days. Mariner included exercises in convoy protection, naval control of shipping, and striking Fleet operations in northern waters. Enemy strategic concepts were introduced and, to make the training as realistic as possible, the “enemy” role was portrayed by surface raiders, submarines and land-based air elements drawn from NATO forces.

**SACLANT Logistics and Financing**

The combat efficiency of the armed forces of a coalition largely depends on the extent to which the various partners are trained on uniform lines, use the same system of staff work, the same operational procedures and techniques and employ the same communications system.

Navies still need beans, bullets and black oil. To carry out NATO strategy, the forces need logistic support, such as maintenance work and repairs, as well as food, fuel, ammunition and equipment.

One of the most difficult problems confronting the Allied military forces is the question of interchangeability of materials provided by the members. Will the naval forces of one nation be able to use the supplies of another? Can one nation effectively support and supply the ships and aircraft of another?

So far as possible, NATO has tried to standardize everything it uses and everything it does. Some items, such as fuel oil, can be used for ships of any kind, regardless of their nationality. Fuel and lubricants are standardized, and so is the refueling equipment used by NATO ships and aircraft. These items can be obtained wherever they are available, regardless of the nation in which the source of supply is located.

In other fields, such as electronics, NATO has established many standard radars for aircraft detection and sonars for submarine detection. Electrical current which varies from country to country is being standardized aboard ship. The communications field uses standard equipment and agreed frequencies as much...
as possible. Many types of aircraft and smaller naval ships, such as minesweepers, are constructed according to NATO standards and can be used and repaired by other NATO nations.

The areas of standardization also reach out to other important fields such as operating procedures, tactics, signals and military operations orders. NATO nations may speak different languages but they all respond to the same signals.

As a taxpayer, you have a legitimate interest in NATO finances. When it was first formed, it was agreed that the cost should be shared but there was considerable discussion as to the basis. Some members suggested "capacity to pay," but this was found to be an expression almost incapable of definition. Others suggested that the nation that used the new facilities would pay for them. Eventually, by a combination of these and other factors, a cost-sharing agreement was reached. Today, all members contribute to the fund and after the money has been spent, there is an audit by representatives of all countries.

NATO has already approved a construction program of over two billion dollars spread over a number of years and involving construction from the far north of Norway, in France, in Portugal, and in Italy, to Greece and Turkey. SACLANT, as well as other NATO headquarters, is supported by all 15 members, even Greece and Turkey, who are far from the Atlantic Ocean.

The amount of money spent each year by NATO amounts to only one-half of one per cent of the total defense budgets of the NATO countries. That's a lot of protection for a small investment.

Achievements of NATO

NATO has made great progress since 1949. It is well recognized that NATO's achievements cover more than one field even though the most spectacular ones are in the military.

To preserve peace and strengthen the security of the North Atlantic Community was the first job. Peace has to be maintained to promote the success of other joint actions of these nations.

Among other factors, the increase in military forces of NATO since 1949 has helped to reduce the danger of another major war. After eight years of effort, NATO has about 100 trained divisions (active and reserve), about 6000 aircraft and 1500 naval vessels. Economic cooperation with NATO has kept defense planning and build-up within the limits imposed by the economic and financial capacity of the member countries.

Other factors besides numerical figures must be used as a basis for measurement of achievements such as integrated forces, fire-power and combat value. The NATO defensive system benefits from the most recent developments in weapons and other techniques.

The number of airfields equipped for jet aircraft rose from 15 in 1950 to 125 in 1954, and reached 165 in 1955. The communications networks of numerous countries have been greatly extended in such fields as submarine cables, land lines and radio relay circuits.

By the end of 1956 about 3750 miles of pipelines for transportation of fuel, and storage tanks with a total capacity of over 1,000,000 cubic meters were in service.

While trying to answer the security needs of the present, the North Atlantic Community looks forward from a troubled international past to a more enlightened future. The ultimate success of the Atlantic Alliance depends primarily upon the friendship and respect that exist among the people of the NATO countries. While cooperation by governments is essential, a cooperative spirit among the men and women who come into contact with one another is equally vital. Service abroad puts naval personnel in a unique position to promote friendship and understanding.

The North Atlantic Treaty Organization represents a major advance toward preserving the peace of the world.

SEATO — A Beginning

The quest for peace through collective security among free nations of the world has not stopped with the North Atlantic Alliance. Realizing the need for collective military and economic strength in Southeast Asia and the Southwestern Pacific, top diplomats of eight nations signed the Southeast Asia Collective Defense Treaty and Pacific Charter, commonly known as SEATO, at Manila on 8 Sep 1954. The Treaty came into force on 19 Feb 1955, following the deposit of ratifications by the eight member countries—Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom and the United States.

When World War II ended, the peace which people everywhere desired did not come to Asia. In many parts of Asia a pattern of Communist-inspired insurrection and aggression developed, culminating in the violent assault on the territory of South Korea.

SEATO member nations have bound themselves together by Treaty because they have common ideals and hopes for the future of their peoples and are determined to resist interference with peaceful progress toward their goal. History shows that evil can only be overcome by a positive faith. SEATO has such faith. The determination of its members to prevent and deter further aggressive expansion into Southeast Asia by armed force and subversion has made an important contribution to the preservation of peace in the area.

ALL TOGETHER—U.S. Ships and Novyemen are working with others from NATO to preserve freedom of the seas.
BLACKDOG has finally lost a battle. It was time—not a canine adversary—that finally brought down the tough, cheerful, utterly useless and utterly admirable mascot of ZP-2, NAS Glynn, Ga.

Utterly useless? Well, not quite.

Then an estimated six years old, Blackdog received his lighter-than-air training en route to Lakehurst when his squadron was transferred from South Weymouth, Mass. He received his Quarter Wing after flying the minimum required hours and then continued to assist the ground handling officers during all flight operations. Blackdog was always the first to retrieve the line and the last to let go on take-off.

In July of 1951, ZP-2 and Blackdog were ordered to change their home base to Glynn. By this time, solely on merit and personality, he was CO of the Squadron, although he permitted certain promising juniors to relay his orders to all hands.

In '52, he joined the search party with ZP-2 when two servicemen from Jacksonville, Fla., were reported missing in the Okefenokee Swamp in the Waycross area. (The men returned to their base two days later, unaware of the concern their absence had created. Blackdog had a fine time, even if the rest of his party did not.)

The following year, he alerted the duty section when a freak accident in the form of falling pieces of lumber from the hangar ceiling punctured one of the blimps. It was Blackdog's loud barking that alerted the crew who were able to supply emergency patches and avert a disaster.

In the years 1953, '54 and '55, Blackdog was to be found barking at the heels of ZP-2 men hastening them on during the frequent seasonal hurricane evacuations and forest firefighting.

It was in 1955 that he achieved his greatest heights. As with all great legends, the details are somewhat obscure. As ALL HANDS first heard it and so reported the event in the May 1956 issue (page 41), Blackdog hung on with his teeth. However, his official biographer who relayed the sad news of his passing, S. H. Bruck, SN, tells the story like this:

"On the evening of 12 Aug 1955, ZP-2 was alerted that a hurricane was approaching. All airships and crews immediately started their evacuation to escape Hurricane Connie. Blackdog was right there, ground-handling with the rest of the men when one of the lines became entangled around his legs. He was airborne for about one hour and twenty minutes before he was discovered, dangling below the blimp, and was finally deposited in the arms of the waiting ground-handling party."

The day Blackdog had dreaded finally came as it does to all airmen who live long enough: he was grounded. Although his heart was still in ground-handling, Blackdog finally resigned himself to the fact that eventually all Navymen find themselves in drydock.

ALL HANDS has never had the pleasure and honor of meeting Blackdog personally. Nevertheless, the sympathy of the staff is extended to the men of Airship Squadron Two in the time of their loss.

His stone reads: Blackdog. A good shipmate.

No, not utterly useless.

The ALL HANDS Staff
you are handling the LIFELINES of the free world

VITAL OCEAN ROUTES MUST BE KEPT OPEN