TABLE OF CONTENTS

Puppet Planes ........................................... 2
Caribbean Drill ........................................... 6
Sub Raiders of Tomorrow ................................. 10
'For Valor in Action' .................................... 15
Saga of POWs ............................................. 18
First Postwar Reserve Cruise ............................ 20
Pacific Cinderella ........................................ 21
Mock-Up For Battle ........................................ 28
Battin' the Breeze on the 7 Seas ....................... 30
THE WORD .................................................. 32
Black Light ................................................ 34
Letters to the Editor ....................................... 38
The Month's News ......................................... 40
New Enemy: Inflation ..................................... 54
Modern Knights-in-Armor ................................ 56
Decorations and Citations ................................. 57
Books: Interesting Lives .................................. 65
THE BULLETIN BOARD .....................................
   Navy Wants Your Ideas ................................ 66
   Airlines Need Communicators .......................... 69
   Pointers for Dependents ................................ 70
   Leave Policy Clarified ................................ 71
   Rules for Wearing Ribbons ............................. 72
   Voting Information ..................................... 77
   Alnavs, NavActs in Brief ............................... 78
All Thumbs ................................................. 79
Fantine Forum ............................................ 80

• FRONT COVER: President Truman talks with Harry O.
  Brewer, MM3c, in the engine room of the USS Franklin
  D. Roosevelt while on an inspection of the carrier during
  the Eighth Fleet maneuvers. (See p. 6)

• AT LEFT: The carrier USS Philippine Sea is cautiously
  eased through the Fore River, Mass., drawbridge by eight
  escorting tugs as it heads for its South Boston Navy Yard
  annex berth.

CREDITS: Front cover, Press Association, Inc.: inside front cover,
Acme photo; inside back cover, Official U. S. Navy photograph.
On pp. 40-41: upper left, U. S. Coast Guard photograph; left
center, Press Association, Inc.: lower left and upper right, Official
U. S. Navy photographs; lower right, Acme photo.
FLIGHT OF DRONE (lower center) is guided by one of two queen planes (upper right). Second queen is standby.

WHEN A-DAY of the long awaited atomic bomb tests at Bikini arrives about 1 July, little pilotless F6F Hellcats will streak down into gathering clouds of smoke and dust in quest of scientific data. And if they return from the inferno of the bomb detonations with data that the Navy, Army, and scientists are seeking, it will be no accident. For daily, barring adverse weather, Navy pilots have been going aloft to put the drones through their paces—all in preparation for the historic tests ahead.

Just how practical the idea of sending the drones into the mushrooming clouds of the explosions will prove is something that cannot be determined now. The bomb detonations themselves will tell the story of what heat will do to the planes.

But this is something for the future. In the meantime, the plan is to send Navy drones to the heart of the explosions, some equipped with special built-in scoops to gather particles in the air, others with velocity, gravity, time, and altitude recorders. The Army Air Forces is jointly participating in the drone phase of the tests, presently training with B-17’s for a parallel exploration of the effects of atomic force on airborne aircraft.

All of the pilots who will guide the drones from their control planes have had previous experience in operation of pilotless aircraft. Not all, however, have worked with the F6F’s, the planes chosen for the job at Bikini. The Navy figures they will be well prepared for the job ahead by the time they reach the Marshalls, as a result of extensive training.

Use of drones is no newly conceived idea with the Navy, although little information about their activities has filtered through to the public. Dating back to 1938, experimentation with radio controlled planes has been in progress. But it was not until drone groups put on an exhibition for the press at Atlantic City last December that the public received any insight into the perfection achieved.

The little F6F’s, only recently converted to remote control duty, made the most impressive showing at the Atlantic City demonstration. Previously, the work horse in pilotless aircraft experimentation was the TD2c. The F6F’s, however, soon proved to be better planes for use as drones, became the object of extensive experiments, and subsequently were chosen for the Bikini assignment.

Having selected the plane, the next chore of the Navy was to choose pilots for a task unit. This could have been a difficult task, since only a small percentage of pilots have the necessary background, but it was not. At the Naval Aircraft Modification Unit in Johnsville, Pa., development of pilotless F6Fs was being given plenty of attention, and Capt. John W. Davidson, USN, chief engineer, was selected to head the drone unit.

It developed that an officer in BuAer kept, as a hobby, a complete file of pilots with experience in handling pilotless craft. So when a request came from the commander of Joint Army-Navy Task Force 1 for a group...
of pilots to form a drone unit, it was not long before cards were pulled out of the file and a list of officers made up. Largest group of pilots came from the unit that had been conducting experiments at Atlantic City. Others were brought in from Santa Ana, Tinian, Pearl Harbor, and many other widely scattered points.

Thus Task Unit 1.6.14 was formed and given an assignment in the Bikini tests, otherwise known as “Operation Crossroads.” The 38 pilots of the unit immediately went into training at the Naval Auxiliary Air Station, Brown Field, San Diego, Calif. And they will continue to train until the first bomb is released—to make sure that no failure results from lack of training or preparation.

Dress rehearsals being conducted at San Diego vary only slightly from plans for the real show at Bikini. Because the drones will be catapulted from the deck of a carrier, the Shangri-La, no effort now is being made to lift them from runways by remote control. A drone actually is taken up by a pilot, who relinquishes control to a control plane as soon as he is in the air. At Bikini, the drones will be operated through remote control from the time they leave the deck of the Shangri-La until they return.

To complete preparations for A-Day, tests have been made in lifting the drones from the deck of the Shangri-La completely by remote control. In these tests, successful in result, the Hellcats went up pilotless, just as they will at Bikini.

In the present training at San Diego, four control planes are assigned to each drone. The control planes work in pairs, but only one actually controls the drone, with the other standing by in case of any emergency.

The first pair of control planes takes over handling of the drone as soon as it leaves the ground. They take it over a prescribed course and put it through maneuvers. Then the drone is set on another previously arranged course, over which it flies under the guidance of an automatic pilot.

This course is followed for 13 minutes. The drone then is picked up by the second pair of control planes, which take turns putting it through maneuvers. On approaching the field, the control plane releases the drone to the guidance of a ground control officer, who handles the landing. In this practice landing routine, the pilot cuts off radio control and takes over if the plane is not coming in properly. Ordinarily, drones are brought in completely by remote control from the ground station.

Normal speed of operation in the training work is about 150 knots true air speed, which makes it possible for the control plane to overtake the drone if necessary. At present it is sometimes difficult to control accurately the speed of the drone. Because the job at Bikini might entail flying at various altitudes, training flights are being conducted at 10,000, 15,000, 20,000, and 25,000 feet.

Handling of the drones in the air has presented little difficulty, and they have been controlled effectively from their control planes at distances of 30 miles. But the problem of speed control poses still another problem—that of landing. The latter is the most ticklish part of the business. Yet some pilots, who have been put in the drones to handle take-offs, come in with their hands over their heads in tribute to the ability of the ground control officer.

All of the drones are painted red, but tail assemblies have different colors. They may be green, blue,
PILOTLESS HELLCAT (above), catapulted from USS Shangri-La, is clear of the carrier's bow and climbs rapidly. Drones like this one will fly through the atomic cloud. Ground crew (below) installs the engine in a drone plane.
white, or yellow. And these tail colors are significant, for they indicate the frequency on which the radio control works. Control planes are set up to work on the frequency as the drones they guide, but ground control officers can turn to any desired channel.

Ground control is accomplished by a control board in a booth. Operators in the booth keep in touch with control planes (in present training the drone pilot) and the ground control officer. The latter sits outside the booth with a small control box attached to the arm of his chair. This box is the same in each of the control planes.

Control boxes are about 5 by 12 inches and contain several switches, which turn the drone's engine on or off, and control its speed, brakes, and rudder. A lever, or hand grip, rises up from the box and acts as a control stick. Through use of this lever, a drone can be maneuvered into a climb, turn, or dive. At the top of the lever is a button, which is pressed when a drone comes out of a turn, and results in the automatic pilot returning it to normal flight level.

When a drone is directed into a turn, the gyro is caged electrically, and remains caged until the button at the top of the hand grip is pressed. The drone automatically lines up on its course without much manipulation from the controller, when the gyro is released.

When word is received in the control booth that a drone is coming in to land, one of the operators throws a switch on the control board. This permits the ground control officer to operate on the same frequency as the incoming plane. The control board is set up, so that it has two channels on each frequency. In event of trouble on one channel the other is used.

In the Bikini tests, in which the drones will play a part, Joint Army-Navy Task Force 1 will be concerned with evaluation and analysis of damage to ships, equipment, and material, and with every possible measurement of the phenomena incidental to the detonation of the atomic bomb.

OPERATIONS OFFICER briefs pilots on proper instant to release drone guidance to ground control officer. Board diagram shows drone and queen.

INTERCEPTION PROBLEM (above) concerns release of drone from one queen to other. Below, drone comes in for landing controlled by ground officer.
EIGHTH FLEET ENTERS Gulf of Paria, British West Indies, during first peacetime extensive fleet maneuvers.

CARIBBEAN DRILL

FIGHTING SHIPS of the Eighth Fleet, powerful striking force commanded by Admiral Marc A. Mitscher, USN, dropped their hooks in New York Harbor last month after six weeks of war exercises in the Caribbean.

Many of the Fleet's ships and a high percentage of their crews were new, untried by war when they set out from Norfolk late in April. Six action-packed weeks later they felt different. As a man aboard USS Dayton (CL 105) put it: "Does the Navy have a striking force? Call the Eighth Fleet!"

The exercises began on 22 April under the critical eyes of President Truman, Secretary of the Navy James Forrestal and Fleet Admiral Chester W. Nimitz, CNO, aboard USS Franklin D. Roosevelt (CV 42). The ship had barely cleared the Virginia Capes before she was subjected to a full-scale air attack by planes from USS Midway (CV 41). The visitors were aboard two days, during which a crowded schedule of air operations, gunnery and maneuvers was carried out.

Then the ships swung southeast, headed for Trinidad. Tempo of operations, slow at first, speeded up as the force shook down. Strikes, sweeps, searches, photo missions kept the planes in the air from dawn until dusk.

Assistant Secretary of the Navy John W. Kenney and high Navy officers came aboard in Trinidad. Several good liberty days later (see illustrations) the Fleet sorted out 4 May for Guantánamo.

Third period of operations was spent in the area of Culebra just east of Puerto Rico, during which Fleet gunners and airmen got first-hand practice in supporting an amphibious operation.

The role of destroyers in modern fleet maneuvers was pointed out by USS Bailey (DD 713), which rescued two flyers whose plane crashed soon after takeoff from USS Princeton (CV 37). Bailey darted up from her plane guard station to pick up the two, and delivered them to the carrier within an hour. Reward: 20 gallons of ice cream for the Bailey.

Cruisers met a carrier and destroyers in simulated surface engagement while another part of the force was returning the Presidential party to Norfolk. The cruisers USS Macon (CA 132), USS Dayton (CL 105) and USS Little Rock (CL 92), attempted to sink the wounded Midway, which, according to the rules, was unable to launch her planes. The Midway's destroyers bored in under smoke screens for torpedo runs on the cruisers, while the latter simulated six and eight inch gunfire with their searchlights. The engagement was a draw.
CREW MEMBERS of the USS Princeton on liberty in Port of Spain, Trinidad, barter with a street vendor for bananas.

'SHOOTING THE SUN,' Lt. J. Malney, USN, stands on bridge of USS Midway during Eighth Fleet maneuvers.

quads goes into action against a drone, radio controlled by USS Little Rock.

TORPEDO-BOMBING HELLDIVERS and escorting Corsair fighters of Air Group 75 wheel over the carrier USS Franklin D. Roosevelt during a sortie.
TORPEDO SQUADRON returning from a mission prepares for landing operations at USS Midway. Planes from Midway had "attacked" the Roosevelt.

GOVERNOR OF TRINIDAD, Sir Bede Clifford, reviews shipboard marines during official visit aboard the FDR.

RENDEZVOUS IS MADE with the replenishment group for refueling all ships at PORT OF SPAIN, Trinidad, was a good spot for liberty. Here crew members purchase souvenirs at a small shop.
sea. The USS Princeton is shown refueling from the tanker USS Elakomin.

PARTIES DURING LIBERTY were many. Rug-cutting is the style at Colored Men’s USO dance in Port of Spain.

PORT OF SPAIN street vendor's parrot is given a short lesson in American Navy jargon by two members of the crew of USS Franklin D. Roosevelt.

GEORGE STEEDLE, S2c, was transferred from USS Ellison to Midway for medical care when his leg was broken.
Much of the research and speculation concerning the nature of navies of the atomic age is focused today on the submarine and its chances of promotion to "capital ship" rank as the aircraft carrier was in World War II.

With some of its traditional weaknesses overcome, and bolstered by the development of revolutionary weapons and means of propulsion, the submarine fighting craft has a spotlighted position in new military concepts being shaped in the light of atomic energy and the magic of electronics.

In immediate prospect is emergence of the "true" submarine, a craft capable of almost continuous submerged operation at high rates of speed. Such a submarine was blueprinted by the Germans before their surrender last year after it became apparent that the older types—essentially submersible torpedo boats which dived only in emergencies—had been stripped of their effectiveness by Allied sea-air power buttressed by improved weapons and far-ranging electronic detection devices. See All Hands, May).

U. S. Navy designers, engineers and scientists are studying German developments, with an eye to strengthening the submarine's orthodox role of raider and scout.

At the same time, Navy officers are considering the possibility of radical changes in the functions of the submarine. Launchers of rockets and guided missiles or carriers of aircraft operating with relative immunity under the surface of the sea may be the warships of the future. The use of atomic-energy propulsion for submarines is also envisioned.

Discussing the pattern of modern naval operations, Vice Admiral Arthur W. Radford, USN, DCNO (Air), declared:

"It is true that the specific weapons utilized by a navy change from time to time. We once used armed boarding-parties. . . . We no longer depend on the high-caliber guns of battleships to hit enemy vessels at close range, when we can send the mobile and far-reaching ordnance of carrier airplanes against any target that threatens our control of the seas. In the future we may turn to the submarine as our primary naval weapon.

"Who knows but that the strides we have made in antiaircraft defense—split-second fire control, proximity fuses, long-range, early-warning radar, guided missiles, and so on—may some day reach a stage of development where they render the piloted military aircraft obsolete?"

"If this day comes, our undersea experts foresee a dependence on long-range submarines, capable of submergence for months, whose ability to fire rockets and guided missiles without surfacing will allow them to stand off any coastal target in the world and destroy it."

Similar ideas were expressed by Rear Admiral Harold G. Bowen, chief of the Navy's Office of Research and Inventions, who cited "a growing school of thought which visualizes the submarine as one of our most promising naval craft, if the time comes when atomic warfare forces us beneath the surfaces of the sea."

Rear Admiral Charles W. Styer, USN, ACNO (Operations), recently asserted that "submarines are certain
to play an increasingly important part in our concept of national defense... Offensively, defensively and mechanically the submarine seems well adapted to a leading role in the navy of the future."

Two coincidental trends are influencing the future of the submarine, 322 years after its debut as an underwater rowboat in the Thames River of Great Britain: (1) recognition of the growing need of a navy capable of extensive sub-surface operation, and (2) development of a craft meeting the requirements of extensive sub-surface operation.

During the half-century of its modern development the submarine became one of the most effective instruments navies have had in utilizing the ancient military devices of stealth and deception. Submarines were the only combat craft which could hide beneath the surface of the ocean, before, after, and even during an attack.

But underwater operation entailed sacrifices. When a submarine submerged, its speed was reduced to a maximum under 10 knots, its cruising range extremely limited. For underwater propulsion it had to rely upon electricity from batteries—a low-speed method making it impossible to leave an attack area in a hurry unless it came to the surface, in which case it was subject to heavy assault from surface vessels. Its underwater vulnerability likewise resulted from sonar and sonobuoys, the underwater sound detecting devices developed to a high state of efficiency in the recent war.

It was necessary for the submarine to spend considerable time on the surface, to charge batteries or to attain the speed—available only on the surface—required to reach target sectors. Radar and aircraft made even this kind of operation extremely hazardous.

These handicaps the Germans sought to overcome in the final months of World War II by designing a submarine which seldom had to surface, and could travel submerged for long periods of time with an emergency speed of 24 knots in reserve. They claimed these qualities for their Type 26 U-boat, the first "true" submarine. When the European war ended, the Germans had designed the model and partially constructed a hull.

Type 26 was to have three power systems—batteries for slow underwater operation, a diesel engine for cruising at periscope depth and a revolutionary Walter hydrogen-peroxide engine for high emergency speeds. The latter type of engine and the schwimröhle, the breathing tube which permitted operation of diesels while cruising submerged, were the Germans' answers to the need of a high-speed method of submerged propulsion which would not exhaust the precious oxygen supply of a submarine.

The Walter engine, developed originally in prewar years by a German engineer whose name it bears, contains its own oxygen supply. Hydrogen-peroxide is broken down in a chamber into water (in the form of steam) and oxygen, which are then fed into a combustion chamber along with fuel oil. From the combustion chamber...
steam pressure is directed onto turbines driving the shaft.

The engine was believed powerful enough to provide speeds up to 24 knots submerged, but it had defects. It would have been possible to maintain the maximum rate for only six hours, and after that period the Walter engine could not be used again until the submarine returned to base for more fuel. The cost of operation would have been almost prohibitive. At the prevailing rate of costs in the United States, the expense of a 6-hour run at 24 knots would exceed $100,000.

Navy engineers now are studying a Walter engine, which was removed from a German type 17 U-boat. This model, a forerunner of the Type 25, actually put to sea and reached a top submerged speed of 24 knots. But Type 17 was small, carrying only two torpedoes. The Walter engine built for the Type 26 hull is now in Britain.

More significant than the Walter engine in the future of the submarine are the possibilities of atomic energy.

The prospect of this revolution in propulsion was pointed out by Admiral Styer when he said:

"The development of compact, efficient atomic energy plants in our submarines would give the submarine more cruising range. With this atomic firebox, none of a vessel's oxygen supply would be used up by the propulsion machinery, and the problem of expelling exhaust gases would be eliminated. Add to this an armament of rockets or guided missiles with atomic warheads, and you have a strong, offensive weapon that is itself relatively secure against atom bombs and detection by radar."

Admiral Radford listed atomic energy as one of the "three potentials" giving submarines "a great military future." He said:

"When submerged they cannot be detected at a distance because sea water still repels electronic waves. When submerged they are relatively immune to bombing attacks. Because of their compartmentation, and the protection against radiation afforded by surrounding water, they may well be the first craft in which atomic propulsion can be efficiently employed."

Navy submariners and anti-submarine warfare experts have been making test runs and experimenting with two Type 21 German U-boats, one being based at Key West, Fla., and the other at Portsmouth, N. H. One hundred and twenty of these were built, but none was used by the Nazis in a war operation.

Although designed for installation of the hydrogen-peroxide engine, the Type 21 boats actually are powered with extra-large batteries, and diesel engines. They are equipped with the "schnorchel." Their submerged speed is 15 to 18.50 knots. Here are some comparisons of the Type 26 and Type 21 U-boats:

<table>
<thead>
<tr>
<th></th>
<th>TYPE 26</th>
<th>TYPE 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Displacement</td>
<td>900</td>
<td>1600</td>
</tr>
<tr>
<td>Torpedo capacity</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Crew</td>
<td>32</td>
<td>57</td>
</tr>
<tr>
<td>Submergence depth</td>
<td>400 ft</td>
<td>360 ft</td>
</tr>
</tbody>
</table>

These types, and the "schnorchel" device which appeared in 1944 when the Nazi U-boat fleet went "underground" to dodge the Allied antisubmarine forces, are under the close scrutiny of Navy's submarine men.

The submarine's future as an aircraft carrier is problematical. Most naval powers have experimented with such models in the past, but because of their great weight and dangerously slow diving time they were not a success. In World War II, the Free French used one which carried one plane in a hangar on deck and two 8-inch guns, but it was lost in 1942.

The Japanese, who were behind the Germans in submarine design and used the underwater craft mainly for fleet operations, built some plane-carrying submarines during the war. The I-400 class of which three were constructed, were the largest submarines yet designed, displacing 4663 tons on the surface. They carried three bombarding planes, and had speeds of about 20 knots surfaced and seven knots submerged.

In addition to the prospect of rockets, atomic projectiles and other guided missiles as armament for submarines, the traditional underwater weapon—the torpedo—is due for further refinement. Discussing the German acoustic torpedo, which homed onto the noise of ship's propellers, Admiral Bowen declared:

"We not only have similar ones, but have gone even farther. Roughly, we can get 40 knots with a steam torpedo, and up to 60 knots with refinement of the hydrogen-peroxide drive developed by the Germans. But there is a probable limit of 75 knots on propeller-driven torpedoes."

Behind the submarine of today and its potentialities for the future lie more than 300 years of development. Before man actually attempted to sail beneath the sea, he imagined the feat.
the schnorchel, the submarine has a submerged speed of 15-16.43 knots.

A Greek tale of 300 B.C. detailed attempts of an imaginary enemy to equip men with diving gear enabling them to approach anchored ships and chop holes in the hulls. Leonardo da Vinci's notebooks show that he had conceived of the submarine, along with the flying machine in the 15th century. Jules Verne was fanciful about submarines, but by the time he published "Twenty Thousand Leagues Under the Sea" in 1870, he had had some working models on which to base his fancy.

The English considered trying submersibles to help stave off the Spanish Armada, but nothing came of it until numerous undersea boats were patented in the early 17th century. In 1624, Cornelius Van Dreebel, a Dutch engineer, constructed a submarine under the aegis of the Royal Navy. With Dreebel rowing and King James I as passenger, the boat made a 2-mile trip across the Thames in two hours, at a depth of 16 feet. The early submersibles were not taken seriously as fighting ships because there was no feasible armament.

David Bushnell, a lieutenant-captain

TESTS FOR FUTURE SUB AIDED ATOM DEVELOPMENT

The Navy's long-standing interest in utilizing atomic power for propulsion of undersea craft was an important link in the chain reaction culminating in stunning blows dealt the Japanese, when atomic bombs fell on Hiroshima and Nagasaki.

Less than two months following word of the discovery of uranium fission and a preliminary understanding of its implications, announced in this country in January 1939, the Naval Research Laboratory put to Rear Admiral H. G. Bowen, then Chief of the Bureau of Engineering and now Chief of the Office of Research and Inventions, a request for an allotment to initiate study of the uranium power problem. The request was granted, and work began.

It should be understood that at this time knowledge of nuclear physics was still in the embryo stage. The Navy was well aware of the general possibilities of atomic power, and was equally aware of the advantages which would accrue from its use in submarines. But the question was not adapting newly developed power to submarine use; it was, could nuclear chain reaction itself be made to take place at all?

Thus the Naval Research Laboratory devoted its first efforts to the production of large amounts of uranium-hexafluoride, the simplest and most stable known form of uranium that occurs in the gaseous state under normal conditions. From uranium-hexafluoride might be produced, by methods still to be evolved in 1939, the active uranium 235 isotope which it was felt—correctly—would be a good bet for a source of atomic energy.

Small amounts of uranium-hexafluoride were produced from metallic uranium, and supplied to the University of Virginia and the University of Minnesota for preliminary isotope separation work. Certain unsatisfactory and dangerous features of this procedure were eliminated by the Laboratory in 1941.

Production of uranium-hexafluoride provides only raw material for the nuclear physicist. The next step is to extract from it the active U 235, only 0.7 percent of which is contained in ordinary uranium. The Naval Research Laboratory did pioneering work in thermal diffusion—one of three methods by which production plants have carried on the extraction process, and in addition vigorously supported the project of centrifugal diffusion, which was successfully carried to the pilot plant stage.

Work on thermal diffusion, originally carried on at the Carnegie Institute in 1940, was transferred to the Naval Research Laboratory in 1941, and a small pilot plant was built and operated there. The erection at the Philadelphia Naval Shipyard of a large pilot plant or small production plant to operate by thermal diffusion was then proposed. But upon near completion of the project in June 1944, the Navy encountered supply difficulties which nonetheless did not prevent the start of production during that month.

A decision of the Manhattan District Project to erect a larger thermal diffusion plant at Oak Ridge resulted in a shift of emphasis from the Navy's Philadelphia project, but training of the operators for the Oak Ridge plant, begun in December 1944, was done by personnel provided in the main by the Naval Research Laboratory.

It was finally at Oak Ridge, 50,000 acre mushroom growth in the hills of Tennessee, that equipment was operated capable of producing the actual missiles which wreaked destruction on Japan.
DECK VIEW of the Japanese submarine I-400 shows the crew members unloading gear onto barge tied to bow. Notice saki bottles along catapult.

PREFABRICATED GERMAN TYPE 21 U-boats are assembled in a German shipyard. One hundred and twenty ships were built, but none used in combat.

of sappers and miners in the Continental army of the American Revolution, was probably the first man to use a submarine in war. With his boat he attempted to sink a British warship in New York harbor in 1775. His plan of attack: Submerge under cover of darkness (by taking on water ballast and thrusting downward with a vertical screw), approach the ship, bore a hole in its hull, attach a time bomb and retreat. There was one thing wrong—copper sheathing made it impossible to penetrate the hull.

Robert Fulton tried his hand at submarines before turning to the steamboat, but failed to interest Napoleon, the British or the United States. There was still no practical armament.

In the American Civil War, the Confederate forces sought to compensate for their lack of a surface navy by constructing submarines to break the blockade. The attack was simple, although it had earmarks of a suicide mission. A contact mine was attached to a long spar projecting from the bow of the submarine. The crew was to make a submerged approach, ram the target and blow it up by explosion of the mine.

The Federal ship Housatonic was sunk by this method in 1864 in Charleston harbor, but the submarine was destroyed and most of the crew perished. The attacker, the Confederate submarine Hulley, thus became the first vessel built as a submarine to sink an enemy ship in action, although actually it was surfaced at the time.

The experience of the Hulley emphasized the problem of suitable armament for the submarine. In the 1870s, Robert Whitehead in Austria developed a self-propelling torpedo powered by compressed air. Surface torpedo boats at first were used to carry the new weapon, but the need was soon seen for a submersible torpedo carrier.

Late in the century the leading nations began adding submersibles to their fleets. A boat designed by John P. Holland, a 100-ton, 50-foot submersible, was commissioned as the first United States Navy submarine in 1896.

The early submarines were propelled by electricity submerged, and by steam or gasoline engines on the surface. But it was not until the adaptation of diesel engines in 1900-1910, and development of the periscope and gyro compass that the submarine began to show promise of becoming a long-range, quick-diving, elusive weapon.

In the early months of World War I, the submarine was not highly regarded. It was small and frail compared with other ships, its primary function being reconnaissance and patrol.

An awakening came, however, in a chance encounter. The German boat U-9—on a scouting mission sank a British cruiser in the North Sea, and then stood by to destroy two more coming to the scene to pick up survivors. The submarine’s record as a deadly weapon of war dated from that incident.
NAVY PAYS TRIBUTE to 24 heroes for "courage, blood, sweat and tears" in ceremony aboard a battleship.

FOR VALOR IN ACTION...

IN THE CLOSELY-GUARDED, coin-stacked United States Mint at Philadelphia, makers of America's money are busy turning out medals and decorations for the Navy.

When Joe Smith—Sic or admiral—stands before his shipmates to be decorated, the Navy wants to know that the medal pinned on his breast will, as nearly as a bit of silk and metal may, befit the merit or valor by which he won it.

Perfection in quantity is a large order, and only the treasury artisans, who annually turn out two and a half billion coins, unmatched in etched sharpness, could meet the Navy's demands. The 332,577 medals turned out by the mint since the attack on Pearl Harbor microscopically assure that extra fineness.

The Philadelphia mint, although it delivered 119,727 medals last year to the Navy, has sought to maintain ideals of perfection. Only with such decorations may the Navy pay fitting tribute to the "courage, blood, sweat and tears" which are said to have been the price of peace.

The mint's manufacture of medals is in a tradition which goes back to George Washington, who received the nation's first military medal for driving the British out of Boston. In September 1792 in the first public-erected building in the United States, a little brick factory in Philadelphia, the first president and his wife, Martha, watched the embryonic metal experts of the new nation's mint stamp six pounds of old copper into pennies on an old screw press. Now a century and a half of accumulated metal skill is employed turning out awards for the heroes of World War II.

Also back to Washington, the Nation traces its first military decoration for bravery given without respect for rank. In creating the Badge of Military Merit, then a figure of a heart in purple silk worn over the left breast, but now called the Purple Heart, Washington prophesied, "The Road to Glory in a patriot army and a free country is thus opened to all...

...and is to be a permanent one."

The moneymakers work in an imposing three story granite building, which has, as one would imagine, subterranean chambers and immense combination vaults. Sixty armed guards and an elaborate alarm system watch over the institution which last year produced over $66,000,000 of American coinage. Its major aim is to keep a stock of one million dollars or more of each denomination of coins in its vaults. Daily, 60 to 70 tons of metal flow into the melting room to manufacture approximately a box car and a half of coins.

The mint last year also turned out over one billion foreign coins. Many of these were invasion coins, necessitating strict secrecy lest the location of future invasions be gained from the nationality of the coin.

The Medal Department of the Mint was established by law in 1857, although individual awards had been struck before that by governmental authority.

Each medal manufactured takes careful designing and workmanship. Twenty separate operations are necessary in making the first metal naval award and the nation's highest mark of esteem, the Congressional Medal of
ELECTRIC FURNACE (left) in melting room of Philadelphia mint pours molten metal which eventually becomes Navy medals. At right, original galvano plates and plaster parish casts are shown to a Marine, injured on Okinawa.

The award, usually bestowed personally upon the recipient by the President, was authorized for the Navy in 1861 and for the Army in 1862.

The first step in the manufacture of this medal, as any other, is design. In the earlier years of medal making, the masters had to chisel to perfection a master die from the design. Turning out an award, such as The Medal of Honor with modern methods, the mint takes a plaster parish model and by electrolysis makes a galvano cast, which is sharp featured and exact.

The galvano is mechanically reduced in size by an engraving machine, and thus the master die is cut. The master is carefully guarded, being the parent of the actual cutting dies, and replace them if they are broken in the manufacture of the medal itself. In the melting rooms a mixture of 90 percent copper and 10 percent zinc is heated until it is white hot.

The molten solution is poured into long molds to cool. The chilled ingots are then hoisted up and placed between a series of mammoth rollers and pressed thinner and thinner until the desired thickness is achieved.

The Medal of Honor finally comes to take form when the long sheets are fed through high pressure machines which blank out the five pointed star, much in the manner of a cook cutting out biscuits from a layer of rolled dough.

As soon as the stamping is completed, girls examine the emblems with magnifying lenses. If there is even a minor imperfection—the slightest flaw in the laurel wreath or the minute myriad of stars—the piece is discarded.

To any one less critical than artisans of the mint, the medal would be finished, but now comes steps toward final perfection. Sanding wheels pol-
PURPLE HEARTS are smoothed (left) to a satin finish on rotating sanding strips. At right, holding rings are soldered on medals to decorate the Navy's most deserved by one of the many technicians at the Philadelphia mint.

ish the edges and outlines to satin smoothness. Trained hands force sharp drills to pierce holes for suspending it; women with soldering irons attach ringlets for the same purpose. The medal is then cleansed in an acid bath, annealed under extreme heat, and placed beneath a sand blasting machine to give its surface a pebbled effect. A thorough hand brushing with pumice stone brings up the highlights, and a fine coating of transparent lacquer is placed upon it to retain that effect. A close final inspection checks the best efforts of the 154 metal workers.

The completed product is then ushered through the numerous metal barred gates and taken into a room where 41 women, gathered around in sewing bee fashion, carefully apply sewing needles, thread, and ribbon.

In this homely atmosphere, deft hands cut and fold the blue ribbons, studded with 13 stars for the original states of the Union. Because the Congressional honor is the only one hung about the neck, the ribbon is much longer than any other. The star is fastened on the ribbon by an old-fashioned stock anchor.

The finished award is placed on a velvet card, and stowed within a blue leather box, which in simple gold engraved letters states "The Medal of Honor." It is then ready to be shipped to the Bureau of Naval Personnel for presentation individually.

Although the Medal Department is working three full eight-hour shifts a day, there are 941,150 unfilled orders to go, and many more in prospect. Edwin H. Dressel, superintendent of the Philadelphia mint, stated the spirit of the mint when he said, "We won't sacrifice any quality, but day by day we are stepping up production by devising shortcuts in production. It is the wish of all us to produce the medals fast enough so that they will be on hand when the citation is given."

At present the American defense medal is passing through assembly, and the European-African and Asiatic medals are in the designing period.

HAND-RUBBING the medals with pumice stone and soft cloths, above. The final assembly line, below, folds and sews the ribbons, and packages medals. These five women shown at work are all mothers of Navy men and veterans.
SAGA of POWs

Submarine Tang's Men Survive Long Ordeal In Jap Prison Camps

FOR 10 MONTHS the submarine uss Tang was considered missing with all hands. But three officers and six enlisted men survivors lived through Japanese prison camps since that night of 25 Oct 1944 when the Tang went down. Lt. Comdr. Lawrence Savadkin, USNR, engineering officer, tells the story of how the group held together, through 10 months of interrogation, barbed wire, work details, endless boredom, and final rescue. The Japanese suppressed the fact that there were Tang survivors the entire time.

After a night surface engagement in the middle of a Jap convoy in the Formosa straits the Tang's survivors were picked up by an enemy DE.

“We were taken up on the deck, trussed up with lines binding our hands and arms across our chests, hands and arms across our chests, were boredom, and final rescue. The Jap engineering officer, tells the story of how the group held together, through 10 months of interrogation, barbed wire, work details, endless boredom, and final rescue. The Japanese suppressed the fact that there were Tang survivors the entire time.

The Jap prisoneers were landed on Formosa and sent on an eight-hour train trip up to Kirun, where we were tossed in the ‘Kirun clink’. The cells were set up above the guards’ catwalk like the cages in a zoo. Bars were of wood, but about five inches in diameter stretching from the ceiling to the floor. The head was a hole in the floor set back in a niche.

One day a conscripted Javanese guard crept into my cell, and in broken English told me he was a Christian, and he had a present for the boys. The fellows in the cell were sleeping, so I held his gifts behind my back and said, ‘Hey fellows! Guess what I’ve got for you—ice cream on a stick!’

“Take it easy, Mr. Savadkin,” one of the boys replied sleepily. They thought I was completely off my rocker. But sure enough, that was what the guard had produced: one long, cool, drippy, and wonderfully stickky popsicle on a stick for each of us. It was a great day, a‘Kirun clink’. The cells were set up above the guards’ catwalk like the cages in a zoo. Bars were of wood, but about five inches in diameter stretching from the ceiling to the floor. The head was a hole in the floor set back in a niche.

One day a conscripted Javanese guard crept into my cell, and in broken English told me he was a Christian, and he had a present for the boys. The fellows in the cell were sleeping, so I held his gifts behind my back and said, ‘Hey fellows! Guess what I’ve got for you—ice cream on a stick!’

“Take it easy, Mr. Savadkin,” one of the boys replied sleepily. They thought I was completely off my rocker. But sure enough, that was what the guard had produced: one long, cool, drippy, and wonderfully stickky popsicle on a stick for each of us. It was a great day, a

One day a conscripted Javanese guard crept into my cell, and in broken English told me he was a Christian, and he had a present for the boys. The fellows in the cell were sleeping, so I held his gifts behind my back and said, ‘Hey fellows! Guess what I’ve got for you—ice cream on a stick!’

“Take it easy, Mr. Savadkin,” one of the boys replied sleepily. They thought I was completely off my rocker. But sure enough, that was what the guard had produced: one long, cool, drippy, and wonderfully stickky popsicle on a stick for each of us. It was a great day, a

JAVANESE GUARD slipped a popsicle to the submariners while they were in the ‘cages’ of a Formosa prison camp. It was a ‘great day’ for the Yanks.

Naval Prisoner of War Interrogation Center, a place the International Red Cross never heard about.

“I kept telling the interrogators I was just a ‘prospective’ engineering officer, I really didn’t know much about the submarine. I didn’t seem to matter what you told the questioner, just so they could keep filling out papers to send back to Tokyo. I made the wildest statements about speed and power of our ship. My machinist made wild statements in the other direction.”

When a Jap interrogator asked the mate about Savadkin’s statements he just replied, “Well, you know Mr. Savadkin—just a greenhorn, doesn’t know a thing.”

They asked us questions,” the Tang engineer continued, “on every subject—communications, operational data, recreational program and facilities, as well as pertinent information about our own ship.

“During the final days before the downfall of Japan a fellow in civilian dress came into the camp and said he was a sociologist trying to find out whether American opinion was in a state to accept anything less than an unconditional surrender. We gave him the works; told him the Americans would never even consider anything less than complete surrender.

“One of the questioners asked me what I did before I went into submarine service. ‘Had a desk job,’ I replied. ‘Why did you go to sea then?’ he queried. ‘Well, a Wave came along and took my job,’ I told him.”

Asked why he went to submarine school, Savadkin blamed it on the Waves again. “I wanted to make extra dough to impress my Wave girl friend,” he told the interrogator. This was swallowed without the bat of an eyelash. “I’d never even seen a Wave at that time,” Savadkin chuckled.

Being interrogated had one advantage: the prisoner usually got a cup of tea, a cigarette and a chance to sit by the stove. During the cold weather any cock-and-bull story was worth spinning out for these advantages.
When the war finally came to a close the JarJ wards immediately increased the told, brought out unused but mildewed shoes, distributed clothes, and then proceeded to get drunk. The Jap OD asked the prisoners to lock themselves in their barracks that night.

"We retreated to the air raid shelters when the carrier planes and the B-29s started bombing us with food and clothing," Savadkin recalled with a grin. "We had our own MP force since the day the war ended."

"Finally Capt. (then Comdr.) Harold E. Stassen's rescue crew arrived at the camp. After one look around the camp he said the place was so awful they'd take us away immediately.

"From then on it was C-54s for the fellows who could travel, all the way back to Oakland, with Wave hostesses on the last hop. First time I'd seen a Wave. Wonderful."

"The bowing and greeting of guards was one of the things we had to do all the time. In the morning we had to say 'good morning' and bow. It sounded like 'Ohio gozimus'. After 1000 the greeting changed to 'Konitsche wa'—or something like that; in the evening it was 'Kombong wa'."

All of the Tang gang lived together, all shared cook detail, all swabbed down and swept. But during the first week at Ofuna nobody was allowed to talk to anyone else.

"Most of the day there was nothing to do," said Savadkin, "so in our little compound we just walked back and forth, back and forth, wearing paths like a bunch of caged animals. Sometimes the Jap guards made us play games, but when they saw we were having fun out of it they made us stop at once. But anyway, walking was a good way to keep warm.

"There was one thing that we finally decided: the Japs cannot be predicted. We were trying to figure out what things we should or should not do so that life would be the least complicated. We could never tell. One bunch of guards would react one way and the next gang entirely different. It was just hopeless."

Finally a form of practical busywork was worked out. With pieces of broken window glass the men set about making bamboo knives, forks, and spoons. Fine. But then came the next set of guards, and bingo—out went the cutlery and everyone got a beating.

"I am sure there were no microphones in our cells picking up our conversation," Savadkin continued, "because as an engineer, I was detailed to repair the electric lines in camp."

At the end of nine months, the submariners were sent to Omari, a registered POW camp, where they went on air raid shelter digging details and gardening duty. The Tang men were considered special prisoners and were not registered with the Red Cross. At home the Navy still considered them missing.

When the war finally came to a close the Jap guards immediately increased the food, brought out unused but mildewed shoes, distributed clothes, and then proceeded to get drunk. The Jap OD asked the prisoners to lock themselves in their barracks that night.

"We retreated to the air raid shelters when the carrier planes and the B-29s started bombing us with food and clothing," Savadkin recalled with a grin. "We had our own MP force since the day the war ended."

"Finally Capt. (then Comdr.) Harold E. Stassen's rescue crew arrived at the camp. After one look around the camp he said the place was so awful they'd take us away immediately.

"From then on it was C-54s for the fellows who could travel, all the way back to Oakland, with Wave hostesses on the last hop. First time I'd seen a Wave. Wonderful."

QUESTIONING by the Japs had this advantage: a cup of tea, cigarette and a chance to sit by the hot stove.

JUNE 1946
STEAK, THAT IS, son — and these reservists took full advantage of Navy chow, having discovered that some meats are hard to get on the outside.

EXCHANGING CHAPLAINS (left) via breeches buoy for Sunday services brought the boatswain's mates into their own. A Protestant and Catholic chaplain each conducted services on the two ships. The latest and best destroyer equipment got a going over by reserve chief machinist's mates returning temporarily to old control stations (right).

BLACK GANG members (left) spent two days dabbling with familiar dials and gauges below decks on the USS English, 2200-ton Sumner class DD. Gun crewmen (right) once again tested their skill and sharpshooting on the 40 and 20 millimeters and 5-inch guns of the two destroyers by tracking an aircraft-towed sleeve during training exercises.
THE MINE HAS EMERGED as the Cinderella of the Pacific war. Now that the full story can be told, the Navy's mine warfare experts can present a record of extraordinary accomplishment. It is a record which gives new meaning to the assertion by Fleet Admiral Chester W. Nimitz that "phenomenal results" were achieved.

The story of the offensive mining campaign in the Pacific is one of Army-Navy cooperation, and inter-allied coordination, which played a vital part in choking off the lifelines of maritime Japan right up to the Emperor's doorstep. It is a story of human ingenuity used to create deadly machines which could almost think, particularly the unsweepable pressure and subsonic mines. Above all, it is a story of results achieved with amazing economy of men and materials.

During the war, the mine became an offensive weapon of major importance. Aerial mining not only was born but came of age so quickly that the Navy's mine warfare experts have declared the airplane to be their most effective minelayer. This does not mean that submarine and surface minelayers did not play a vital role, particularly in the earlier days of the war.

For the most part, mine warfare against the Japanese was strategic, but it also was used tactically on occasions, and with spectacular results. The Okinawa invasion is an outstanding example of the latter use of mines.

All told, the minelaying campaign against the Japanese sank or damaged more than 1,750,000 tons of enemy shipping—nearly one-fourth the prewar strength of the Japanese merchant marine. This figure may go as high as 2,000,000 tons when all the returns are in. Enemy casualties caused by mines included 2 battleships, 2 escort carriers, 8 cruisers, 46 destroyers and destroyer escorts, 7 submarines and 81 other naval vessels.

Preliminary reports credit mines with the sinking of more than 675,000 tons of enemy shipping and the final total may go to 750,000 tons. Of more than 1,000,000 tons damaged by mines, an estimated 25 percent might as well have been sunk as far as the Japanese were concerned because their ship repair yards were so crowded that damaged vessels couldn't go to sea again for a long time. In fact, many of them were still out of service at the end of the war. The Japanese themselves have declared that a large ship damaged by mines required an average of 95 days for repairs and a small ship 70 days.

All this was accomplished with a total loss of 55 airplanes, 15 of them B-29s, in 4,760 sorties. No submarines or surface vessels were lost, while minelaying. Nearly 25,000 mines were laid, 21,389 of them mines of aircraft types.

The mining offensive was divided into two principal phases:
- The "outer zone" campaign, which began early in the war and lasted to the end, choked 150 enemy harbors and shipping channels with nearly 13,000 mines, more than 9,000 of them aircraft types. This campaign hampered the flow of enemy troop supplies and of raw material shipments to the Japanese homeland. It helped to foul up the enemy's offensive, and frustrate his efforts at defense. And it sank 245,000 tons and damaged 460,000 tons of enemy shipping while causing many sailing delays of a day to a month.
- The "inner zone" campaign, a
Army B-29's laid Navy mines which sank or damaged more enemy shipping during last months of war than any other Army or Navy offensive measure.

PACIFIC CINDERELLA (Cont.)

Spectacular aerial mine warfare blitz, during the last five months of the war built a virtually impenetrable wall of 12,000 mines around the Japanese homeland, sinking or damaging more than 1,000,000 tons of enemy shipping. This drive, in which Army B-29s laid Navy mines, sank or damaged more shipping than the combined efforts of submarine and direct air attack by both the Army and Navy in the war's final months. The Japs even moved anti-aircraft guns from industrial centers to mining targets in an effort to stop the Superforts.

Although the 21st Bomber Command devoted only 5.7 percent of its efforts to mining, Prince Konoye, a former Japanese premier, subsequently declared that the mines were as devastating in their effect as all the bombing and incendiary raids in the last few months of the war.

In the outer zone campaign, mines were laid by the Australians, the British and the U.S. Army and Navy. In the inner zone, the U.S. Army carried the brunt of the mining effort because it had the long-range better-suited aircraft (B-29s).

The British supplied some mines for the outer zone campaign, but most of the mines were U.S. types supplied by the Navy, which was responsible for their design, development, production and servicing. The Navy also played a major part in planning the joint Army-Navy efforts.

Submarines, surface vessels and aircraft participated in the outer zone campaign. Operations were carried out from China, India, Australia, Ceylon and island bases in the south and central Pacific. Rangoon and Haiphong were rarely used by large ships after mining began. The presence of mines frequently closed Shanghai, Hong Kong, Takao in Formosa, Bangkok, Singapore, Balikpapan and Surabaya to enemy ships. Palau, Penang, and Kavieng were abandoned as key bases shortly after and largely because of mining.

Major General Claire L. Chennault has credited mining of the Yangtze River and ports of the China Coast with being one of the major factors responsible for failure of the Japanese offensive in South China in 1944.

"Aerial mining was primarily responsible for the long delay which amounted to a tactical defeat for the Japanese," he said.

Much of the failure of the Japanese to supply and reinforce their troops in Burma can be attributed to the persistent mining of ports in Burma, Siam, Malay and Indo-China. In the Southwest Pacific, 49 areas were mined by air, greatly hamstringing Jap efforts to exploit the Netherlands East Indies and supply troops in that area. Rear Admiral Matsuzaki, chief of staff in the NEI area, estimates that 90 percent of the ships over 800 tons were lost to allied attack and 40 percent of these were due to mines.

The 33 submarine mine-laying missions in the Pacific laid 658 mines, sinking at least 24 enemy ships and damaging 20. The mines also forced enemy ships into deep water where they were better torpedo targets.

Fourteen surface-laid minefields in the vicinity of the Solomon Islands...
sank four destroyers and interfered significantly with the support of Japanese troops in the closing months of the Solomons campaign. The aerial phase of the outer zone campaign required 3,231 sorties from which 40 aircraft failed to return.

The mining offensive began in October 1942. Seventh Fleet submarines, based in Australia, started it by taking extremely long cruises to the dangerously shallow waters of the Gulf of Thailand and the Gulf of Tonkin in the South China Sea and laying mines in enemy shipping channels.

Submarines from Pearl Harbor conducted similar operations off the coasts of Japan and China.

Surface vessels started minelaying early in 1943 and by the end of January, as the Guadalcanal campaign was drawing to a close, mined the channels around that island. On one night, the “Tokyo Express” made its usual effort to run supplies to the beleaguered Jap troops and an enemy destroyer was sunk by a mine. Three more destroyers were sunk in a similar field in Blackett Strait. Surface minelaying continued as U. S. forces penetrated deeper and deeper into the Solomons, doing such a thorough job that the Navy later had to sweep some of its own fields because the Japanese did not have enough gear to sweep the fields themselves.

**Vigorous Campaign**

The first aerial minelaying in the Pacific occurred on the night of 22-23 Feb 1943 when the Tenth USAF, India-based, sent ten B-24s loaded with British minelayers against Rangoon. Norway had set up immediately and from that time on few large ships ever attempted to use that port. This started a vigorous minelaying campaign from India and from there on neither Rangoon nor any other port within aircraft range was long free from mines.

The first dropping of U. S. mines from U. S. aircraft occurred on the nights of 20 and 21 Mar 1943 when 40 Navy and Marine Corps TBFS made two aerial mining strikes at Bougainville, then the center of enemy resistance to the Solomons campaign. This opened a campaign to close down enemy supply lines to Jap outposts in the Solomons in which aircraft and surface layers collaborated.

Ground mines, which sank to the bottom and laid there until a pre-selected size of ship came along to set them off, were laid by aircraft in the shallow waters, while the surface layers established fields of moored mines across the deep approach channels. As a result, at least six enemy warships were sunk. Of these, two destroyers were sunk, two were so badly damaged that they became “sitting ducks” and were subsequently sunk by air attack and one light cruiser and one destroyer, as well as one or more cargo vessels, were damaged.

In late April 1943, Royal Australian Air Force Catalinas (PBY-5a) opened a campaign continuing into early June, during which they laid 60 mines in the proposed Japanese fleet anchorage at the north end of New Ireland near Kavieng. The one entrance remaining, too deep for ground mines, was closed by a field of moored mines laid by a U. S. submarine. Late in June and July, the field was reinforced. Results: One survey ship and five cargo vessels sank, several vessels—including two light cruisers and a destroyer—damaged and, finally and most important, the Japs abandoned the anchorage completely.

The RAAF carried out virtually all subsequent aircraft mining in SoWePac. It was a strategic campaign against the principal harbors and shipping routes of the NEI.

By the end of 1943, U. S. offensive mining had taken its first steps in each of the major combat areas of the Pacific war.

In the next 12 months, about 400 U. S. and British mines were planted by the RAAF, operating from Australia, in 21 harbors of the NEI and Bismarck Archipelago, with a loss of only one plane in 200 sorties.

The first U. S. mines arrived in India in July 1943. They were later used in the mining attack from Rangoon to Bangkok and the railway ferry crossings between those places. After the early mining of Rangoon, the Japs attempted to bring their ships into Bangkok and transport supplies the rest of the way to Burma by rail. Minelaying combined with direct air attack on the rail lines made this route an unreliable one for the enemy and his supplies suffered.

The 14th USAF, based in China, joined the minelaying offensive in October 1944. Two B-24 sorties against Haiphong sank a ship in the main channel, blocking a 10-ship convoy outside the harbor. After milling around several hours, the convoy headed for northern Hainan where the 14th's bombers caught it and sank six of the ten ships. The Japanese also suffered another ship casualty in the minefield and abandoned Haiphong as a port for anything larger than junks. The 14th subsequently mined from Tonkin Gulf on the south to the Yangtze on the north. Hong Kong and Takao became favorite targets. Both of them, especially Takao, were staging points for convoys between the Empire and the southern Japanese holdings.

Mines began to be used more extensively as tactical weapons early in 1944. The first mining done specifically in preparation for an amphibious attack was directed against the Marshall Islands late in December 1943 and early in January 1944.

Heavy bombers from Tarawa and Apanama placed mines in the entrances of four of those islands which were by-passed during the invasion of the Marshalls.

The first and only minelaying mission by U. S. carrier-based aircraft was directed against Palau on 30 and 31 Mar 1944. Task Force 58 was spotted by a Nip search plane at Woleai so the Japs had sufficient warning to get their warships out of danger before the task force was in striking position. Thirty-two enemy merchantmen and tankers, however,
were bottled up in the harbor by mines which planes from the Hornet, Lexington and Bunker Hill laid in the long, tortuous passages leading into it. Bombers and torpedo planes of the task force then came along and wiped out all 32 ships.

This strike denied use of Palau to the enemy for at least 20 days and was one of the factors which led to its abandonment as a forward operating base for enemy naval ships and aircraft.

Truk and Woleai were mined in April 1944 to prevent temporarily their use by enemy fleet units which might endanger the Hollandia invasion and other movements then being carried on. Palau was mined again in June and July to insure its neutralization during the capture of the Marianas and the westward sweep toward the Philippines.

Attrition (strategic) mining also expanded rapidly. The Royal Air Force, based in India and Ceylon, and the 10th USAAF flew more than 200 sorties and laid almost 1,000 mines in 11 regions along the coasts of Burma, Thailand and the Malay peninsula.

The 14th USAAF’s mining was done under more difficult conditions. All its planes and mines had to be flown over the Hump from India and Jap advances greatly curtailed air operations in late 1944. Nevertheless, several hundred mines were laid along the coast and in the rivers of China and around Formosa. In the first three months of 1945, the 14th laid over 300 mines in the upper Yangtze, including more than 100 floating mines dropped upstream from such places as Hangkow to float down on ship and barge traffic. Then India-based B-24s carried out two heavy mining attacks in the mouth of the river near Shanghai in March.

In the SoWesPac area, meanwhile, the RAF, RAAF, 10th USAAF, 14th USAAF, 20th Bomber Command and the Fifth Fleet all contributed to mining 40 localities, hampering enemy development of important sources of raw materials.

Balikpapan, Borneo, site of the only high octane gasoline refinery nearer to Pacific bases than Palembang, Sumatra and principal storage place for bunker fuels in that area, became an important new target. RAAF Catalinas first mined it on 22 Feb 1944, and port closures and ship sinkings followed regularly thereafter. The first U. S. acoustic mine—a mine fired by the noise of a passing ship—was used there on 20 Apr 1944.

B-29s entered the minelaying picture for the first time at Palembang.
on 10 Aug 1944. It was also the first time the B-29 had been used for anything but high altitude bombing. While some Superforts bombed the target, eight B-29s flew low and dropped mines into the long river channels leading to the refinery—so low that one plane strafed an enemy tanker. The mining resulted in seven ship casualties and the river was closed to enemy traffic for nearly a month. It was the longest bombing and mining mission of the war.

In November and December 1944, B-24s of the 7th USAAF heavily mined the Bonins, which were being used as forwarding points for enemy supplies to the Volcanoes and other advance bases. This operation, which caused a marked decrease in enemy shipping in the mined areas, was in support of the invasion of Iwo Jima.

By early 1945, the Japanese were making desperate efforts to transport the most vital materials from their outer zone to the homeland for a last stand. It was at this point, on the night of 25-26 Jan 1945, that Japanese B-24s engaged in their first large-scale mining effort, planting several hundred magnetic mines in the approaches to Singapore, Saigon and Camranh Bay, a serious blow to the major port and repair facilities left to the Japanese in southeast Asia and the southwest Pacific. In view of the operations already in progress in China, southeast Asia and the central and southwest Pacific, this operation served notice on the Japanese that no mineable waters short of those in North China, Korea and the Empire proper could be considered safe to shipping.

At the same time, during one week the RAF mined nearly every usable port along the Malay peninsula. The RAF kept up a continuous campaign against all targets within range of India and Ceylon, using all types of U. S. and British magnetic mines, as well as acoustic mines, for the first time in that theater.

While the Japanese offensive in South China forced the 14th Air Force to move so far west into China that it could no longer mine the China Coast, RAAF Catalinas, operating under CoverHQ, took over the job as soon as Philippines bases were available.

By the end of March 1945, the Japanese were forced to withdraw most of the 2,000,000 tons of shipping they had left to the inner zone. There, in the comparatively shallow and well-protected East China Sea, Yellow Sea and Sea of Japan, the Nipponese vessels shuttled back and forth between the homeland and the Asiatic continent in comparative safety. Most of this shipping—and it was then adequate to Japan’s needs in the inner zone—passed through Shimonoseki Straits to industrial ports on the Inland Sea of Japan.

Just before the invasion of Okinawa began, Superforts of the 21st Bomber Command (313th Very Heavy Bomber Command Wing) carried nearly 1,000 magnetic and acoustic mines from Tinian to Shimonoseki Straits and the Inland Sea. This attack opened the inner zone campaign by denying the enemy the use of sea lanes on which they depended heavily to rush reinforcements to the Ryukyus and to bolster their homeland for the threatened invasion.

The inner zone campaign was divided into five phases:

- **First phase**, 27 Mar-2 May, Okinawa support: Shimonoseki Straits, the naval bases of Kure and Sasebo and the military port of embarkation at Hiroshima were mined to endanger Japanese naval movements, particularly by a sortie of the fleet through Shimonoseki to Okinawa under cover of western Kyushu. As a result, the only task force which did sortie attempted to slip out of the Inland Sea via Bungo Suida, east of Kyushu, where U. S. units lay in wait and sank the BB _Yamato_, pride of what was left of the Japanese fleet.

- **Second phase**, 3-12 May, industrial center blockade: Purpose of this attack was to destroy seaborne communications between industrial zones of Japan by maintaining the blockade of Shimonoseki and mining the ports of Tokyo, Nagoya, Kobe, Osaka, and the main shipping lanes of the Inland Sea. It was here that the unsweepable pressure mine was introduced, after being made available by the Navy. This attack used 1,422 mines of all types, and shipping at all ports began to fall rapidly while ship sinkings rose. Much shipping from Korea and Manchuria, which formerly passed through the Straits to industrial ports on the Inland Sea, was diverted to northwest Honshu ports and Kyushu.

- **Third phase**, 12 May to 5 June, Northwest Honshu-Kyushu blockade: The purpose here was to blockade the bulk of enemy shipping from the Asiatic mainland to Japan by continuing to block Shimonoseki Straits and by mining all the major harbors.
SOLUBLE WASHER is adjusted in a mine case. When water pressure reaches a predetermined density, the washer dissolves, thereby arming the mine.

of northwest Honshu and Kyushu. The Superforts laid pressure, magnetic and acoustic mines in this phase and the low-frequency or subsonic acoustic mine also was introduced. As shipping fell off in Shimonoseki Straits and the industrial ports, there was a slight increase in shipping in the northwest Honshu and Kyushu ports, but the newly laid mines resulted in many ship casualties.

- Fourth phase, 7 June to 8 July, intensified northwest Honshu-Kyushu blockade: Secondary and tertiary harbors were added to the list of targets and saturation of Shimonoseki and the primary ports of northwest Honshu and Kyushu continued. The important port system of Kobe-Osaka was mined repeatedly. Ship losses accumulated rapidly, shipping began to drop off in the northwest ports and Shimonoseki and the industrial ports were almost completely blockaded.

In conjunction with the fourth phase, Navy PBY-2 (Privateer) aircraft based on Okinawa conducted an attrition mining attack against shipping from the Yellow Sea skirting the southern coast of Korea.

- Fifth phase, 9 July to 15 August, total blockade: The purpose of this phase was to mine all the ports of Korea while maintaining the blockade of Shimonoseki and all of northwest Honshu-Kyushu. This attack resulted in continued shipping losses and falling off of traffic in all ports. In the closing days of the war, Japan was ringed with ports polluted by aerial mines. None of the shipping lanes was being cleared efficiently, but the Japanese preferred to take normally high losses rather than stop shipping completely. Ships were using the diversionary ports on northwest Honshu and Kyushu only as a desperate measure to get supplies to the mainland, but limited inland transportation prevented final delivery of the necessary food and materials to the industrial sections of the Inland Sea.

Accumulated results of the mining offensive were shortages of coal, oil, salt and food which contributed to such a complete paralysis of industry that shortly before the surrender leading industrialists indirectly informed the militarists that industry could not continue. Seven million Japanese would have starved to death if the war had continued another year, they estimated. Appropriately enough, this mining attack on the inner zone was called “Operation Starvation.”

Such is the outline of the war’s mining operations. But it is more than a story of operations. It is also a story of machines—of the mines themselves—and of the race between allied and enemy scientists to bring them to a new and even more baffling perfection of intricacy.

The Nazis started the race early in the war, while the U.S. was still at peace, by dropping new magnetic mines from airplanes into British shipping lanes. These mines lay on the bottom and were set off by the magnetic fields of passing ships. It was the “secret weapon” of which Hitler had been warned beforehand and the British were justifiably alarmed. Their alarm spread to the U.S. Navy.

British and American scientists joined in developing degaussing methods for neutralizing the magnetic fields of ships and in 1940 the Naval Ordnance Laboratory in Washington, D.C. began building magnetic scale model ships in an effort to predict degaussing systems for ships under construction. This method worked and by war’s end degaussing had protected 12,600 ships and millions of American lives from magnetic mines.

The German mining activities not
DEGAUSSING COILS are experimented with on scale models to determine formulas to be built into actual ships.

only forced the Allies to take defensive measures, but spurred them to take offensive steps in mine warfare. As a result, the U.S. Navy developed magnetic mines of its own, and went on to produce other types as well. After the Pearl Harbor attack plunged us into war, mines designed and produced by BuOrd during 1941 and 1942 were sent to mine depots throughout the Pacific, Australia, India and China, staffed largely by personnel trained at the Mine Warfare School, Yorktown, Va., and at NOL, Washington, D.C. Several Navy officers stationed at the Admiralty in London also accumulated experience from the war on shipping between Great Britain and Germany.

As the race of the scientists developed, the Navy produced an audio-frequency acoustic mine which, lying on the bottom, would be fired by the audible sounds of a ship passing overhead. By sheer luck, the Japanese discovered they could sweep this mine with underwater noisemakers which they had been using for training of their sonar operators. The enemy also developed magnetic sweeps for the magnetic mines.

It was then that the Navy came up with its two “unsweepables”—the sub-sonic acoustic mine, and the pressure mine. The subsonic mine was fired by ship sounds so low in frequency that they could not be heard by the human ear. The pressure mine was fired by the changes in water pressure caused by a passing ship. But the various types were only part of the story. The mines could be equipped with counters which would literally count the number of ships passing overhead and then go off when a pre-selected number had passed to hit an important target in mid-convoy.

Lacked Equipment

Actually, the Navy's experts report, the Japanese never were able to cope adequately with the Allied mining offensive, for lack of sufficient equipment and for lack of sufficient ingenuity to keep pace with our scientists. For that matter, the Navy itself never discovered a sure method of sweeping the pressure mine, other than that of simply running ship over the areas in which they were planted. Although these mines were equipped with sterilizers to render them harmless after a given period of time, “guinea pig” ships—three ancient, battered merchantmen with specially protected volunteer crews and no one below decks—crisscrossed Japanese home waters after the war in a deliberate effort to blow up any mines which might still be alive. Fortunately, all the sterilizers had worked.

Aerial mine warfare required an entirely new type of mine. In general appearance they resembled heavy bombs, but were equipped with small parachutes to slow their descent. Most air mining was carried out at night, particularly when the sky was heavily overcast, and drops were made by radar or visually from very low altitudes.

Problems of training ground and air crews in an entirely new type of warfare, problems of logistic support, problems of production were met and conquered. Mine details, consisting of specialized personnel and equipment for servicing intricate mine mechanisms under all sorts of advanced base conditions, were formed and sent to all areas in the Pacific theater. The speed and efficiency with which these details worked are illustrated by the fact that B-29’s often took off from Tinian with fully-serviced mines, the components for which had been unloaded on the beach the day before. On the production front, freight cars were on occasion hooked to fast passenger trains to speed needed materials to the many manufacturers of mines.

Yet offensive mining had a slow start. Comparatively little had been done about developing mines between World Wars I and II, so far as the U.S. was concerned. Mines suffer from the handicap that their results cannot be seen immediately and often never are definitely known. Minelaying is not a competitor of more direct forms of attack on enemy shipping, but it is a valuable supplement. The record of the Pacific war has shown that it was the most economical, in terms of results achieved measured against effort and men and equipment expended, of all the forms of attacks on shipping. That record will not soon be forgotten.
GUNNERY STUDENTS learn to estimate the lead of a plane in flight using this equipment designed by Special Devices. Five hundred training devices were developed and distributed throughout the Navy during the past war.

MOCK-UP FOR BATTLE

Training Tricks from Special Devices Unit Simulate Combat and Speed Class Studies For Navy's Students

There will be no pitch or roll and no spray over the bow, but simulation of the bridge of a vessel under way will otherwise be nearly complete in the shiphandling trainer under development by the Navy's Special Devices division.

An old and sure hand at the art of projecting the pattern of operations into the class room, with a war record of more than 500 training devices designed and distributed, the division is completing plans for the new equipment in its headquarters at Sands Point, Long Island, N.Y.

The shiphandling trainer, a device containing two complete replicas of ships' bridges, pilot houses and CIC compartments, is high on the list of the division's 150 peace-time projects. The current program, under supervision of division director Capt. D. L. Hibbard, USNR, calls for an extension of techniques utilized during the war in founding a new instructional system credited with saving many men from death in training accidents. And as in the past the development of training devices and operational equipment will run concurrently.

Three hundred military and civilian personnel are carrying on this work for the division, which is a part of the Office of Research and Inventions, headed by Rear Admiral H. G. Bowen, USN.

The shiphandling trainer is one of Special Devices' newest examples of applied illusion. Here again the sounds and shapes of actual operation are being "prefabricated" to lend an air of reality to instruction—a method devised and developed in the war years by Rear Admiral Luis de Flores, USN, now assistant director of Admiral Bowen's office and in civilian life an inventor and engineer.

Other Special Devices projects under way concern anti-aircraft armament, super-sonic air speed research, mathematical computers, simplified cockpits for helicopters and new developments on camera guns.

Also taking shape is the "Fly Bar"—a piece of aircraft equipment which would enable pilots to "read" their flight instruments with their ears, so to speak. Auditory signals would give the instrument readings, allowing pilots to use their eyes for observation or to rest them from strain.

A new contribution to the problems of flight training and learning how to control pilot-less aircraft is on the way. This device consists of a cockpit, a panel like those used in flying "drones" and a miniature plane suspended from a movable arm. Electric motors power the propeller and synchronize the plane with the control stick in the cockpit, where the student pilot sits. The craft and the "drone" panel are likewise coordinated. Landing and take-off speed is simulated by an endless moving strip, operating in the manner of a treadmill, on which the plane rests at the beginning and end of each "flight."

So sensitive are the controls of this miniature aircraft that experienced fliers find difficulty in handling it at the first attempt, according to division officers.

The war record of Special Devices and its rise from desk to divisional status is one of accomplishment. Many of the 500-odd types of training paraphernalia logged out by the division from 1941 to 1946 were used throughout the world, at continental training centers, on ships and in rear areas of combat zones.

They were distributed to all United States armed services and 10 allied nations. One mission of Special Devices was to set up training equipment in Brazil for the instruction of Brazilian pilots on the South Atlantic anti-submarine patrol. Some of the equipment went to Naval hospitals for rehabilitation work. Special Devices developed equipment for training in gunnery, recognition, radio, radar, bombing, flight, navigation, air crew cooperation, maintenance and anti-submarine warfare.

The division was the creative force behind the designing of numerous operational devices whose details are still classified confidential. To help meet the submarine menace in the Atlantic, new methods were blueprinted for use in rocket firing, combating sonar torpedoes and conducting searches at night. The radar section trained officers participating in every major invasion.

850 New Projects

In all, the division initiated 850 projects during the war. Most of these were in the field of aeronautics, the unit having been part of BuAer until last year.

The story behind the designing of a new type of diagram was typical of project development in the division. In August 1944, Special Devices re-
ceived a request from Rear Admiral John Gingrich, USN, (then a captain) for aid in installing simplified damage control diagrams on his ship, the USS Pittsburgh (CA-72).

Three-dimensional charts were Special Devices’ answer. By January 1945, the new diagrams, easily read and depicting vividly the location of valves and compartments, had been installed on the Pittsburgh. And the pay-off came on 8 June 1945 when the Pittsburgh lost her bow in a typhoon between Guam and the Philippines. The whole forward part of the ship, 104 feet back from the stem, was torn off in the storm which did extensive damage among a task force.

Admiral Gingrich believes that Special Devices’ idea aided materially in saving the ship and allowing her to limp back to Guam, without a loss of life.

The diagram system, together with an improved cabinet installation for display of the charts, has been adopted by BuShips for use in all new combat ships.

Special Devices had its inception in the ideas and inventive genius of two officers, Admiral de Florez and Captain Hibbard, who entered the Navy in 1940 to speed up BuAer’s training program. For the work of Special Devices, Admiral de Florez in 1944 was awarded the Collier Trophy for “the greatest achievement in aviation in America, the value of which has been demonstrated by actual use during the preceding year.”

At first, his task in BuAer was to seek means of improving existing systems of training pilots and air crewmen, but later his attention was directed toward synthetic devices.

As this program grew, more and more men got their first feel of combat conditions in Special Devices’ “Rube Goldberg” creations. Gunners who had fired beams of light at an ersatz enemy on a screen knew instinctively what to do when the real thing came up. Air crews taking off for the first time had already “flown” hundreds of miles sitting in the simulated nose of a big plane, meeting “emergencies” which in an actual training flight could have meant death to all hands.

The results of the new method were cited in a book, “Carrier War, Task Force 58 and the Pacific Sea Battles,” by Lt. Oliver Jensen, USNR: “Synthetic training with Navy mechanical special devices produced fighters who knew automatically what to do. In their very first action they were actually more than a match for veteran enemy fliers.”

“Only short of miraculous” was the description applied to the program by a House investigating committee in 1948. A Pacific Fleet notice of 24 May 1944 concerning the experimental installation of gunnery trainers declared: “The percentage of hits has increased, in many cases to a marked extent.”

Men with scientific training and skills ranging from ballistics to psychology were recruited during the war years. Captain Hibbard, who was awarded a Legion of Merit medal in March for his Special Devices work, first as assistant director and later as director, is a college president and mathematician. The division’s roster also included educators, engineers, lawyers, architects and businessmen.

Special Devices became a separate division in BuAer in August 1943, when headquarters were established in a converted Washington, D. C. garage. It was transferred to the Office of Research and Inventions on 19 May 1945.

The machines and methods Special Devices devised during the war became familiar to the men of Navy men. A list of the division’s most widely-used war developments would include:

- The “Gunairstructor,” for training fighter pilots in the art of dogfighting. This consisted of a cockpit with its fixed guns firing at plane silhouettes projected on a screen, with the illusion complete as to sky, maneuvering tricks and the cacophony of plane engines and gunfire.

- The free gunnery trainer, a device also containing a light-beam gun and two motion picture projectors for training in estimation in range and lead amid a confusion of sound and excitement.

- Bombing Trainer. In this unit photographs of terrain were projected underneath a bombadier chamber, with height and movement simulated with startling reality. Light-beam “bombs” were dropped and hits scored.

- Planetarium rooms for instruction in aerial navigation and star identification.

- The safety cockpit program. On the theory that many air accidents are caused as much by pilot confusion as by pilot error, the division promoted with BuAer a scheme for simplifying and standardizing arrangement of flight instruments. This program is still progressing.

- Landfall technique. The division developed skills and techniques for constructing models used in combat planning and briefing. Kits were devised with which officers could make relief maps and terrain models with three dimensional perspectives.

- Operational flight trainers. The noses of large Navy planes were exactly reproduced, down to the sound effects. Pilots, flight engineers, navigators and radiomen went through all flight operations without leaving the ground.

- Maintenance trainers. These facilitated the transition from school to line work by machinists’ mates, electrician’s mates, ordnancemen, radio technicians and other specialists.

- Flight engineers’ panels. The controls and instruments on these devices were synchronized so that the instruments would react to the student’s operation. The instructor could introduce engine trouble from a duplicate set of controls.

- Refrigerated low-pressure chambers to induce pilots and air crewmen to conditions of flight at high altitudes.

**MECHANICAL COUNTER keeps score while fighter pilot practices a “dog fight” with plane silhouettes which are projected onto a screen.**

**LINK TRAINERS are devices used to teach Navy cadets the art of blind flying. Spitfire” LT. Florice Burke, above, demonstrates how it’s done.**

**LIGHT-BEAM BOMBS** are dropped by trainee in horizontal bomber trainer chamber which simulates actual conditions during flight.
Toss Him a Smoke Bomb

While waiting for the exec’s green flag from the signal bridge, the bomb-laden OS2U pilot on the cruiser’s catapult tested his radio gear with a talker deep in the darkened depths of CIC.

Pilot: “Ace One to Bulldog . . . Over.”

Talker: “Bulldog to Ace One . . . What is your position?”

Pilot: “To Bulldog . . . I am directly over you.”

Talker: “To Ace One . . . What is your air speed and altitude?”

Pilot: “Air speed . . . zero-zero; altitude . . . 20 feet above the deck.”

(At this point there was a brief pause while the talker dived for the quick-action door to the captain’s cabin.)

It didn’t help the talker’s nerves when, just at that moment, he heard an explosion on deck—the catapult charge.

Ship’s Service Afoot

Peacetime reconversion of Japs, famed for going loin-cloth clad into battle fortified only by a handful of rice, seems to be in full swing despite reports of hardship and famine in Nippon. At least Shoji Nishimoto has found a way to beat the food and haberdashery shortages.

When arrested in Sendai for illegal possession of U. S. goods, Nishimoto was concealing on his person without benefit of sacks, bags, or any other carryall:

One can salmon, one can mixed nuts and candy, one pack candy, 12 packs cigarettes, one bath towel, one Navy flashlight, one pair trousers, two shirts, one sweater, one mackinaw, one box lifesavers, one can chopped ham and eggs, one pair shoes, four packs gum, one pack cocoa, one pack cereal, one can candy, 12 candy bars, four packs sugar, one mirror, one tube shaving cream, three packs razor blades, one can anchovies, one shaving brush and kit, four bars soap and one soap case.

Stars Are Pretty, Too

Even the angels probably heard about the young—painfully young—officer who apparently missed attending one of the Navy’s schools designed to teach you what-to-do-when-and-why.

Freshly commissioned and in a snappy new officer’s raincoat, he strode into one of the Navy’s offices, stood at attention, and with the prescribed flourish of his right arm removed a cap resplendent with the sort of gold filigree customarily adorning senior officers’ headgear.

Strictly conforming to regulations, he snapped out briskly: “Ensign Johnson reporting for duty, sir.”

He momentarily unbent to the extent of doffing his raincoat to display, sure enough, one lonesome stripe on each sleeve. This proved almost too much for the composure of the office. Awed, the duty officer was barely able to ask who he was, what he was, and how he’d come by either the scrambled eggs or the single stripe.

“Ensign Johnson, I said, sir,” the newcomer replied, “As for the cap, I bought it. I’m glad you like it. It only cost a few dollars more and it’s so much prettier than the plain ones.”

Gyrene Boot Lure

Army Day in Washington and thousands of neatly turned-out GIs tramped or rode down Constitution Avenue in their olive drab uniform.

But, on the day set aside to glorify soldiers, Marines couldn’t stay out of the act any more than they’d have thought of sitting home during the war.

Sharing the cheers of crowds watching the two-hour parade were four Marine sergeants—making a sharp contrast in their snappy dress blues—who rode close behind the last brown-clad rank in a jeep prominently displaying “U. S. Marine Corps Recruiting Service.”

Explaining the expedition as an unintentional added attraction, the head of the local recruiting office grinned that officially the boys were just out riding and got caught between the guide ropes. After that they had to go through with it.

Such quibbling doesn’t hide the fact, however, that a flock of dog-wearied doughfoots have turned up recently at the recruiting station with discharge buttons asking to trade in their OD’s for blues.
Recipe: One Mailing List

Homesick for stateside beer parlors? Bored with overseas life? Feel let down when you miss out on the packages at mail call?

Well, you might try out the scheme a couple of overseas LCTs evolved in England when they figured the folks back home weren't making with the parcels often enough. Not being ones to offend the proprieties by coming out with blunt requests, they put their heads together and came up with a plan of great finesse to start the flow of morale builders rolling in.

Soon afterwards two girls in the states—at least that's as many as the fellows admitted they wrote—received letters that read in part something like this: "... Boy, did I appreciate that big box of home-made fudge and candy you sent! It sure went fast. And almost as soon as the fudge cooled, it was on its way across the Atlantic.

Mail Call

When the chaplain throws in the towel over your problem, it's still not time to jump overboard. Maybe the Navy Department or Veterans Administration can give you the word. Anyway, a lot of people—and their wives—have tried it. Such as these excerpts from letters:

"I have been married to a naval enlisted man for three months on the 17th of June. Should I report this to the Red Cross or where?"

"I know this question is a long one. I could use bigger words, and make the letter shorter, but then I wouldn't understand it. I would like very much to buy a farm. I have the necessary money to start farming on. But I haven't enough money to buy a farm and start farming. My question is, can you get money under the GI Bill even though you didn't get called into service?"

"I am an honorable discharged veteran of this war and would like to have some advice about the Waves, mainly where do I go to join up?"

"I have two small children and expecting a baby in September due to an infection in my left side. I would like to know if it would be all right if my husband went AWOL to see me at the hospital?"

"I am a member of the Marine Corps and am going to get a medical discharge for disability. I am married to a Wave and I would like to get her out of the Navy because I will have use for her in my home. How can I do it?"

"I have a son in the Marines, he write me often but seem as though he doesn't know where he is, as I am furnishing you his address will you inform me as best you can where he is located? I would like so very much to know and if I do find out can I tell him?"

"Just before my fiancé was shipped overseas he wrote and told me he was married. Who do I see about an allotment?"

"I want to know about vocational training. Can I collect the $76 monthly subsistence allowance while I learn a trade? Can I work and collect if I work for my wife? I can learn more from her than anyone else."

"At one time I heard the statement made on the radio: 'It costs $10,000 to have a man discharged from the United States Navy.' Is this true? If not, how much does it cost? In any case, what is the course taken by the money? Where does it go?"

This Is the Cats

The cruiser got under way from Ominato, Japan, with a six-by-six cage lashed to the port side of the well deck. In the cage was a 100-pound wildcat, mascot of an Army unit billeted on northern Honshu; the cat was the Navy’s "guest" en route to the States via the "Magic Carpet".


Worried, the wildcat's chaperone tried soft-voiced coaxing, choice tidbits from the galley. Result: negative. The cat wouldn't eat.

"They'll skin me alive when we reach 'Frisco if this baby's lost a single pound," lamented the GI, while his Navy buddies chewed their fingernails trying to find an apertif for the sad-eyed tabby.

Then—the change. The weather: very stormy. Spray showered the well deck and doused the cage at every roll. All hands (with few exceptions) temporarily missed meals. The wildcat's appetiteless plight was forgotten.

Generosity of the crew knew no limits. The cat refused to eat. The appetitless plight was forgotten.

Result: The Army short-tail—neglected—bristled and yowled for chow. Generosity of the crew knew no limits and the cat grew plump and sleek while the ship pitched and rolled her way to the Gate.

Now, we're told, green-eyes insists on a salt shower before chow and her waistline is a furry 24.

Swimming Call

Somebody "shoved" the Eniwetok dock and the jaygee missed the whaleboat, plummeting into the brine. Spouting, he surfaced—clutching an old soggy life belt, which he handed to his ship's exec. Then he gurgled: "Abandon ship drill completed, sir."
The WORD
Frank, Authentic Advance Information On Policy—Straight From Headquarters

- ETM and AETM shortages are continuing as most critical in all Navy radio material schools. Almost anything that is being offered to attract personnel to this field. Electronic technician's mate and AETM are the only ratings now open in which a $2c can rise to $5c in 13 months. Moreover, good conduct excepted, just about every other requirement is being waived for advancement—sea duty and service in pay grade, for instance.

In addition to the usual ratings accepted for this training—RM, ARM, EM, AEM, RdM and SoM—all other ratings or nonrated personnel who passed the Eddy test previously but were not selected for radio material training are eligible for enrollment. Men with the speed may also apply for assignments to their Fleet commands, applications being screened by either ComServPac or ComServLant/SubordComs, as applicable, for inclusion within quotas assigned their commands. Personnel attached to shore establishments apply directly to BuPers via unit commanders. Two years of obligated service at time of school entry are required for all personnel interested in the program.

Upon completion of 20 weeks basic training at one of the Naval Training Schools (EE or RM), graduates may be advanced to the next higher pay grade up to and including pay grade two ratings. Advancements in cases of men in ratings other that ETM and AETM will be effected in the ratings held.

A special program of advancement for non-rated men will be followed in advanced radio material schools. Upon completion of the first four weeks, the top 25 percent of the total number of non-rated men will be advanced to ETM3c or AETM3c, as appropriate.

After the first 16 weeks, up to one-third of those non-rated men not previously advanced in rating may be promoted to ETM3c or AETM3c. Upon completion of the entire weeks course, remaining men not promoted may be advanced to ETM3c or AETM3c.

Those men in either the top one-fourth or one-third mentioned above may be promoted to second class ratings upon completion of the course if their work is considered to have been outstanding. In addition, they can be recommended to BuPers for advancement to first class if their showing has been exceptional.

Completing the advanced training satisfactorily will mean, too, that third class petty officers of other ratings will be advanced to second class of their rating, and that second class men will be promoted to first class. First class POs become either ETM1c or AETM1c. In addition, CPOs of other ratings, in turn, become CETMs or CAETM.

Recommendations for advancement to CETM (AA) and ACETM (AA), in the cases of all men who held a petty officer, first class rating upon entry in the NavTraScol (EE or RM) and who successfully complete the advanced radio material course, may be submitted for consideration. Sea duty requirements and service in pay grade requirements may be waived in these cases.

- Many scarce items of ship's store and ship's service stock are expected to be back on the shelves within the next three to five months.

According to present contracts, radios will be arriving in lots of 2,500 per month for the next four months. There is already a considerable number of various types of radios in ship's services and ship's store distributing points.

Cameras, another rare article, are expected to be in fairly general supply during the summer months. Thus far, five different types of cameras have been procured for distribution to the fleet and overseas bases through ship's stores. Leading brands of fountain pens should be appearing in ship's stores and ship's service stores during the next few months.

Noticeable change in ship's service store policy from prewar days will be seen with regard to items such as automobiles, jewelry and costly household appliances which formerly were obtainable through Navy ship's service channels. Purchase of such items no longer will be possible through these channels, the reason being that the Navy does not desire to enter into competition with private retailers.

- USNR and USN-I men now on shore stations will, in general, remain land-locked until their final demobilization. Exempted are those who have volunteered or volunteer to remain on active duty until 1 Mar 1947.

While not a hard and fast rule for remaining land-lubbers, the fact is that with final demobilization at hand, the short time remaining before 1 September doesn't warrant general reshuffling of reserve personnel.

In some cases, reserve officers are being ordered to sea for one cruise of short duration, but in these instances consideration is being given to their remaining time on active duty before becoming eligible for discharge in order that they may be returned to the continental limits in time for processing.

Some enlisted reservists have complained about studying seamanship and related salty subjects while still ashore with no prospect of going to sea before discharge. The answer is that the Navy is a seagoing outfit, and that it looks to the future in training its men.

- Family allowance benefits may be extended until 1 July 1952 under a Navy plan sponsored by BuPers and prepared by the Judge Advocate General's office. Before going to Congress for legislative action, however, the proposal must be approved by the Federal Bureau of the Budget. The question most likely to concern budget men and Congress is, "What will it cost?" If it becomes law, the plan may end much uncertainty over eligibility for such benefits under the present law. Moreover, it will keep many USN men happy who were concerned about reenlistments after 1 July 1946, and loss of such allowances.

creased. Among reserves, a majority of the 17 to 18-year-old group liked the present uniform, while greatest opposition to the uniform as is came from reserves over 25. Here are the answers:

**OPINION**

<table>
<thead>
<tr>
<th>REGULARS</th>
<th>RESERVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The enlisted man's uniform is completely satisfactory as it is</td>
<td>33%</td>
</tr>
<tr>
<td>It is fairly satisfactory, but there are a few changes that should be made to improve it</td>
<td>27%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60%</td>
</tr>
</tbody>
</table>

| A lot of changes should be made to improve it but it has some satisfactory features | 15% | 16% |
| The uniform is completely satisfactory and it should be entirely changed | 25% | 43% |
| TOTAL | 40% | 59% |

**ALL HANDS**
**Warrant ranks** in the postwar Navy are in for a good deal of reconsideration and possible revision. Realizing that many of its most experienced personnel are either warrant officers or aspiring to rise to such rank, BuPERS is looking forward to the time when there will be a warrant rank for every enlisted rating.

At present several enlisted ratings must be reclassified when warrant rank is attained. For instance, a chief quartermaster or chief signalman in boatswain’s mate who becomes a warrant officer. The Navy’s plan is to provide suitable rank classifications for all enlisted ratings so that men will retain their proper identity upon promotion.

For the present, however, it appears that BuPers will resort to the use of designators in classifying warrant ranks. In this case, a quartermaster who becomes a warrant boatswain might have a parenthetical designator (such as D2) attached to his rank to distinguish him from a boatswain with strict deck duty, who might be designated as (D1).

When all this will come to pass is another consideration. Navy plans, already discussed, will probably be in final form for announcement to the Fleet by 1 September, but in view of necessary legislation which will have to come from Congress, it is unlikely that actual enactment of the plan—granting Congressional approval—will be an actuality before a year from that date.

**National Service Life Insurance** may be due for some changes if present legislation now awaiting action on Congressional bill becomes law. Still in the hands of the Committee on World War Veterans’ Legislation, and not yet reported out of committee to the floor of the House of Representatives, are several bills providing for increased benefits to servicemen holding NSLI.

Several of the bills are “omnibus” in form, and include provisions for altering more than one feature of service insurance. Almost all of them provide for:

- Optional lump sum settlement in case of death;
- Elimination of present beneficiary restrictions;
- Endowment policies;
- Income to the insured in the event of total disability.

Army and Navy are favoring enactment of these proposals, and the main action now consider at present is when the bills will be put on the House calendar for action.

A journalist’s mate rating leading to a corresponding warrant grade is being considered by BuPers in the postwar rating structure. Journalist’s mates would gather news throughout the Navy and perform editorial duties for various agencies including ALL HANDS and ship and station newspapers, and carry out special assignments in radio interviewing.

**THE WORD ON—**

**ATOM BOMB TEST, NUCLEAR PHYSICS**

A special ALL HANDS “extra” has been published this month on Operation Crossroads and on the science of nuclear physics that developed the atomic bomb. The 52-page magazine tells the story of preparations for the tests scheduled to be held at Bikini 1 July and includes an elementary but detailed explanation of nuclear physics. Among the features of the edition: a color cover of the USS Nevada (the target ship), a list of leading scientists who developed nuclear science, and complete information to date on details of the test.

Distribution of the “extra” will be on the same basis as regular issues of ALL HANDS.

- **Permanant Waves?**
  With jargon most nautical,
  In get-up quite toiletal,
  These lovelies have earned our loud waves.

  Sea-laborers they lighten,
  The landscapes much brighten:
  All hail, then, the Permanent Waves!

  —The St. Louis Post-Dispatch


- **Terminal Leave Pay**—(H.R. 4051)—Provides for terminal leave payments, or enlist personnel. Opposed by Bureau of the Budget but reported favorably by House Committee on Military Affairs, the bill was expected to be brought onto the House floor by its sponsor, Rep. Dwight L. Rogers of Florida, for action on 28 May. The House committee has amended the bill so that in any future emergency, payments of this character will not be made either to officers or enlisted personnel.

- **Retirement**—(S. 2201)—Extends time for filing valid application for disabled emergency officers’ retirement benefits, and grants retirement pay to World War I emergency officers who have now or may later establish a 30 percent or more service-connected permanent disability for this and/or other purpose. Introduced by Sen. Claude Pepper of Florida and referred to Senate Committee on Military Affairs.

**LEGISLATIVE ROUNDUP**

- **Electronic Devices**—(S. 1958)—Forbids the sale, loan, lease, exchange, transfer or presentation as a gift of U. S. electronic equipment to foreign governments. Introduced by Sen. William Knowland of California, the bill was referred on 14 May to the House Committee on the Judiciary.

- **Veterans’ Subsistence**—(H.R. 6430)—Introduced by Rep. Helen Douglas Mankin of Georgia, this bill would amend the veterans’ regulations promulgated pursuant to chapter 12 of the Servicemen’s Readjustment Act of 1944 so as to provide additional subsistence for all veterans enrolled in and pursuing educational courses. Referred to the Committee on World War Veterans’ Legislation, the bill has not yet been reported on by the Veterans Administration.

- **Legal Advice**—(H.R. 6485)—A bill conferring upon the Attorney General authority to advise veterans on their rights and privileges as veterans under existing laws, without cost or fee. Introduced by Rep. Cecil R. King of Florida, the bill was referred on 14 May to the House Committee on the Judiciary.
INFRA-RED SIGNAL LIGHT sends out rays which are not visible to the naked eye, but can be seen with a receiver.

IN ADDITION to its myriad other virtues, endowed and acquired, the Navy can see in the dark. This useful gift, enjoyed hitherto only, as far as anybody knows for sure, by cats and owls, was bestowed on the Navy by infra-red.

During the war, infra-red was provided as a means of night signaling, reconnaissance, recognition, navigation, station keeping and benchmarking. Some of these, however, for sufficient reasons, were never employed. The principle was useful to Marine Corps snipers, who, carrying rifles equipped with lights and special filters, simply illuminated the Jap at night, scrutinized him through a receiver attached to the gun, and picked him off. This item, called the Sniperscope, was developed by the Engineer Board at Ft. Belvoir, Va.

Infra-red visual signaling, however, was the most important use to which the principle was put. The system supplements standard blinker and flashing light equipment with special devices which make the signal invisible to the naked eye. This is accomplished by placing a filter over any signal light and then viewing the rays that filter through with a special receiver. Only the observer equipped with this receiver can see and read the signals.

Back in 1918, during the other war, the Navy found itself face to face with the problem of enemy interception of radio and visual signals. Forthwith, the USS Pennsylvania was equipped with a mechanically modulated acetylene searchlight with infrared filter and selenium type photocell receiver. Messages could be sent with this in Morse, but the beam was too narrow for use except in a flare. The equipment was bulky and unreliable besides, so they finally let the whole thing go.

Then in 1930 a man at the Naval Research Laboratory developed an ultra-violet signaling system, involving the use of special telescope in which the ultra-violet radiation was transformed into visible light. Unfortunately, some people can see the longer ultra-violet waves, and it was not possible to screen the source adequately without absorbing most of the useful energy. The project was terminated.

In 1941, with war imminent, the Navy renewed its interest in invisible signaling. Some men in the Bureau of Ships, with a group at the Naval Research Laboratory and in the National Defense Research Committee, laid out plans for expediting a practical solution to the old problem.

Before the invasion of Sicily several ships were outfitted with pre-production models of infra-red gear. Reports of their performance varied, but few were good. However, by the summer of 1944 infra-red had made some friends. Admiral Halsey's Third Fleet flagship reported that in one operation the receivers had given "excellent performance" and that "traffic was exchanged with great reliability" up to a good range. Other reports gave the gear a good word from Saipan to Okinawa, where the Marines unlimbered Sniperscope.

The way this equipment transmits and receives rays that you can’t see may be compared to the way a radio transmits sounds you can’t hear until...
they are reproduced by a receiver. The radio transmitter sends out a radio frequency wave to a receiver which converts it into a sound wave at a frequency within your hearing range. In a similar manner, some types of infra-red gear send out waves that are beyond the visible light range; a receiver catches these and converts them into light waves within the visible range. This enables one equipped with a suitable receiver to see light rays emanating from otherwise invisible sources. These light rays are of the type beyond the visible light range, the receiver transforms them to visible light rays.

Infra-red sources emit invisible rays which fall above the wave length range of light which the human eye is capable of seeing, and just below the wave length range of heat waves. At wave lengths of about 4,000 to 8,000 Angstroms (an Angstrom is one ten-thousandth of a micron, which is one-thousandth of a millimeter or about .00004 of an inch) light waves are visible to the human eye as colors, or as white light, which is a combination of waves of all wave lengths. Infra-red waves, however, are waves whose wave lengths are longer than 8,000 Angstroms, and just beyond the range of visibility. All this is supposed to demonstrate why, when you get within 400 yards of an infra-red source, you may see a faint red glow with the naked eye; and why, when you get up close, you feel heat on your cheek where you would expect to see light.

An ordinary electric light may be used to produce infra-red rays, and only these, if a filter is employed to completely remove all the visible light rays that are produced. This is exactly what is done in infra-red sources. It is accomplished by covering any standard or specially constructed searchlight or beacon with a specially designed, visually opaque, glass or plastic filter, through which only infra-red rays can pass.

Infra-red equipment is divided into sources and receivers. All sources consist of some type of electric light, a filter and a power supply. Naturally, there are many supplementary components and refinements in some of the more highly developed models. But, fundamentally, all you need to produce infra-red radiation is light, power, and a filter, and these are the only components common to all sources.

Sources Grouped
Sources may be grouped according to their function or use as follows:

- Signal searchlights, including the standard searchlight equipment with infra-red filter-lens and hood added.
- Beacons, to serve purposes similar to those of shipboard broadcast lights.
- Beaconmarks, provided chiefly in portable models with portable power supplies.

Infra-red experts are of some pains to point out that the equipment is adversely affected by fog, haze and rain in much the same manner as regular, visual daytime signaling equipment is affected. The range of an infra-red source is reduced by adverse weather conditions to approximately the same degree as the range of a white light of comparable intensity. In conditions of very bad visibility, the equipment may be rendered virtually inoperative.

The standard searchlight is the most powerful unit used for visual infra-red signaling. However, the beam of the standard light has very little spread. On a rolling ship it might be difficult to keep a narrow invisible beam trained on the signalman receiving. The control lens-filter, fitted inside the special hood, spreads the infra-red beam and permits un-
interrupted signaling despite the rolling of the ship.

On the standard searchlight a curved mirror concentrates most of the light into a single beam. However, a small percentage of the light spills directly from the lamp to form a dim, side-angle beam around the main beam. If haze is present in the atmosphere, the spilled light is reflected from the tiny moisture particles and produces a secondary illumination which clouds the view of the receiver and greatly reduces its range. The purpose of the hood is to reduce the spilled light to a minimum.

The standard light and hood also have been used successfully to flood-light objects close aboard. One time, for example, it was necessary to transfer personnel from one ship to another in complete darkness. By means of infra-red illumination the task was greatly facilitated.

Infra-red beacons were used during the war principally for broadcast purposes; that is, for sending simultaneous messages to ships in formation. One type of equipment included two beacons, each utilizing six infra-red units arranged to cover 180 degrees of azimuth. Obviously these, when

THE SNOOPERSCOPE has a dual mechanism: a light source which sends out infra-red rays to illuminate the target and a receiver to spot the target.

INFRA-RED UNIT is installed in a beacon, used during the war to send simultaneous messages to ships in formation.
properly mounted, will give a coverage of 360 degrees; they also can sweep a 15-degree vertical span.

In addition to signaling devices, the Navy developed some portable beacons and beach markers intended for use with invasion units. These were never actually put into combat operation, probably for the very good reason that most of our landings were made in broad daylight. If night landings had been undertaken on a large scale, however, the infra-red beacons were to have been employed in guiding landing craft waves into beachheads and in marking the assault area after the landing was made.

The Navy originally designed two types of receivers. Both were called in and replaced by other types. All receivers perform the same basic task; they gather up invisible infra-red rays and convert them into light you can see or sounds you can hear. This objective, however, is accomplished in different ways and in different types of receivers. Image-forming receivers are small, portable units, looking vaguely like telescopes.

Other types are larger, more powerful, permanent installations not suited for ready handling as is the case with the smaller, portable units.

Image-forming types are phosphor receivers and electronic receivers. Briefly, the phosphor receiver contains a phosphor disc or "button" which, when properly charged, transforms infra-red waves into visible light. Charging is accomplished, in one unit, by a tiny green light powered by two dry cells. Charging of the phosphor disc in another type is done by a small quantity of radium, no less. This costs the Bureau of Ships $800,000 per gram, but it gives the receiver a power source guaranteed for at least 1,700 years. By that time, who knows, somebody may have figured out something less expensive.

Electronic receivers, the type used with the Sniperscope, are of four types ranging from a handy unit less than 12 inches long and weighing under seven pounds to a permanently-mounted piece a foot in diameter, 20 inches long and weighing about 20 pounds. This receiver is equipped with a glass optical system common to ordinary telescopes or field glasses and employs a special type of phototube (image-forming tube) which converts infra-red radiation to visible light. Incidentally, the Army, which also used the Sniperscope and a similar gadget called the Snooperoscope, says the two devices "are credited with 30 percent of the enemy killed on Okinawa."

The enemy also had a finger in infra-red. The Germans appear to have made widespread use of devices for signaling, reconnaissance and detection. German infantrymen carried infra-red devices, probably similar to the Sniperscope, which enabled them to see and fire on enemies in complete darkness at about 100 yards. Another German development was a long focal-length camera using infra-red sensitive film which enabled the enemy to photograph Allied defenses and communications installations across the English Channel. Other devices, used with infra-red searchlights and headlights, made it possible for tanks and other vehicles to be driven in complete darkness.

The Japanese are known also to have used infra-red devices. Information on such employment has not been fully analyzed, but the developments are believed to be distinctly inferior to those of the U. S. Navy.
**Muster Out Pay**

**Sir:** When, if ever, will a usn who shipped over in 1944 for four years be eligible for muster out pay?-J.E.D., CFC, USN.

- At the termination of his present enlistment, USN men who reenlisted prior to 1 Feb 1945 will receive muster out pay at the end of present enlistments. Those who reenlisted on or after 1 Feb 1945, and who have not received muster out pay, can apply for it now. The application should be sent to the Field Branch, BuSandA, Mustering Out Payment Division, Cleveland, Ohio.-Ed.

**Sir:** I hold a permanent rate of CPO. As the result of excessive promotions I now hold a temporary commission as lieutenant and have more than 17 years of service. I desire, when required by law, to revert to CPO and to continue active service. If I am discharged as an enlisted man for purposes of reenlisting, will my discharge entitle me to muster out pay?-M.E.W., Lt., USN (T).

- Yes.-Ed.

---

**Mary Maru** Was at Pearl**

**Sir:** In your article, "SRU: Fix-It-Hands" (ALL HANDS, January 1946) you stated that a task force which included the battleships, "Pennay," "Woecee," California and "Big T," practically annihilated a Jap task force in Surigao Strait. Your article pointed out that each of those ships was hit in the attack at Pearl Harbor. What I wish to bring to your attention is that you forgot the "Mary Maru" (USS Maryland). She was indeed hit at Pearl Harbor, I was aboard her and saw several shots of the motion picture made.-A.G.P., SK1c, USN.

**Sir:** Are officers who started their careers as enlisted men eligible for the Good Conduct Medal after completing three years of commissioned service?-H.M.B., Ens., USN.

- No. Good Conduct Medals are awarded to enlisted men only. If a man completed three years of commissioned service in the enlisted ranks prior to commissioning he would be eligible. Temporary USN officers would receive service in commissioned status toward meeting eligibility requirements for the medal after reenlisting for three years of commissioned service. Requirements for the medal are three years of continuous service for periods terminating on or after 1 Jan 1945. Requirements for the three years of commissioned service are: 3.0 in average and 2.5 in last year of commissioning.-M.E.W., Lt., USN (T).

---

**Stewart Rates Philippine Ribbon**

**Sir:** Are the personnel who served aboard the uss Stewart (DD24) from 8 Dec 1941 to 22 Feb 1942 entitled to the Philippine Defense ribbon?—R.M.B., Yc, USN.

- Yes, they earned the ribbon with one star. The Stewart served under both the U.S. and Japanese flags in World War II. Sunk at Surigao In, she was reclassified by the Japs. We recovered her at Kuraz Naval Base, Japan (see ALL HANDS, April, p. 45).-Ed.

**Award for Good Conduct**

**Sir:** What rate has the highest seniority in the Navy, a quartermaster or a boatswain's mate?—W.F.S., PQM3c, USN.

- The boatswain's mate rate has the highest seniority in the Navy rate structure. Following in order are: captain, gunner's mate, minesweeper's mate, and quartermaster.-Ed.

account for mattresses?—A.G.P., SK1c, USN.

- No carrier has been designated the "Fighting Lady" by the Navy Department. The motion picture, "Fighting Lady," contains a statement to that effect in their service records.-Ed.

---

**Boatswain's Mate is Number 1**

**Sir:** What rate has the highest seniority in the Navy, a quartermaster or a boatswain's mate?—W.F.S., PQM3c, USN.

- The boatswain's mate rate has the highest seniority in the Navy rate structure. Following in order are: captain, gunner's mate, minesweeper's mate, and quartermaster.-Ed.

---

**Payment for Mattresses**

**Sir:** I am wondering what happened to the $10 enlisted men were supposed to have received for mattresses turned in last October. An AlNAV came out last September which stated that the mattresses were to be turned in. We paid them out of our clothing allowance and did not receive any reimbursement.-M.W., Stc.

- No provision ever was made for reimbursement on mattresses.-M.W., Stc.
Souvenir Books

In this section ALL HANDS each month will feature notices of books and any other kind of publications which might be of interest to ship officers and men. If you have any such items which you wish to have mentioned in the column, please address your notices to the Chief of Naval Personnel (Att: Editor, ALL HANDS), and should include name and date of issue; address of ship or station, price per copy and whether money has been sent. Notices which are solicited will be acknowledged within three weeks. Those notices are passed to the word to former shipmates who will be interested.

• Block Island (CVEs 21 and 106). Prior 16 June address requests for copies to: Ship's Book, USS Block Island (CVE 106), Norfolk, Va. After 16 June address Editor, Ship's Book, USS Block Island (CVE 106), U.S. Naval Academy, Annapolis, Md. The book covers activities of both the old and the new Block Islands (CVEs 21 and 106). It is distributed free to naval and marine personnel who served aboard either ship. This book was ready about 1 June.

• USS Lake Champlain (CV 38), Address Commanding Officer, USS Lake Champlain, (CV 38), Norfolk Group, 16th Fleet, Newport News, Va. Will be distributed upon request to former crew members free of charge.

• USS Miami (CG 88), Address Commanding Officer, USS Miami, Miami (CL 89), Fleet Post Office, San Francisco, Calif. This book will be published 5 July. Requests must be in prior to 15 June. $1.50 per copy, prepaid.

• USS Pondera (APA 191), Address Commanding Officer, J. T. Tubbs, Pondera, St. Salisbury, Md. One copy has been mailed free to the best known address of each officer (that is), Surgeon's (1945) ship's kid later was identified as the Japanese submarine I-773. An extract from the War Diary of Heermann, which sank a sub a few days a friendly manner the day after the war ended, recounts how the ship received some of the surrender papers to the Japanese, local (Japanese) time. That afternoon, suspicious of an approaching aircraft, she went to general quarters. When the Judy closed in for what appeared to be a suicide dive the Heermann opened fire and splashed the plane.

From the above it seems the submarines won all the prices, not counting Heermann's exploit which occurred after hostilities had officially ended (that is), Lita's kid's later was identified as the Japanese submarine I-773. It is quite apparent that Mar- garite Adden had few of the qualities so necessary in the adjustment from civilian to military life. A little initiative and enthusiasm would sooner or later have made her a success in civilian life better than her Navy life.

**CFA for Wave Chiefs**

**SIR:** Do Wave CPO's receive a higher CCA than an enlisted chief?—J.F., USN.

**SIR:** (1) No. (2) Shop's cooks are not authorized to wear the two keys and feather badge. This is earned only by chief commissioned stewards.

**SIR:** Yes.—Ep.

**USS TORSK** takes winner's honors.

**USS SPIKEFISH** was a runner-up.

**USS HEERMAN** overshot the deadline.

**Irate Women**

**SIR:** Let us address this letter to Seaman Adden (ALL HANDS, Fantail Forum, April 1944).

No, I am not thinking of the Navy as a life work, but we certainly do not pass judgment on those who do. I have heard that one thinks that other folks have rocks in their heads. It is high time to see a psychiatrist. Yet, you are entitled to your opinion. Do you think you are an authority on naval administration? How many weeks have you served toward a hash mark? Do you know how the part of all service women women served a couple of years on the Spirea. She shot down a Japanese plane in the last shot of the war department, if the attitude of all service women women served you, we would probably be hoeing rice! There were plenty of jobs during the war which had to be done. If you feel you did nothing, please don't brag about it.——Irate Waves in Pearl Harbor.

**SIR:** I would like to reply to the remarks of Margaret M. Adden, in your April issue. During the war we needed every man we could send to man our ships. That shore work had to be done by someone; therefore, the Waves. None of the work was glamorous, and that is where she made her mistake. I wonder if she'll be able to adjust herself to civilian life better than her Navy life.

**SIR:** (AK 16) as a merchantman! Those of us who served on her, as I did for 16 months, do not like to see her misinterpreted.—C.E.F., LL, USNR (inactive).

**SIR:** Sorry, ALL HANDS loosely classified Spica and SS Harrington together as "merchantman." These of us who served on her, as I did for 16 months, do not like to see her misinterpreted.—C.E.F., LL, USNR (inactive).

**USS SPIKEFISH** has flown the commission pennant since 1 May 1944. The Ex-uss Shank, she was acquired by the Navy 16 Nov 1941, as Harrington is in fact, a merchant ship.—Ep.

**FINI LA GUERRE**

**SIR:** Reference the letters on page 28 in the February, 1944, issue concerning the Concord, Hughes and Tigrone and their future use. Well, our was no such thing as a hangfire with the gun pointing in the direction of the Empire. But a guided torpedoing of the Jap sub I-382 by uss Spikefish (SS 461) at 0425 King, 14 June 1944, in the East China Sea. —K.S., LL, USN.

**SIR:** Maybe I shouldn't write to your magazine since I'm a woman and not serving, but my husband served a couple of years on the Concord and still is aboard uss Heermann (DD 522). Now I tell the Heermann fired the last shots in the Pacific on 15 August. She shot down a Judy which was making a suicide attack. Why not give them a little credit.—Mrs. J.F.F.

• A check of war records confirmed reports on the Hughes, Concord, Tigrone, Spikefish, and Heermann, and turned up a surprise candidate for last-shot honors, uss Torsk (SS 223). The last-shot schedule, all times Greenwich:

<table>
<thead>
<tr>
<th>Ship</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>uss Hughes (DD 419)</td>
<td>0658 13 August</td>
<td></td>
</tr>
<tr>
<td>uss Concord (CL 16)</td>
<td>2159 14 August</td>
<td></td>
</tr>
<tr>
<td>uss Tigrone (SS 415)</td>
<td>0706 15 August</td>
<td></td>
</tr>
<tr>
<td>uss Spikefish (SS 461)</td>
<td>0241 15 August</td>
<td></td>
</tr>
<tr>
<td>uss Torsk (SS 223)</td>
<td>2117 14 August</td>
<td></td>
</tr>
<tr>
<td>uss Heermann (DD 522)</td>
<td>2350 14 August</td>
<td></td>
</tr>
</tbody>
</table>

**From the above it seems the submarines won all the prices, not counting Heermann's exploit which occurred after hostilities had officially ended (that is).**

**SIR:** (1) No. (2) Shop's cooks are not authorized to wear the two keys and feather badge. This is earned only by chief commissioned stewards.

**SIR:** Yes.—Ep.

**Additional copies $3.40.**

**The New Uniform**

**SIR:** The only thing we can see that's right about the new uniform is the hat, although most of the rest of it looks like the Bell Boys' Union. One question: When do we get the pajamas?—H.C., SL, usn.

Sir: We all have the same idea about the uniform. We want to wear the so-called "tailor made" with hip pocket and 30-inch bottoms. We recommend replacing the present white hat with a visor cap. We think the neckerchief should be worn 1/5 inches above the "V" in the jumper, because we think it's neater. —G.C.R., Cox, and 26 other usns.

Sir: I'm in favor of the new uniform if it can serve to show off to the world and still retain its crease like our present uniform. I don't care for the new overseas hats, however, change is good but there is something resembling those of chiefs—J.F., SL, USN.

Sir: Most of us regulars joined the Navy for a change of pace. If it is changed I think many will be glad to get out. The present blues are perfect, as far as we are concerned. Sure we would vote for the new uniform but not the design. Why not change the color to gray?—A.J.L., SL, USN, and four buds.

**JUNE 1946**
THE USS SOLAR, upper left, wrecked by a Coast Guard fireboat. Salvage crew, bullion, left center, which Japs dumped. Navy's USS PC 799, lower left. Alcatraz. Visitor aboard the USS Midway, right, is shown the mechanisms of a flight deck, USN. Chosen official pin-up girl Vaniver, below, is to be a guest of honor.
WORLD AWAITS ATOMIC BOMB TEST AS NAVY SHIPS STEAM TO BIKINI

PERIOD 21 APRIL THROUGH 20 MAY

Before the Blast

The world waited last month for the CROSSROADS test explosion of the atomic bomb, scheduled for 1 July at Bikini. It was to be a gigantic experiment, and would possibly determine naval and military tactics and strategy for years to come. Because of the importance of the test, to give naval personnel a better insight into nuclear physics and things to come, ALL HANDS Magazine prepared an atomic energy extra issue, now being distributed.

Meantime, these were the worldwide developments:

- Joint Task Force 1 personnel left Washington, D. C., on a special train for San Francisco on the first leg of their trip to Bikini, and Navy ships bound for the experiment plowed broad wakes across the Pacific converging on Pearl Harbor and fanning out to the Marshall Islands.
- President Truman issued invitations to 11 nations, members of the U. N. Atomic Energy Commission, to attend the test, including Australia, Brazil, Canada, China, Egypt, France, Mexico, Netherlands, Poland, Soviet Union and the United Kingdom.
- The Senate Special Atomic Energy Committee was drafting a bill to control atomic power.
- The Army-Navy Munitions Board directed a survey of the nation’s caves for underground military and industrial use in event of another war.
- Use of atomic energy in medicine was outlined at a meeting in New York, including treatment of thyroid cancer with radioactive iodine and use of radioactive “tracers” to study body processes; and the University of Chicago announced it would soon have a model turbine spinning on power supplied by a small pile of uranium.
- German atomic research was banned by the occupying Allies; General of the Army Dwight D. Eisenhower said in Honolulu that disclosure of U. S. atom bomb secrets “must await the time when the United Nations can demonstrate its efficiency and permanency”; a British scientist drew 10 years in the penitentiary for disclosing atomic secrets to the Russians; and Marine guards with “shoot to kill” orders were placed over test preparations at Bikini.
- Former inhabitants of Bikini, moved once to Rongerik Atoll 109 miles to the east, might have to move again as a safety precaution if it is determined that currents of wind or water might carry injurious matter from Bikini to Rongerik.

For more on the A-bomb test, see p. 2.

Solar Explosion

A destroyer escort unloading at the Naval Ammunition Depot, Earle, N. J., was wrecked by explosions on 30 April. A Navy Court of Inquiry and other Navy officials have completed investigations but no findings were made public.

USS Solar (DE 221), a veteran of World War II which saw action in the ETO and the Pacific, was towed to the U. S. New York Naval Shipyard for dry-docking and salvage.

Of the ship’s 13 officers and 143 men reported to be aboard, one officer and six enlisted men have now been declared dead as a result of the explosions. Thirty-six required hospitalization. Others were treated at the scene.

The explosion occurred as the crew was unloading ammunition in preparation for an overhaul. Only about one-third of the regular load of 15 tons of ammunition remained on board at the time of the first explosion which reportedly was a “hedgehog.”

Last July

<table>
<thead>
<tr>
<th>U. S. Fleet fired upon the Jap homeland at point blank range as record number of carrier planes hammered at remnants of land-locked Jap warships during raids on Tokyo and Honshu coastline. The Army mopped up in the Philippines and Australians landed on Bismarck.</th>
<th>July 1946</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUN</strong></td>
<td><strong>MON</strong></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>29</td>
<td>30</td>
</tr>
</tbody>
</table>
VISITING WEST POINT CADET is made welcome in style at the Naval Academy during an exchange of students between the two service schools.

Photograph from Press Association, Inc.

an antiaircraft charge about 30 inches long and 7 inches in diameter, weighing about 65 pounds. The first explosion was followed one minute later by a blast heard two miles away. After the first explosion, fire stations were manned and attempts were made to extinguish the blaze, but after the second explosion the word to abandon ship was passed. Nearly all of the crew was able to get off the ship before a third and final explosion followed about two minutes after the second.

A 10-ton section of the bridge was blown about 150 feet into the air and landed on the pier. The forward section of the ship was battered and mangled beyond recognition and curled back over what remained of the bridge with the underside of the deck exposed. The third blast was felt for a radius of about 30 miles, shattering windows and causing ground tremors.

A destroyer and an ammunition ship tied up at the same pier some distance away were undamaged. The pier is 2.7 miles long. Flying fragments caused a railroad boxcar into which ammunition taken from the Solar was loaded to explode on the pier, leaving nothing but a hole in the concrete.

The USS Solar, after a long career of escorting convoys in the Atlantic was assigned to testing new equipment and had just returned from the Pacific.

Photograph from Press Association, Inc.

Midway on View

The Navy's newest type carrier, USS Midway, played host in April at New York City to approximately 1,000 naval reservists, their families and friends. A special day was set aside and the ship was opened exclusively to reservists and their guests. Presentation of Naval Reserve identification cards was necessary to board the ship.

Success of the visitors' day prompted Com3 to recommend in a letter to the Chief of Naval Personnel that similar visits be planned when other ships of the Fleet enter New York.

The visit aboard the carrier was planned by the district director of Naval Reserve, and invitations to board the ship were sent to approximately 5,000 reservists in the area.

The reservists and their guests were taken to the carrier, which was moored in the North River, by small craft provided for the occasion. They were received aboard ship by officers and crew, who conducted a three-hour tour. Much of the ship's intricate equipment was open for inspection.

The Merger Bill

S. 2044, the Thomas-Hill-Austin bill for unification of the armed forces, was reported out last month by the Senate Military Affairs Committee and placed on the Senate calendar. This means the bill is available to be taken up by the Senate at any time.

The Senate Naval Affairs Committee also has held hearings on the merger question and received statements from several witnesses, including Secretary of the Navy James Forrestal, Fleet Admiral Chester W. Nimitz, USN, CNO; Fleet Admiral Ernest J. King, USN, former CNO; and Gen. A. A. Vandegrift, Commandant of the Marine Corps.

Army, Navy and Air Forces leaders conferred one day last month with President Truman at the White House. Secretary of War Robert P. Patterson and Mr. Forrestal said after a conference that a "general discussion on military reorganization" had been held. Later, the President asked War and Navy heads to strive to have differences on unification ironed out by the end of May.

Senators Styles Bridges (R., N.H.) and Thomas C. Hart (R., Conn.), the latter a former commander of the Asiatic Fleet, submitted a minority report on S. 2044 last month as members of the Senate Military Affairs Committee. The report said that in the conduct of hearings on the bill the nation's "great reservoir of impartial wisdom and experience ... has not been tapped." It continued, "In addition to many who have been leaders in war mobilization, we should hear from our industrialists, from our scientists, and from our citizens generally."

The Thomas-Hill-Austin bill provides a Department of Defense to be headed by a secretary of Cabinet rank, with the secretaries of the Air Forces, Army and Navy subordinate to him.

Photograph from Press Association, Inc.

FLYING WING, experimental Army bomber, has a wing span of 172 feet. The plane, called the XB-35, is powered by four 3,000 horsepower engines.

ALL HANDS
Navy Holds Class in China

At Tsingtao, U. S. Navy men are running basic and operational training schools for Chinese sailors.

At that North China port, the American Amphibious Training Group, under Capt. John S. Keating, USN, is training 800 enlisted men and 100 officers attached to the Chinese Naval Training Center. School is held aboard U. S. amphibious craft—four LSTs, two LCIs and one LSM—which once underwent enemy attacks in Pacific and Atlantic waters.

Goal of American instructors is to teach Chinese personnel to man U. S. amphibious ships so they can take over one of the jobs that has been keeping American Navy men busy in China—moving Nationalist armies to the North.


About 400 U. S. Navy men are assigned to the seven amphibious craft. Five officers and nine men assist with training at the shore school. Should the bill authorizing transfer of American ships to the Chinese government become law, both ship and shore facilities will be augmented.

The language problem, while eased by interpreters, is presenting interesting personal chores for Americans responsible for teaching the Chinese. Many of them are studying Chinese, and some have undertaken to teach their pupils their versions of the American language.

Down at Guantamano, Cuba, Chinese naval personnel were trained in eight small naval vessels—patrol and mine craft—and left for China about 1 April via the Panama Canal. In the interest of safety and to provide a possible assistant, these craft are proceeding with uss Monume, an ex-tanker now a repair ship and tender.

Turned over to the Chinese navy under lend-lease before the Japanese surrender, these vessels will be supported under lend-lease until 30 June 1946 by Presidential authorization. Upon arrival at their destination, these ships probably will be used for shipping protection in China waters.

Surplus Food Transfer

Coffee, tea, spinach, dried fruit, canned roast beef and marmalade were few of the items in the 156 million pounds of food declared surplus by the Navy in a five month period ending 1 Apr 1946.

To the Department of Agriculture went 44 million pounds of food for U. S. civilians and 74 million for sale to foreign governments. In addition, 38 million pounds of food was transferred to the Army for civilian relief programs in Germany and Japan.

BuStorA, which handled the food transfers, said the surpluses resulted from dry stores unloaded from ships returning from the Pacific and from the rapid demobilization of personnel since VJ Day.

Maritime March

A march honoring officers and men of the U. S. Maritime Service, "The Merchant Marine," was first performed publicly last month and offered for adoption as the official march of the Merchant Marine by its composer, Kenneth Douse, principal musician, USMC.

CHINESE SEAMAN, students at the U. S. Naval Training Station, Tsingtao, China, are being instructed by Coxswain Peter Cerce in tying sailors' knots.

End of the Search

All searches for missing persons in the Pacific Ocean Areas under the jurisdiction of CinCPoA have been completed by the Navy. The searches, which began coincidentally with the Allied offensive in the Pacific, covered every land mass, island, and atoll in the area. Naval casualty records show no instance of any person's being found alive in these searches, although graves of American fliers were discovered on a few islands.

Covering searches first were made by airplane, then followed up where it was considered necessary, by shore parties landed from ships. In some places very small dots of land, entire areas which could be sighted from a ship's deck were circled and interrogated by loud speaker. On all islands of any size, however, parties went ashore and queried natives and missionaries concerning the existence of any white persons in the area.

Searches have been completed in the Philippines and the Japanese empire under the Army.

'Mac' Cuts Jap Navy

The Japanese government was ordered by General of the Army Douglas MacArthur to destroy all Japanese naval vessels larger than destroyers, if they can not be used in the repatriation fleet, by 30 Apr 1947. When repatriation of Japanese from China and other countries is completed, the fleet used for this purpose also will be scrapped.

A list of Japanese combatant vessels larger than destroyers which were not sunk in the war includes: Hiei—hörzer, heavily damaged; Amagi, Katsuragi, Ryuho and Haya-
taka (Junyo), heavily damaged; Hoso, lightly damaged; Kasaagi, never flown; G50—Mokho and Takeda, heavily damaged; CL-Kitagami, heavily damaged.
Veterans' Education

Best chance for Navy men to return to school when they go back to civilian life is to try a small college. A veterans administration survey found 162, 485 known vacancies for the fall term in 1,029 schools throughout the nation, and the probability was that vacancies would be more than 250,000 when the remainder of the 1,686 schools queried had reported. The schools included universities, professional schools, teachers' colleges and junior colleges in 47 states and the District of Columbia. Complete facilities for education in every academic field exist in the small schools, many of which have academic ratings considerably higher than the "name" universities. Most of the big "football colleges," VA pointed out, have few or no vacancies for veterans.

VA has published an aid to the veteran who is shopping around for a school with an opening in the academic field he wants. The pamphlet, "Educational Opportunities for Veterans," lists the schools by location and states their fields of study. The pamphlet has been distributed by VA to its field workers at separation centers and VA regional offices, where it is available to former servicemen looking for a school.

VA has concluded that the "educational shortage" is not as serious as was once believed. Nevertheless, Gen. Omar N. Bradley, veterans administrator, foresees a still substantial lack of educational opportunity. Speaking before 500 educators in Chicago he declared total enrollment of full-time student-veterans may run as high as 750,000 this fall (present enrollment, 394,551), and that demand for additional enrollment might equal the total of those enrolled.

Applications for training under the GI Bill of Rights number nearly 1,750,000 (including those already in school), but VA pointed out that not all applicants are potential college- or college-level students, nor do all applicants qualify for GI education rights or accept them when qualified.

ND Headquarters to Move

Approval of plans to move headquarters of the Seventh Naval District from Miami to Jacksonville was announced recently by the Navy Department.

Rear Admiral John F. Shafroth, USN, commandant of the district, is effecting cancellation of leases on property now being occupied by the headquarters in anticipation of the move.

Mutual Interest is shown in spring finery as Navy men wearing new uniforms talk with Mary Alice Ward.

Alcatraz Prison Break

The Navy, with the Marines, Coast Guard and Army, helped federal officials quell last month's attempted prison break at the federal prison on Alcatraz Island in San Francisco Bay. Navy and Coast Guard craft patrolled waters around the island, a Coast Guard PBY flew an observation patrol overhead, and 100 Marines landed on "the Rock" to guard prisoners who did not take part in the riot.

The two-day uprising broke out in the afternoon of 2 May when a small group of convicts holed up in a cell block after one of them had overpowered a guard and taken his weapons, a rifle and a pistol. The riot cost the lives of two guards and the wounding of 14 others, and the lives of the three ringleaders of the escape plot.

Warden James A. Johnston sent out a call for help soon after the riot began. Several of the prison guards were held as hostages by the convicts.

The warden's call was answered quickly. As he put it, "The Marines came over like it was "a piece of cake."

Two Navy ships, PCs 788 and 799, and five Coast Guard craft were soon patrolling the waters around the island to prevent escape by swimming. The Navy transported the Marines in four groups from Treasure Island.

The riot ended with the death of the ringleaders.

Later, a small crew of Navy bomb disposal men went over Alcatraz carefully, at the request of federal officials. They removed 11 unexploded hand grenades.

Merchant Marine Reserve

Contrary to reports previously published, the Merchant Marine Reserve is not set up under the Organized or Volunteer Naval Reserve, but is a separate component of the Naval Reserve.

Purpose of the Reserve is to provide a trained force of experienced seagoing personnel adequately indoctrinated in naval administration and organization available for mobilization in the event of a national emergency. These men serve aboard naval vessels and merchant vessels requisitioned by the Navy, and provide a backlog of qualified specialists for mobilization billets in the naval establishment connected with the administration and operation of vessels. During World War II, approximately 5,000 were on active duty in the Navy.

A training program is in effect at the present time which places on active duty for one year those junior officers of the merchant marine who previously have not had active duty with the Navy. In addition, a total of 56 days of active duty within four years is allotted to these merchant marine reserve officers. Correspondence and other courses are also made available to these reservists.

About 12,000 copies of a new publication, the Merchant Marine Naval Reserve Bulletin, have been distributed for the information of inactive officers of the Reserve.
Return of War Dead

President Truman has signed legislation permitting the return of America's 328,000 war dead from overseas. In addition to service personnel the program will include the return and reburial of American Red Cross workers; war correspondents; Merchant Marine personnel and government employees who were buried subsequent to 3 Sept 1939 and who were engaged in war work or whose death was a result of the war.

The repatriation program which should be completed in less than five years will cost from 195 to 215 million dollars. Anticipated cost of returning the bodies is approximately $700 each.

The Bureau of Medicine and Surgery will take the initiative and contact families to determine the desired disposition of the remains of naval personnel. Next of kin need not originate any correspondence in this regard to the Navy or War Department. This process will be lengthy, therefore families of deceased personnel living in the same neighborhood may receive such queries at widely separated times.

Next of kin will have the option of:
- Having the remains returned to U.S. and interred in a National Cemetery, all costs to be paid by the Government.
- Having the remains returned to U.S. for burial by next of kin in a private cemetery. Government will pay $50 of local interment expense and all expenses of shipping the body home.
- Burying the deceased in a permanent American military cemetery overseas.

The bodies will probably begin to arrive in the States at the beginning of 1947 at the rate of 1200 per month increasing to 18,900 per month by the end of the year. Liberty ships, aircraft carriers and LSTs will be converted for the job and will be painted white with a purple band circling the ship.

Veteran Job Training

Veterans receiving on-the-job training under the GI Bill of Rights are eligible for the same cash subvention benefits as are veterans attending school, the Veterans Administration announced. Veterans in school receive $85 a month if they have no dependents, $90 a month if they have one or more dependents.

These payments are made also to veterans in on-the-job training, provided the total of the payments plus wages received from the employer does not exceed the minimum wage prescribed by labor unions for journeyman in that trade.

As was reported in error in ALL HANDS, April 1946, p. 50, the maximum wage prescribed for an apprentice in the trade of pharmacist's mates was $100 a month. VA scales down its payments. For instance, if the minimum wage prescribed by the union were $150 a month, and the veteran were receiving $100 from his employer, VA would scale down his $65 or $90 dollar benefits to $50, to bring the combined total to $150.

NAVY NURSES, as members of air evacuation service teams, were responsible for the care of all patients aboard their evacuation planes.

NAVY NURSE CORPS 38 YEARS OLD

Back in October, 1908, 20 women at the Washington, D. C. Navy Hospital constituted the Navy Nurse Corps. The act of 13 May 1908 had established the Corps, and its first superintendent was appointed in August; but the Navy was unable to provide quarters for them, so they rented a house and operated their own mess. While a Congressional order designated the group as neither officer nor enlisted personnel, members were officially recognized as members of the naval service and were subject to naval discipline.

That was the beginning of the Nurse Corps, now 38 years old, and a seasoned veteran of two world wars, the Corps observed its anniversary with a membership of 7,500 women. Its strength sharply reduced since VJ Day (when it reached a peak of 11,000), its future complement will depend on the size of the postwar Navy.

Secretary of the Navy James Forrestal, in recognition of the Corps' 38th birthday, sent the following message to Vice Admiral Ross T. McIntire (MC) USN, Surgeon General of the Navy:

"On the thirty-eighth anniversary of the Nurse Corps, I want to express, on behalf of the Navy Department, my congratulations to the Corps for its able performance in the war and its continuing activity in peace.

"To the Nurse Corps may be attributed a substantial share of credit for the Navy's low death-rate of casualties. Throughout the war, at advanced bases, afloat and in the air, as well as at home, Navy nurses carried on their vital work with patience, devotion, fortitude and skill in the best traditions of their profession and of the Navy."

World War II brought new experiences to the Corps. For the first time, Navy nurses took to the air as members of air evacuation service teams; for the first time they were given commissioned rank status; and for the first time they were taken prisoner by the enemy.

During the first World War, the Navy's 1,460 trained nurses had served conspicuously well in overseas hospitals. One hundred and six nurses were given military awards for distinguished service in line of duty. Four of them won the Navy Cross, and an even greater honor was given one of the four, Lenah S. Higbee, second superintendent of the Corps. The USS Higbee, a destroyer, was named in her honor in January, 1945, marking the first time a fighting ship had been named for a woman in the service.

Flight nurses of the air evacuation service served with distinction during the recent war. Assigned to ambulance squadrons which evacuated wounded during battle, flight nurses were responsible for all patients aboard their planes. Assisted by pharmacist's mates, they dressed wounds, administered whole blood or plasma, and fed and cared for the men while in flight. Air evacuation service flew 4,500 casualties out of Okinawa in one month alone, and there is no possible estimate of the number of wounded saved by the immediate attention given them.

Present superintendent of the Nurse Corps is Capt. Nellie Jane DeWitt, USN, who has held that position since November, 1945.
Aviation Fair

Airplanes—all types of them—will be on parade in the sky at the World's Fair of Aviation sponsored by the Knights of Ak-Sar-Ben, a civic nonprofit organization of Nebraska.

The Navy, simultaneously with the AAF, in letters to the chairman of the sponsoring organization, approved plans for the air show and announced intentions of participating in flight demonstrations of newest planes and tactics.

Aerial attractions from Offutt Field in Omaha will include precision flying, fighter maneuvers and the first showing of the jet-propelled aircraft in the midwest.

Member countries of the UN have been invited through the State Department to exhibit military and civilian aircraft and equipment at the World's Fair of Aviation and to send their representatives to the event. The Fair will be held concurrently with the first postwar meeting of the National Aeronautic Organization from 18 to 21 July.

For the first time in aviation history a major air show and aircraft exposition will be combined in one great event. Included in the ground show will be a complete display of radar and other aircraft accessories.

Proceeds of the World's Fair of Aviation will be divided among the Air Forces Aid Society, Navy Relief and the educational and charitable activities of the Knights of Ak-Sar-Ben.

Naval Ordnance Award

The Johns Hopkins University Applied Physics Laboratory is carrying out a research and development program on guided missiles for the Bureau of Ordnance. Johns Hopkins, which maintains the laboratory at Silver Spring, Md., recently was presented the Naval Ordnance Development Award.

The laboratory's fundamental research on basic theories, measurements and instrumentation of guided missiles is expected to have commercial as well as military application.

Vice Admiral George F. Hussey, Jr., USN, Chief of BuOrd, presented the naval award at a ceremony in Silver Spring. Dr. Isaiah Bowman, president of Johns Hopkins, accepted for the university. D. Luke Hopkins, vice president of the board of trustees and the university's representative for administration of the Navy contract under which the laboratory operates, represented the laboratory.

Marine Athletics

Marines on active duty can expect continued emphasis on athletics. The Marine Corps has announced an athletic program to include combat conditioning and sports competition. Combat conditioning will be emphasized and will be compulsory mass participation exercises encompassing all sports with special emphasis on body contact and self survival. The sports competition will be voluntary.

Councils and committees will be organized by units down to battalion level to determine athletic policy, hours, equipment, facilities and funds. This council will be the CO or exec, an officer from the operations and training section, a representative from the supply section, the special service officer, the athletic officer and chaplain. The athletic officer, the special service officer and one athletic officer from each subordinate unit will carry out the plan of the administrative group. Prizes, transportation, and incidental expenses will be paid for out of the recreation funds of the various units.

Annual tournaments will be held in all sports. Winners of east and west coast play-offs will meet for the Marine Corps championship in each sport, and the Corps will sponsor an all-Marine team to represent it in leagues and tournaments with service and civilian teams.

Rest in Peace

Ninety-three years ago, in a little cemetery near Naha, the capital of Okinawa, Commodore Mathew C. Perry laid to rest the six American sailors who had died at sea during his pioneering expedition to Japan. Today, there are on Okinawa and nearby islands, seven cemeteries, containing the graves of 6,832 Americans who fought valiantly to wrest the island from the Japanese in one of the bitter battles of World War II.

The little burial ground was reclaimed by U. S. Army engineers from the litter on the beach, where elements of the Sixth Marine Division launched an amphibious assault against the Oruku Peninsula, south of Naha, on 4 June 1945. It was on this spot too, the Marine division landed its supplies in its attack on Naha.

The cemetery was almost hopelessly ruined when found by the engineers, but the graves were restored, markers were repaired and placed on concrete bases, and a white picket fence was constructed around the site. Later a flag was raised. Graves of several British seamen and three Chinese were also found. These too have been restored, and the burial ground is now known as International Cemetery.

For years after Commodore Perry sailed away from Naha on his mission to open Japan to western commerce and influences, the National Geographic Society said, graves of the American sailors were cared for by missionaries, who decorated them with flowers on Memorial Day. During the war the graves went unattended, but even before Japanese resistance on the island ceased, Army engineers instituted a search for the graves.
ComDesPac Goes Home

Headquarters for all destroyers assigned to the Pacific Fleet was changed from Pearl Harbor to the prewar base in San Diego recently, with the arrival of Rear Admiral Francis S. Low, USN, aboard his flagship USS Prairie (AD 15).

Admiral Low, who relieved Vice Admiral William H. P. Blandy, USN, as ComDesPac last November, said he would maintain headquarters on the Prairie. Admiral Blandy now is directing preparations for the joint Army-Navy atomic bomb test.

Hands Across the Sea

Three new U. S. warships of the 12th Fleet recently made a goodwill cruise to key ports of United Kingdom waters in which they are operating.

In response to British public interest in new American ships, Admiral H. Kent Hewitt, USN, Com2ndFleet, and ComNavEu, sent the heavy cruiser, USS Helena (CA 75) and the destroyers USS Come (DD 866) and USS Glenn (DD 840) on “visits of courtesy.” All three vessels were commissioned after the cessation of Japanese hostilities.

With wartime restrictions against visiting lifted, Britons satisfied their curiosity about how seagoing Americans live afloat. All the features of U. S. ships, the modern galleries, soda fountains, the model crew’s quarters and entertainment facilities, were open to visitors in Southampton, Plymouth, Edinburgh, Glasgow, Newport and Belfast.

Negotiations to visit these ports were made through the British Admiralty and American consuls in cities which had extended invitations. As soon as plans for the cruise were announced, councils of the port cities went into action. Official ceremonies with peacetime pomp were scheduled.

Welcome was spoken by Lord Mayors in ceremonial regalia and with retinues of mace bearers and officials. There were luncheons, dinners, dances and sightseeing trips.

In Belfast, Sir Basil Brooke, Prime Minister of Northern Ireland, was host to officers of the two destroyers at a state luncheon. Sir Crawford McCullagh, Lord Mayor of Belfast, presented the destroyer skippers with plaques biladed “the visit of friendship.”

At Edinburgh a band of kilted pipers greeted the ships; at other ports Royal Navy and Marine bands played on the docks as the vessels came alongside.

Bluejackets did their share to make the cruise memorable. During a reception for officers and men of the Helena at Torquay in the course of the Plymouth visit, the Mayor of Torquay interrupted the celebration to announce that two guests would be late. It seems that 2 members of the ship’s crew had stopped on their way to the party to rescue a drowning boy in Torquay.

By the tour’s end, more than 45,000 Britons had gone aboard the ships during the two general visiting days in each port.

Shortly after completing the cruise, the Helena was relieved of her duty with 12th Fleet by USS Houston (CL 81) and assigned to join 7th Fleet in the Pacific.

The British Embassy in Washington on behalf of Foreign Minister Ernest Bevin has expressed England’s thanks to the American armed forces for courtesies extended repatriated British subjects from the Far East.

Pending arrival of British representatives, U. S. Army and Navy authorities had cared for British subjects after their liberation from Japanese internment camps. Particular appreciation was expressed by the British “for the most efficient arrangements which were made by the United States authorities for the provision of rations, medical attention and transport for these victims of Japanese aggression.”

Noting the “spirit of sympathy” which extended beyond the “generous material aids,” the Embassy felt that feelings of the deepest gratitude thus evoked could only “strengthen the ties of sympathy and friendship uniting our two countries.”

Heavy Surplus Declarations

Reconversion material included in declarations to disposal agencies totaled $40,000,000 during February, the Navy reported. Among items labeled surplus were trucks, cranes and tractors originally worth $11,000,000, office supplies (exclusive of furniture and machines) totaling $4,000,000, wire rope $2,000,000, cordage $1,000,000, and camera and photo equipment $1,000,000.

Total surplus declarations for February amounted to $251,781,000, of which $192,159,000 was declared to the War Assets Administration. Capital goods declarations to WAA totaled $123,020,000, consumer goods $47,917,000. The Maritime Commission received declarations in the amount of $57,151,000 and other disposal agencies took $2,471,000 worth of Navy property.

From July 1944 to March 1946, the Navy processed more than $2,000,000 worth of declarations to various agencies created to transfer government property to civilian activities.
AN APPEAL for housing for returned veterans is made on this float, a feature of the GI housing parade recently staged in Washington, D. C.

Poll Reveals War Fears

War for the U. S. within the next 25 years! This is the opinion of nearly seven of every 10 persons in the U. S., according to a recent Gallup poll. This marks a sharp increase from last year in pessimism concerning the outlook for world peace. Field reporters asked men and women in all parts of the country this question (the same as that asked in March 1945) "Do you think the U. S. will find itself in another war within the next 25 years?"

Here are the results:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Yes</th>
<th>March 1945</th>
<th>No</th>
<th>March 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-29</td>
<td>70%</td>
<td>45%</td>
<td>23%</td>
<td>55%</td>
</tr>
<tr>
<td>30-44</td>
<td>70%</td>
<td>45%</td>
<td>23%</td>
<td>55%</td>
</tr>
<tr>
<td>50 and over</td>
<td>65%</td>
<td>45%</td>
<td>23%</td>
<td>55%</td>
</tr>
</tbody>
</table>

When asked if they expected the U. S. would be in a war within 10 years, more persons thought that it would (49 percent) than thought that it would be at war within 25 years in the poll taken last year (38 percent).

When a poll was taken on the question by age groups, a slightly greater proportion of people 20 to 49 years of age expect war within the next 25 years than is the case among people over 50 years of age. The same held true last year. This is shown in the following table:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Yes</th>
<th>March 1945</th>
<th>No</th>
<th>March 1945</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-29</td>
<td>70%</td>
<td>45%</td>
<td>23%</td>
<td>55%</td>
</tr>
<tr>
<td>30-44</td>
<td>70%</td>
<td>45%</td>
<td>23%</td>
<td>55%</td>
</tr>
<tr>
<td>50 and over</td>
<td>65%</td>
<td>45%</td>
<td>23%</td>
<td>55%</td>
</tr>
</tbody>
</table>

Sea Scouts Get Boats

The Sea Scouts of America will get Navy boats under 100 feet in length which have been surveyed and recommended for disposal, under a new policy similar to one in effect before the war.

CNO Housing Survey

A survey to determine on-station housing needs of naval personnel at activities throughout the nation was begun last month by CNO. Aim of the survey was to disclose stations within the continental U. S. most in need of housing, for the purpose of allocating funds for construction. The Navy hopes to spend 30 million dollars on such housing for its personnel during the next fiscal year.

Commandants of all naval districts in CLUSA, and of the Potomac and Severn River Naval Commands, and the Commandant of the Marine Corps, were requested to forward to CNO prior to 10 May surveys of on-station housing at stations which will exist in the postwar Navy, or stations the postwar status of which still is doubtful.

The housing reports were to include:
- Number of married officers' quarters and married enlisted men's quarters existing (adequate for surrender of rental allowance), under construction or approved for construction by SecNav.
- Number of married civilian quarters existing, under construction or approved for construction by SecNav.
- Number of temporary quarters for married officers and married enlisted men not adequate for surrender of rental allowance.
- Any other on-station housing suitable for married personnel and not covered by above classes.

Equipment For Vets

Photographic and dark room equipment valued at approximately $100,000 has been obtained by the Veterans Administration for pre-vocational retraining of hospitalized ex-service men. As part of the medical rehabilitation activities, this acquisition will provide basic dark room materials for 100 hospitals. The dark room equipment and 47 cameras were secured as surplus from the War Assets Corporation.

Faulty Navigation

A Navy board of investigation has attributed to faulty navigation the disappearance of five Navy torpedo bombers at sea last 5 December. Dispatched from Ft. Lauderdale, Fla., the planes were forced down at sea after exhausting their fuel. The investigation also covered the loss of a large patrol plane which crashed and burned at sea, through causes undetermined, while searching for the lost bombers. Twenty-seven officers and men are listed as dead.

The Board's report said a radio message, intercepted at 1534 on 5 December, indicated that the bomber flight leader thought he was south of the Florida peninsula or over the Gulf of Mexico.
Navy Saves Food

The Navy is saving $11,000,000 worth of foodstuffs per month, in addition to the converted wheat flour. As a result, the Navy has reduced its annual consumption of food per man 12 percent under the prewar figure. Under the current 1946 program, food saving in the first quarter of the year amounted to over $33,000,000.

Converted into terms of foodstuffs, the 1946 figures mean that tons of scarce commodities are made available to famine-stricken countries. A large proportion of the foodstuffs are the critical items of flour and fats.

Unusual conservation methods are used. Believing that conservation must come from the men as well as from mess administrators, BuSanDA has used directives and posters in handling the problem. These posters are put up in mess halls where the men going through the chow line will see them. The directives order limits on rations of bread, butter and fats. The posters press home one point—“take what you want, but eat what you take.”

All Navy galleys have been ordered to reduce the thickness of slices of bread and the size of wheat rolls and sweet doughs. Half-portions of wheat bread are served. Corn bread is substituted for white bread at least two days each week and corn and buckwheat griddle cakes have replaced wheat griddle cakes. Rolled oats, corn meal and hominy grits are used in place of wheat cereals and potatoes are used instead of wheat and rice. Substantial nutritional savings are expectd to result from these practices.

The Navy has succeeded in feeding its men on an average daily cost per man of slightly more than 66 cents. Despite the small sum the nutritional value of the food served is high. Food now served in Navy messes is 90 percent above the recommended dietary standards set by the National Research Council.

How Nazi Ships Escaped

Blame for the escape of the German battle cruisers Scharnhorst and Gneisenau and the heavy cruiser Prinz Eugen from Brest to German Baltic ports, was laid mainly upon the Royal Air Force, according to a British government white paper. Minor events leading to confusion on the part of the RAF gave the Germans the advantage of surprise and led to their successful escape on 12 Feb 1942, the paper said.

According to the findings of the board, “Operation Fuller,” the code name for the combined plans to prevent the escape of the German ships from Brest, failed for seven reasons. They were: a breakdown in the night patrols of the RAF’s coastal command; weakness of the British forces available; the RAF’s failure to fly a strong morning patrol that day; failure of the fighter command of the RAF to intercept the German planes; the importance of the German attempts to jam radar reception; inefficient training of air crews on the bombing of fast-moving ships; the RAF’s lack of dive bombers; and weather conditions that deteriorated steadily throughout the day.

A new method of maneuvering large carriers in confined waters of a harbor through use of planes secured to flight decks has been used on USS Midway (CVB41), largest of the Navy’s carriers. Developed under stress of wartime conditions, “Operation Pinwheel” employs the thrust of airplane engines to turn a ship in a slow spinning motion or to pull it sideways through the water. It can be used to help get a carrier under way or moor it to a dock in confined waters, independent of tugs.

First use of the method was at Guam in June 1945, when closeness of dangerous shoals and heavy harbor traffic made it impossible for the USS Randolph (CV15) to gain sufficient headway to turn around under her own power. Large tugs were not available. Capt. Felix L. Baker, CO, ordered five planes placed on the port bow face, and five similarly placed on the starboard quarter. As props of the starboard planes turned at cruising speed, the ship’s stern swung to the left and, in such a position that the port bow caught the trade wind, the forward planes were not required.

Since that time, the procedure has been used in occasional emergency situations and led to the installation on the Midway. The carrier uses 32 planes, eight on each corner of the flight deck. Planes with wings folded and landed securely to the deck are lined up facing inboard. When engines of any group are started, the propellers exert a strong forward pull in whatever direction they are facing. The result is to swing the ship in the same direction.

The basic idea for the new method was discovered by chance. The Randolph was fueling at sea while some of its planes were warming up on the flight deck. Capt. Baker noticed that the planes exerted a force that increased the speed of the ship. Speed of the ship’s main engines had to be reduced to maintain station. The chance discovery of the effect of idling planes on a flight deck was used later to a good advantage at Guam. Capt. Baker is convinced that this new method is practical but doubts that it will be put to widespread use.

In maneuvering with idling planes on the flight deck, a skipper has definite and positive control of the ship, he declared. He conceded, however, that it does the airplane engines no good.

The new method never will replace tugs for the purpose of maneuvering carriers in confined waters, in Capt. Baker’s opinion. In emergency situations where tugs are not available, however, the idea is practical and can be used as an alternative means of getting a ship under way or maneuvering to a dock.

Capt. Herbert S. Duckworth, USN, CO of the Midway, also has used the new method. He put it to use while commanding an escort carrier in Tokyo Bay after the Japanese surrender.

On the Midway, planes used to maneuver the ship are controlled by the ship’s air officer from the primary flight control station in the “island.” A different colored flag is used for signalling each group of planes. In addition, regular flight deck hand signals are used.

Radio communication is used as a double check to communicate instructions to pilots of the planes. Four different radio frequencies are used to give each group its own circuit and to prevent interference. In emergency operation the planes are not stopped and started repeatedly, but are allowed to idle at low speed when not supplying actual thrust.

Turning to Port—Planes on Midway’s starboard bow (left) pull bow to port while planes secured on port quarter (right) pull stern to starboard.

PROP THRUST SWINGS CARRIERS
MOBY DICK, the most powerful rocket motor in the world, exceeds by more than one-third the thrust of German rocket that was used to bomb London.

Navy Unveils 'Moby Dick'

The Navy unveiled "the newest and most powerful rocket motor in the world," and demonstrated a jet-assisted takeoff of a heavily-loaded plane, before 100 members of the Institute of Aeronautical Sciences at the Naval Air Test Center, Patuxent River, Md., last month.

"Moby Dick" is the new rocket motor which develops in excess of 30 tons of thrust, greater by more than one-third the thrust of Germany's V-2 rocket. Use of Moby Dick would increase the speed of an aerial rocket, such as the Navy's 10-foot "Tiny Tim," from 900 to about 2,700 feet per-second. "Tiny Tim" is a 1,200-pound aircraft-launched rocket that gives a fighter plane the punch of a heavy gun.

The Navy believes such rocket motors as "Moby" may find commercial and military use to assist takeoff of heavy aircraft. William F. O'Neil, president of the General Tire and Rubber Company which is sponsoring rocket research through its subsidiary Aerojet Engineering Company, declared a JATO unit could add 2,000 pounds to the maximum payload of most commercial airliners, permit shorter takeoff runs and add a margin of safety should one of the conventional engines fail.

To demonstrate this use of JATO, a Martin Marauder (JM) was jetted into the air for the scientist-spectators.

Musicians Fund Commended

The Musicians Emergency Fund, Inc., New York City, and its president, Mrs. Lytle Hull, have been commended by Secretary of the Navy James Forrestal for contributing to the rehabilitation and morale of servicemen. Mr. Forrestal's statement: "On behalf of the Navy Department it is a pleasure to commend the Musicians Emergency Fund and Mrs. Lytle Hull for your generous and whole-hearted interest in service personnel. Through numerous beneficial activities during the war years, and now through the reconstruction and reconditioning program in Army and Navy hospitals, your organization is contributing materially to the rehabilitation and morale of servicemen. May I extend my personal gratitude and best wishes."

The Musicians Emergency Fund is an organization in New York which arranged musical entertainment for servicemen during the war. It also provided free music lessons, and now is engaged in rehabilitation work in Army and Navy hospitals.

German Scientists Aid U. S.

The U. S. now has rocket bombs more effective than those the Nazis used against England and Belgium, Secretary of War Robert P. Patterson said. They have been developed in collaboration with German scientists brought to the U. S. by the Army.

The Army sorted out the qualifications of some 6,000 German technical specialists, brought 160 to the U. S., and plans to bring in 120 more.

The Germans selected played a dominant role in fields where German progress was significant. They were brought to the U. S. only if their fullest exploitation could not be carried out in Europe and Secretary Patterson said that under War Department policies, "No scientists who are alleged war criminals are brought to the U. S."

TF 58 Disbanded

Task Force 58, which slashed its way across the Pacific to the shores of Japan as the most destructive seagoing unit in naval history, was deactivated in late March on orders of CNO to make way for peacetime Navy fleet organization. TF 58's alter ego, Task Force 38 which consisted in large part of the same ships and men, was dissolved late last year.

Task organization, primarily a wartime development, will see use in the peacetime Navy only when fleet units are assembled for specific duties, such as the coming A-bomb test (Joint Task Force 1), training exercises and cruises.

DRESSED IN THEIR NATIVE GREEK COSTUMES, girl members of the Greek-American Society of Piraeus do a dance on the deck of the USS Missouri during the battleship's four-day courtesy call at the port of Piraeus, Greece.

ALL HANDS
Hurricane Plan

With the onset of the hurricane season, which starts this month and runs through November, the Army and Navy have set up their annual joint plan for evacuation of aircraft. Navy evacuation operations in Southeastern and Gulf States is under direct control of the Chief of Naval Air Training, with headquarters in Pensacola, Fla., and in Northeast States under ComAirLant in Norfolk. Coordination of plans for evacuation of all naval aircraft is effected by CNO.

This mass movement of planes runs into good proportions when a hurricane hits. Last year a field at Corpus Christi, Tex., for example, flew out nearly 1,450 planes during a storm in August with only one mishap—a bellev landing—and with more than a million miles covered during evacuation and return. Overall, about 5,000 planes and 9,000 flight personnel were flown out of the way of hurricanes in the Gulf and southeastern states last season. During a blow in September, 28 airfields were used and more than 3,300 planes flown out.

Ordinary practice evacuation plan is a matter of determining the number of planes each command has, and of assigning refuge fields in other localities for aircraft in the event of a storm. This year, however, the problem is complicated by the old bugaboo of demobilization—there are nearly as many airplanes as ever, but fewer pilots to fly them out if a hurricane comes.

A meeting at Pensacola, Fla., a few weeks ago thread out this problem. Three solutions were offered as follows:

1. Removal of excess aircraft for disposition and/or storage to areas outside the danger zone as soon as practicable.

2. Utilization of available hangar space for inside storage when evacuation is ordered.

3. Effect tie-down procedures in accordance with current instructions from Bureau of Aeronautics or equivalent AAF directives. The latter plan probably will utilize procedures tested and developed on aircraft carriers in the Pacific.

Some pertinent recommendations were made by the AAF Weather Services and the Navy Aerological Service at the Pensacola meeting. These included: that radar observations, including scope pictures, be made on all hurricanes coming within range of land-based Army and Navy radar installations and that positions of the storms be dispatched to the cognizant center; and that radar observations be made by hurricane reconnaissance planes in flight near the storm center.

Short Occupation Feared

Some liberal Japanese fear to help U.S. occupation authorities because of their belief the Americans will not stay long enough to finish the job of reeducation of Japan along democratic lines, according to Brigadier General Ken R. Dyke, civil information and education chief to General of the Army Douglas MacArthur.

NATS OPERATES MERCY AIR FLEET

Reaching the hand of mercy nearly halfway around the world, the Naval Air Transport Service’s “hospital express” carries hundreds of patients to medical care every week. Some are flown into the U.S. by Navy JRM’s, giant Mars flying boats, others are whisked about the country in R5D Skymasters.

And when “Hawaii Mars” takes off on a hospital trip it’s something to consider. The big ship landed in Honolulu one morning not long ago with a record pay load of 35,000 pounds on board. Within eight hours the mighty plane was unloaded, cleaned, set up as a hospital ship, and loaded once more. Her new load consisted of 100 evacuation cases from Aiea Heights Naval Hospital, overlooking Pearl Harbor, six medical attendants, a crew of 12 and two other passengers for a total of 120 persons. NATS believes this to be the largest number of persons ever carried in an aircraft, and is certain it’s the largest number to be carried on such a whopping long flight (2,424 statute miles). NATS says the patients on this trip were pleased with the efficient, comfortable ride and the turkey dinner served four hours out of Honolulu. The trip takes about 15 hours.

When the “hospital express” arrives at NAS Alameda, the patients are taken to Oak Knoll Naval Hospital, Oakland, Calif., where they are screened and placed aboard R5Ds heading East. These R5Ds, which make three round trips, coast to coast, per week, can accommodate 12 litter patients, 24 ambulatory cases, a nurse and a corpsman, in addition to the plane crew.

NATS calls its JRM, used on the Pacific run and also on hospital duty, the newest, largest and most advanced flying boat in existence. The big planes, three of which have been delivered and a fourth ordered, currently shuttle on regular three-a-week schedules between the West Coast and Honolulu. R5Ds take care of the hospital load in the Western Pacific. Mars planes, however, are scheduled for duty on the main line from California to the Philippines and Western Pacific Areas.

NATS says the new JRM is bigger, better, faster than the original Mars. She is a veritable flying warehouse with wide open cargo spaces and cargo doors big enough to load a bulky item like a 20-ton tank. She can carry 135 fully equipped troops in comfortable troop seats when she is used as a troop transport. The seats can be quickly converted to provide 27 bunks. She can accommodate a maximum of 84 litter cases with room for 25 other persons seated.
Merchant Fleet Expands

The U.S. Merchant Marine reached the half-way mark in its reconstruction program from global war to global trade 22 May, when National Maritime Day was celebrated throughout the country. At the same time, the Maritime Commission announced a plan under which more American flag vessels will be seen on more trade routes than ever before.

The present goal is to carry a substantial portion of U.S. exports and imports in American flag ships. Before the war, less than 30 percent of U.S. foreign trade was transported in American bottoms. To this end, a fleet of speedy, safe, and superior merchant ships is being assembled and a minimum active fleet of some 1,050 vessels is to be engaged in foreign trade. The Maritime Commission, furthermore, has received bids on five and a half million tons of tankers in foreign service and three million tons in domestic service, bringing the minimum ocean-going fleet to 10 1/2 million tons.

Citing the American war record, the Maritime Commission pointed out that more than 5,800 merchant type ships were built in U.S. yards before we entered Tokyo. A total of 268,285,000 tons of cargo moved in U.S. flag ships during the war. Today two-thirds of the world's merchant fleet flies the American flag.

Admiral Smith Nominated

Vice Admiral William Ward Smith, USN, was nominated by President Truman in May to succeed Vice Admiral Emory Scott Land, USN, (Ret.), who resigned as Chairman of the Maritime Commission in 1946. Admiral Smith's term of office on the Maritime Commission, if approved by the Senate, will expire 16 April, 1949. He will not, however, necessarily be chairman, as that post is designated by the President.

Captain Edward Macaulay, USN, (Ret.), resigned 21 May from the Commission and the acting Chairmanship because of ill health. Named to the Commission in 1941, Captain Macaulay also served as Deputy War Shipping Administrator during the war and had charge of labor relations and training.

A member of the Naval Academy class of 1909, Admiral Smith saw duty on the Asiatic Station during the Chinese Revolution of 1911-12. In World War I he was aide on the staff of the Commander, U.S. Naval Forces in Europe. From January 1943 until the fall of that year Admiral Smith commanded cruiser task forces and was awarded the Distinguished Service Medal for service in the Battle of the Coral Sea. Until March 1945, when he became ComServPac, Admiral Smith was Director, Naval Transportation Service. Since February, 1946, he has been a member of the General Board, Navy Department.

Coast Guard Reduced

A reduction of Coast Guard personnel from a wartime peak of 172,052 officers and enlisted personnel to 22,104 has been announced by the Commandant, Admiral Joseph F. Farley, USCG. The Coast Guard will be reduced to peacetime allowances in numbers and ranks of commissioned, chief warrant and warrant officers and in ratings of enlisted personnel.

The following reductions in ranks of commissioned officers of the regular service will be effected by retirements prior to 30 June or by reversion to lower ranks on 30 June: flag officers from 40 to 25; captains from 137 to 100; commanders from 284 to 193; lieutenants from 981 to 304; lieutenants from 1,447 to 437; and warrant officers from 1,059 to 857. A total of 900 lieutenants (jg) and ensigns will be on duty, drawn largely from officers reduced to those ranks.

There are now 2,300 commissioned officers in Coast Guard service whose permanent status in the regular service is chief warrant, warrant and enlisted. Officers who will retain temporary commissions and reserve officers to be retained (800 in all) are being selected by a board composed of regular officers, officers temporarily promoted from chief warrant, warrant and enlisted, and reserve officers.

Nearly all ranks retained by officers will be temporary ranks. No permanent promotions have been made since 1942 and none can legally be made until 12 months after the end of the fiscal year in which the emergency is declared ended.

Commissioned personnel in service on active duty on 1 July are expected to total 2,517 officers, composed of 962 regular officers, 800 temporarily promoted from chief warrant, warrant and enlisted grade, and 855 reserve officers of whom 467 are officers formerly with the Bureau of Marine Inspection. This reduction in officer personnel brings the Coast Guard down from 12,682 commissioned and warrant officers to a total of 3,474.

Before having to revert to enlisted status, officers will be given terminal leave privileges in commissioned status.

By 1 July, enlisted personnel, which numbered 160,270 at its peak, will be cut to 18,600. All enlisted reservists will be released by 30 June 1946. It is estimated that about a third of the enlisted personnel holding petty officer ratings will suffer at least a temporary reduction in rating. However, specialists in which an excess exists are being given the option of discharge at their own request. Other personnel in excess in specific ratings will be transferred to other ratings if qualified or will be trained for other ratings.

The greatest excess occurs in the ratings of boatswain's mate and gunner's mate, while radiomen and technicians are scarce.

Five Days, Five Nips

The USS Harder, an American sub marine, rang up an underwater record when she sank five Japanese destroyers in five days in June, 1944, it was revealed last month. She was declared overdue and presumed lost in August of that year. To her credit are 78,000 tons of Jap shipping sunk and another 35,000 tons damaged.
Admiral Rock Is Dead

Rear Admiral George Henry Rock, USN (Ret.) 77, former Chief Constructor of the Navy and former President of the Webb Institute of Naval Architecture, New York, died in the Naval Hospital, Brooklyn, 20 April after a brief illness. Burial was in Arlington Cemetery.

Born in Hastings, Mich., Admiral Rock was graduated from the Naval Academy in 1889, and later received a B.S. degree in naval architecture at the University of Glasgow, Scotland. Upon his return from Glasgow, the admiral began his long naval career in the construction branch, holding many posts before becoming chief of Construction and Repair in 1929, a position he held until his retirement 1 Oct. 1932.

Admiral Rock was awarded the Navy Cross during World War I as construction officer at the New York Navy Yard where he supervised refitting of captured German ships for naval transport duty.

New Naval Hospital

Construction has begun on the new six million dollar Naval Hospital at Beaufort, S. C., designed to add 300 beds to permanent Navy hospital facilities. The hospital will be a major unit in the Navy’s network of 20 permanent hospitals with a total bed capacity of 9,000.

The structure was authorized originally as a 500-bed unit, but conservation of materials required a reduction in size. Facilities and services will be so constructed, however, that eventual expansion will be possible.

The main building, 500 by 600 feet in size, will face southeast toward the Beaufort River, so oriented as to give patients a maximum of breeze and sunshine. The five-story, red brick, limestone-trimmed structure will be designed for eventual air-conditioning. Only the operating rooms will have air-conditioning apparatus installed initially. Eighteen months is the Bureau of Yards and DOcks’ estimate of time required to complete the project.

Training Tragedy

Twenty-seven Navy airmen were killed last month when two PB4Y-2s, engaged in training maneuvers from NAS Pensacola, collided and crashed in flames in a remote wooded area five miles north of Munson, Fla. The big four-engined planes were accompanied by an F6F, which sent word of the collision by radio to Whiting Field.

Going into a turn in an attempt to outmaneuver the F6F, the planes crashed together, knocking out one engine in the lead plane, which immediately went into a spin and crashed. The other plane flew straight and level for a short time and then it also spun in and crashed.

June 1946

Quiz Aweigh

The powers of observation and memory frequently play tricks on us all. In your Navy days you have seen the photos below or the "real thing". Have you observed them closely enough to identify them and do you recall the following details about them? Why not test yourself?

1. Above is an Iowa class battleship. What is the caliber of the main and secondary battery guns?

2. What is the approximate standard displacement of a ship of this type and class?

3. Identify the four distinguishing marks pictured above.

4. Which two of the four are worn only on the right sleeve?

5. Match the numbered items with the most closely related item: (A) bitts; (B) bull-nose; (C) rope stopper; (D) chock; (E) cleat; (F) bollard.

6. Bitts are used on dock for securing mooring or towing lines—true or false.

7. Identify the above burgee pennant.

8. What does a star on the pennant signify and what is the highest number of stars that can be added?

Answers to Quiz on Page 77.
**NEW ENEMY: INFLATION**

WHEN THERE ARE 10 buyers for each radio, price is sure to be bid up.

HOW MUCH does it cost you and your family to live? Now subtract that from your salary. Anything left? (According to the best family budget experts, there ought to be about 10 percent left, representing savings and insurance.) Now double the cost of living, and see how deep into the red you go each month.

That's how it was during and after World War I. The cost of consumers goods went up an average of 108 percent from 1914 to 1920. That's how it is with inflation.

Persons on small, fixed incomes (most Navy men and Navy veterans fall in this category) are the first to feel the squeeze when prices rise. It hurts to walk into a shoe store and find shoes that sold in 1939 at $3, now selling at $3.22; or a clothing store and find work shirts, formerly $2, now $3.60; or a grocery store where 25 cents worth of oranges now costs 32 cents, 30-cent-a-dozen eggs sell at 48 cents, a dime's worth of potatoes sets you back 22 cents. And those figures aren't just something that happened in the spending spree after World War I; they're figures on the rising cost of living between August of 1939 and February of 1946, as reported by the Office of Price Administration. (See table of price increases on next page).

Let's suppose you and your family are getting along on $150 a month. If you're like most people, you spend 40 percent of that ($60) on food. Since 1939, food prices have increased an average of 49 percent. To buy $60 worth of food now costs you $88.40, an increase of $28.40—just about equal to your pay increase when you sweated your way from seaman first to a second class PO rate. Your hard-earned salary increase goes for groceries—all but 60 cents of it.

Importance of the Navy man's part in the fight against inflation was underlined recently when Secretary of the Navy James Forrestal issued a statement to the Fleet. (See The Word, May 1946, p. 56) and Fleet Admiral Chester W. Nimitz, CNO, appealed to former Navy men to hold the line against rising prices. (For ways in which you can help keep prices down, see boxed story on this page).

Inflation is no bugaboo dreamed up by economists. It's already with us, as the Navy man supporting a family on the beach, the Navy veteran returned to civilian life, has learned the hard way. Prices went up 108 percent during and after World War I; they've gone up 31 percent during and after World War II. The problem, then, is to understand the causes of inflation and to do something about them before higher prices make paupers of us.

Inflation is really just the old law of supply and demand operating in an abnormal situation. As illustration: A merchant's counter is stacked with radio sets and there are only 10 people in the store (supply high, demand low). If the merchant wishes to sell all of the radios he must quote a low price. The 10 persons might buy one radio each at a high price, but they would refuse to load up on radios at that price.

The opposite is true: A merchant has one radio and 10 customers who want it (supply low, demand high). Now the merchant could hold an auction and the radio would go to the highest bidder. The man with the most money in his pocket would walk off with the set; the other nine persons would be out of luck.

That's the situation that grew out of America's wartime economy of high production of war materials and low production of civilian items. Demand is high: People have money to spend and they need goods. Supply is low: There was little civilian production in the war years; during the war, war goods were wearing out; reconversion of industry to civilian production has not begun to meet the backlog of demand. In this situation it would be possible to sell the available civilian

---

**HOW YOU CAN HELP FIGHT PRICE INCREASES**

Ways in which Navy men and Navy veterans can aid the fight against inflation, suggested by Secretary of the Navy, Chester W. Nimitz, CNO, in an appeal to former Navy men, are:

- Keep your dollars off the market. The more persons bidding for scarce goods and services, the greater the pressure for a price increase on those goods and services.
- Refuse to deal with black marketers.
- Refuse to pay premiums for rental or purchase of housing, and report to the OPA the names of persons suggesting premium payments.
- Refuse to pay over-the-ceiling prices for any goods.
- Maintain National Service Life Insurance. It helps keep your dollars off the market, and provides you with the most reasonable and valuable insurance investment available.
- Invest extra dollars in United States Savings Bonds. They'll buy more in the future than they will now.

---

Herewith 'The Word' to Veterans and Regulars On the Economic Trends And What They Could Do To Our Peacetime Living
goods at extremely high prices, out of reach of the average man. We would have a developed inflation. What does that mean?

Well, we had a sample of it after the last war. The causes of inflation are bred during a war; but the worst effects of inflation are apt to come after the fighting is over. As the OPA tells it, in 1918 consumers with wartime savings and incomes wanted the goods they had been unable to get while factories turned out war materials. A lack of controls permitted the consumers to go out on the open market and bid for the scarce goods. Encouraged by this tremendous market, industries began to bid against each other for limited supplies of raw materials to fill the huge orders for goods. Many firms ordered twice and three times what they needed. This created a wave of speculative buying and artificial scarcities. As a result operating costs were forced up, followed by further price increases. To the outward glance it looked like prosperity: There was heavy demand, heavy buying and selling (at least on paper).

By mid-1920 prices and costs were far ahead of buying power. The individual whose savings or whose small, fixed income would have been sufficient to buy him a fair share of goods at prewar prices, found himself in 1920 with the same amount of money but with prices so high he could buy less than half as much. People in general could not pay for the goods produced at inflated costs and offered for sale at inflated prices. Orders and production dropped, and prices crashed.

The result: 106,000 firms went bankrupt; merchants, farmers and industries suffered inventory losses of 16 billion dollars as goods on their shelves awaiting sale were devalued; 5% million workers lost their jobs as factories went out of production; corporation profits dropped from six billion dollars to a net loss of 500 million dollars; weekly factory payrolls dropped from 246 million dollars in March 1920 to 136 million dollars in January 1922; a net loss of 61 million dollars as goods on their shelves awaiting sale were devalued; 5½ million workers lost their jobs as factories went out of production; corporate profits dropped from six billion dollars to a net loss of 500 million dollars; weekly factory payrolls dropped from 246 million dollars in March 1920 to 136 million dollars in January 1922.

**U.S. Inflation In Two Wars Compared**

One remedy for inflation is price control. The following table compares price increases during World War I and World War II. Price rises in World War II are shown before and since the late President Roosevelt’s “hold-the-line” order of April 1943. Figures below were taken from an “Annual Report to the President,” signed by Chester Bowles, director of Economic Stabilization; Paul Porter, administrator OPA; Clinton P. Anderson, Secretary of Agriculture, and others.

<table>
<thead>
<tr>
<th>Percent of average family expenditure</th>
<th>World War I Percent price increase July 1914 to peak of inflation</th>
<th>World War II Percent price increase Aug. 1939 to Feb. 1946</th>
<th>World War II Percent price increase since hold-line order (May 1943 to Feb. 1946)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All consumer prices</td>
<td>106%</td>
<td>31%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Food</td>
<td>126</td>
<td>49</td>
<td>-2.4</td>
</tr>
<tr>
<td>Round steak</td>
<td>85</td>
<td>18</td>
<td>-11.1</td>
</tr>
<tr>
<td>Pork chops</td>
<td>125</td>
<td>24</td>
<td>-10.7</td>
</tr>
<tr>
<td>Eggs</td>
<td>208</td>
<td>59</td>
<td>-1.4</td>
</tr>
<tr>
<td>Bread</td>
<td>92</td>
<td>13</td>
<td>-1.1</td>
</tr>
<tr>
<td>Milk</td>
<td>94</td>
<td>31</td>
<td>-4</td>
</tr>
<tr>
<td>Cereals</td>
<td>139</td>
<td>13</td>
<td>-2</td>
</tr>
<tr>
<td>Canned goods</td>
<td>108</td>
<td>43</td>
<td>-6.2</td>
</tr>
<tr>
<td>Fruits, veggies</td>
<td>64</td>
<td>62</td>
<td>-16.2</td>
</tr>
<tr>
<td>Potatoes</td>
<td>291</td>
<td>112</td>
<td>-28</td>
</tr>
<tr>
<td>Rent</td>
<td>54</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Clothing</td>
<td>200</td>
<td>50</td>
<td>17.2</td>
</tr>
<tr>
<td>Men’s suits</td>
<td>37</td>
<td>4</td>
<td>6.5</td>
</tr>
<tr>
<td>Men’s shoes</td>
<td>148</td>
<td>4</td>
<td>47</td>
</tr>
<tr>
<td>House dresses</td>
<td>50</td>
<td>15</td>
<td>15.9</td>
</tr>
<tr>
<td>Cotton work shirts</td>
<td>45</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>Electricity, fuel, ice</td>
<td>45</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>House furnishings</td>
<td>179</td>
<td>48</td>
<td>18.6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>101</td>
<td>25</td>
<td>8.5</td>
</tr>
<tr>
<td>All Wholesale Prices</td>
<td>148</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>Industrial Prices</td>
<td>27</td>
<td>11.9</td>
<td>48</td>
</tr>
<tr>
<td>Building materials</td>
<td>26</td>
<td>9</td>
<td>9.4</td>
</tr>
<tr>
<td>Plate glass</td>
<td>171</td>
<td>50</td>
<td>37</td>
</tr>
<tr>
<td>Steel plate</td>
<td>232</td>
<td>13</td>
<td>3.1</td>
</tr>
<tr>
<td>Copper</td>
<td>148</td>
<td>15</td>
<td>10.9</td>
</tr>
<tr>
<td>Anthracite</td>
<td>74</td>
<td>4</td>
<td>10.7</td>
</tr>
<tr>
<td>Building materials</td>
<td>44</td>
<td>14</td>
<td>3.2</td>
</tr>
<tr>
<td>Textiles</td>
<td>67</td>
<td>5</td>
<td>4.9</td>
</tr>
<tr>
<td>Denims</td>
<td>51</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>Men’s cotton hose</td>
<td>277</td>
<td>104</td>
<td>16.4</td>
</tr>
<tr>
<td>Average weekly earnings of factory workers</td>
<td>140 (July 1943)</td>
<td>74</td>
<td>-4.2</td>
</tr>
<tr>
<td>Average hourly earnings of factory workers</td>
<td>150</td>
<td>61</td>
<td>5.4</td>
</tr>
</tbody>
</table>

*No data available.*

**Latest on Price Control**

The Senate version of the OPA bill, providing for a full year’s extension of price controls, received a favorable 15 to 5 vote in the Senate Banking and Currency Committee on May 15. On the other side of Capitol Hill, the House had approved its own measure, carrying a nine-month limitation of price controls.

It was expected that the Senate committee would report out a bill by about May 24. Tentative arrangements were made to bring such a bill to the floor for action by May 27.

453,000 farmers lost their farms. In short, we had a full-fledged depression, traceable directly to uncontrolled inflation, which in turn was traceable to the nation’s all-out war effort.

War leads to inflation, which leads to financial disaster for the nation as a whole. What can be done about it? Chester Bowles, director of the Office of Economic Stabilization, former administrator of the OPA, quotes these figures:

In World War I industrial production increased 25 percent to turn out the machines of war. During the same period, wholesale prices shot up 43 percent over prewar levels by mid-1920. In World War II industrial production increased nearly five times as much as it had in World War I, but wholesale prices had increased only 44 percent up to February of 1946. The cost of living went up 108 percent in World War I, 31 percent in World War II. Most of the World War II increase was prior to May of 1945 when the late President Roosevelt, alarmed at price increases, issued his “hold-the-line” order to the nation and the OPA clamped down hard. Since May of 1943 the cost of living has increased only 8.4 percent (up to February of this year).

The OPA clamped the lid on prices and rents to control the cost of living. The high demand for goods and services has been prevented from bidding the prices up. As a result, prices still are low enough to keep the necessities of life within the reach of persons of average means. This has been doubly important as it concerns the families of servicemen, living for the most part on small, fixed incomes. Your family would be in the soup if prices had risen as much during this war as they rose during the last one.

That’s why there are OPA price tags on most essential items. Clothes are tagged with the legal OPA ceiling price. Durable goods, such as washing machines, radios, refrigerators, plumbing, vacuum cleaners, OPA tags. New and used cars are sold under ceiling prices, and the legal price must be stated on the certificate of transfer. Building materials for new houses are covered by ceilings; OPA controls rents in most cities and towns.

With continued success in controlling prices, Mr. Bowles has forecast that price ceilings will be off by the middle of next year and America will have returned to peacetime economy, avoiding disaster of inflation and depression.

MODERN KNIGHTS-IN-ARMOR

REMEMBER THAT PICTURE, published about five years ago, which showed Henry Ford hacking lustily with an axe on a shiny new V-8?

All right—now take a look at the pictures accompanying this story. They show one lieutenant commander shooting at another lieutenant commander with a .45-caliber pistol.

No, you’re wrong. Henry Ford did not go berserk from watching too many Fords go by. And the two lieutenant commanders were neither crazy nor angry with each other. In fact, they’re the best of friends.

Mr. Ford was demonstrating the virtual indestructibility of a new plastic automobile body when that picture was made in 1940. The two naval officers were demonstrating, four years later and in even more spectacular fashion, a new plastic body armor developed by the Naval Research Laboratory in cooperation with commercial scientists. The pictures symbolize the initiation and climax of Navy research which perfected a modern version of the knight-in-armor’s suit of mail.

Now it can be revealed that the Marines would have stormed the beaches of Japan, had there been no pre-invasion surrender, clad in laminated glass cloth combat jackets to protect them from bullets and flying fragments.

That Henry Ford picture, in December 1940, caught the eye of Rear Admiral Harold G. Bowen, then director of NRL and now Chief of the Office of Research and Inventions. He telephoned Dr. G. R. Irwin, head of the laboratory’s ballistics section, who immediately began research work in plastics.

BuAer and the Army Quartermaster Corps subsequently lent their support to the research, which reached a turning point when samples of Doron, a glass cloth laminate developed by the Dow Chemical Co., reached NRL for testing. A joint Army-Navy committee was established to evaluate the use of plastic armor by both services. Army Ordnance had maintained Hatfield manganese steel would provide the best protection but airmen found steel flak suits too hot and heavy.

Most of the opposition to use of plastic armor was overcome by Navy tests in which shell fragments, both simulated and actual, were fired at the armor. The most spectacular test, however, was that pictured. Lt. Comdr. Andrew P. Webster, USNR, of Washington, D. C., fired a .45-caliber automatic pistol at his friend, Lt. Comdr. Edward L. Corey, USNR, of Charlottesville, Va., who was wearing the plastic armor. Although staggered by the impact, Lt. Comdr. Corey was unhurt. The heavy bullet blunted itself against the armor and fell harmlessly into his hand.

THE TWO friends examine the bullet after the firing test is completed.
Medal of Honor Awarded Skipper Of Submarine

The Medal of Honor recently was awarded Comdr. Richard H. O'Kane, USN, of Durham, N. H., for gallantry as CO of the uss Tang on 23 and 24 Oct 1944. Despite relentless fire from the enemy, Comdr. O'Kane operated his ship, itself winner of two unit citations, against two Jap convoys and sent four torpedoes into the group of vessels, before the Tang was sunk on her fifth and last war patrol.

Boldly maneuvering on the surface into the midst of a heavily escorted convoy, Comdr. O'Kane stood in a fusillade of bullets and shells from all directions to score hits on three targets. He coolly swung his ship to fire at a freighter and, in a split second decision, shot out the path of a transport, missing it by inches.

Boxed in by blazing tankers, a freighter, transport and several destroyers, he blasted two of the targets with his remaining torpedoes and retired from the area with pyrotechnics bursting on all sides.

Twenty-four hours later he again made contact with a heavily escorted enemy convoy steaming to support the Leyte campaign with reinforcements and supplies. Crated planes were piled high on each ship. Torpedoes from the Tang exploded a tanker in a burst of flame and hit a transport and a destroyer before the submarine went under.

USS Trepang Cited for Tokyo Patrol

For outstanding service during her first war patrol in the Tokyo Bay area from 13 Sept to 26 Oct 1944, the USS Trepang has been awarded the Navy Unit Commendation.

Operating in defiance of persistent and severe hostile counter measures, the submarine Trepang maneuvered to strike at a heavily escorted Jap battleship sighted leaving Tokyo Bay. Going in under relentless depth charge and air opposition, she penetrated the enemy's formidable screen to deliver accurate and intensive torpedo fire against her targets and, by her tenacious attacks, succeeded in sinking a large enemy landing craft and seriously damaging the battleship and a destroyer.

JUNE 1946

2 LCS(L)s Awarded Unit Commendation For Action During Okinawa Campaign

The Navy has awarded the Unit Commendation to two LCS(L)s for action during the Okinawa campaign. The USS LCS(L) 74 was awarded the coveted commendation for action on 11 May 1945. While on radar picket duty, she was taken under attack by kamikaze planes of a suicide group. The LCS(L) 84 immediately opened fire on the attacking craft as they plunged toward the picket ships, shooting down three planes and assisting in the destruction of two others.

With her own forward deck blazing as a result of a plane exploding 10 feet off the starboard bow, the 84 proceeded to the assistance of the USS Evans, stricken by the crash of two suicide planes, and rescued 47 survivors from the water. Then, mooring alongside the disabled destroyer while still under aerial attack, she conducted salvage operations and furnished electrical power to aid in saving the disabled ship.

The USS LCS(L) 122 was cited for action on 10 and 11 June 1945. Promptly going alongside the USS William D. Porter, after that vessel had been crashed by a suicide plane, the LCS(L) 122 put aboard a salvage and pumping party despite the dangers of explosion, heavy list and imminent sinking, in an effort to keep the stricken ship afloat. Failing in this after two perilous hours, the amphibious craft took aboard about 98 survivors before the destroyer went down.

Taken under concerted attack by three Jap planes on 10 June, the LCS(L) 122 immediately opened fire, shooting down one kamikaze, scoring a hit on the second before it crashed through her decks and hull to explode in the water. The third aircraft was driven off. Despite raging gasoline fires and an injury-ridden crew the officers and men of the 122 finally brought their ship into a friendly port under her own power.

Reserve Special Commendation Ribbon Authorized

The Reserve Special Commendation Ribbon recently authorized by SecNav will be awarded to reserve officers for meritorious service in keeping reserve components ready for mobilization, according to Alnav 180-46 (NDB, 30 April).

Officers of the Naval Reserve who officially commanded, in a meritorious manner, an organized battalion, squadron or separate division not part of a battalion, of the Naval Reserve, or an organized battalion or squadron of the Marine Corps Reserve for a total period of four years (need not be continuous) between 1 Jan 1930 and 7 Dec 1941, and who have a total of not less than 10 years reserve service, are eligible for the ribbon. The change of designation from Fleet Reserve to Organized Reserve in 1938 does not affect eligibility.

No medal is authorized for the ribbon. It will be worn in the same manner as other decorations and takes precedence before any campaign or service ribbon. Authorization to wear the ribbon will be a letter from SecNav.

The Reserve Special Commendation Ribbon is the same as the Naval Reserve except for a three-eighth inch vertical stripe of myrtle green in the center.

The Reserve Commendation Ribbon has no connection with the Naval Reserve Medal and will not be made a general award for past service (duty in the Organized Reserve, Communications Reserve and other volunteer branches) but will be reserved for specific purposes mentioned above, according to Alnav 223-46 (NDB, 15 May). Requirements for future awards will be determined when the organization and operation of the reserve indicates its best application.
12 HEROES RECEIVE NAVY CROSS AWARD

Gold star in lieu of third award:

- **CLAREY, Bernard A., Comdr., USN, Oskaloosa, Iowa:** While CO of the USS Pintado during her third war patrol in the South China Sea, from 21 Dec 1944, to 1 Jan 1945, Comdr. Clarey was also OTC of a coordinated search and attack group which intercepted a retiring enemy task force. One of the submarines under his command sank an enemy light cruiser of this force. On 3 November Comdr. Clarey led his own sub in a daring attack on a large aircraft carrier escorted by three destroyers and one light cruiser. One destroyer was sunk and the carrier damaged, while the Pintado successfully escaped the subsequent depth charging. On the morning of 13 December the Pintado attacked three unescorted merchantmen, destroying all three. This made a total of 21,300 tons of enemy shipping sunk and 28,000 tons damaged during the Pintado’s third war patrol.

Gold star in lieu of second award:

- **CLAREY, Bernard A., Comdr., USN, Oskaloosa, Iowa:** As CO of a submarine during a war patrol he delivered successful torpedo attacks against heavily escorted enemy shipping, resulting in the sinking of over 46,000 tons. Despite strong enemy air and surface anti-sub measures, his skilful evasive tactics enabled him to avoid severe damage to his ship and bring her back to port.

- **JOHNSON, Frank L., Capt., USN, Delaware City, Del:** While CO of the USS Purdy during the Okinawa campaign, on 6 April 1945, Capt. Johnson led his crew in combating repeated and determined attacks by enemy aircraft. During these attacks his ship destroyed four enemy planes, assisted in the destruction of two and damaged another. When his ship was severely damaged in the final phase of this action he was instrumental in restoring the battle efficiency of the ship and enabling her to remain on station until relieved.

- **JONES, Thomas R. III, Lt. (jg), USN, Savannah, Ga.:** As fighter pilot in the Inland Sea on 28 July 1945, Lt. Jones piloted his plane through adverse weather conditions in a dive bombing attack against major units of the enemy fleet, including carriers, battleships, cruisers and destroyers. During the action he attacked a heavy cruiser in the face of intense antiaircraft fire and scored a direct hit.

- **LEONARD, William R., Jr., Lt. Comdr., USN, Los Angeles, Calif.:** While torpedo plane pilot in action against enemy shipping in the Inland Sea on 24 July 1945, he led a flight of torpedoes, dive and fighter bombers in an attack on the KY-CB Hyuga. He attacked the battleship-carrier despite accurate opposition fire, scoring a direct hit and two near misses with his bombs, contributing materially to the sinking of this capital ship.

- **NORGAARD, Rollo N., Capt., USN, Dell Rapids, S. D.:** As CO of the USS Human off Okinawa, on 6 April 1945, he met the attack of seven suicide planes, shooting down two before another crashed into the superstructure deck. Two minutes after the plane hit, one of the warheads detonated, causing a heavy fire and inflicting numerous casualties. Determined to save the ship from the spreading flames, he personally directed fire fighting measures and restored the Human to maximum combat efficiency in 10 minutes. Later, the ship, despite the previous damage, shot down three more attacking planes.

- **ORTIZ, Peter J., Major, USMCR, La Jolla, Calif:** From 8 Jan to 20 May 1944, Major Ortiz, together with two other officers, organized the existing Maquis units and additional groups in the region of Rhone, after having been dropped from an airplane in civilian clothes. He was largely instrumental in the acceptance of the
sion by local resistance leaders and in ef-
fecting the organization of parachute oper-
ations for the delivery of arms, ammunition
and equipment for the Maquis in his re-
gion. Where four RAF officers were shot
down in his region, Mayor Ortiz, although
his identity had become known to the
Resistanc with the resultant increase in
personal hazard, voluntarily conducted
them to the Spanish border, after which he
returned and resumed his duties, landing
successful raids against enemy forces
greatly superior in number, inflicting heavy
casualties with small losses to his own
forces.

**OTTINGER, George M., Comdr., USN, Mem-
phis, Tenn. (posthumously): While task
group strike commander and target coor-
dination officer of aircraft from seven
carrier groups in action over Shikoku on
19 Mar 1945, he led the first wave of
strike bombers across the Jap island and
over the heavily defended Inland Sea in
a daring assault upon vital enemy posi-
tions. He coolly struck with unfaltering
precision, scoring direct hits and inflict-
ing severe damage on two carriers, two bat-
tle ships, two cruisers and two destroyers.
Six of his torpedo planes released their
deadly bombs, and an enemy flak ship was
Naval Arsenal with devastating results.

**PADDOCK, Merlin, Lt. Comdr., USN,
Wayne, Neb. (MIA): Fighter plane pilot
and commander of an air group attached to
UB Langley during action against the Jap
fleet off coast of Kyushu on 7 Apr 1945,
Lt. Comdr. Paddock led his bombers to
their striking area through extremely ad-
verse weather and flew over an enemy
light cruiser with concentrated anti-
aircraft fire. He promptly maneuvered for
maximum striking power and, despite low
visibility, scored a direct bomb hit, neu-
tralizing the shattering gunfire and en-
abling our torpedo bombers to complete
the destruction of this vital hostile fleet
unit.

**POITRAS, Edwin W., Sp(X)1c, USN,
Lowell, Mass.: While in civilian clothes,
thereby at all times subject to capture
and execution as a spy, Poitras operated
against the enemy in axis territory on the
European continent from 2 May to 23 Sept 1944.
Poitras, after having been dropped from an airplane, acted as wire-
less operator and assistant to a British
army officer. He was responsible for the
transmission of numerous operational
messages to England and the receipt of
operational orders from London and as-
sisted his chief in the organization of resis-
tance forces and in their training for
 sabotage of air and sea warfare in the vicin-
ity of Nuds, France, his group was
attacked by a greatly superior force.
Poitras made a daring retreat, covering the retreat of his
comrades, enabling them to avoid
with small losses.

**WEICKHARDT, Charles F., Jr. (3c),
Washington, D. C. (posthumously): While
fighter pilot and division leader
attached to USS Langley, he intercepted a
hostile fighter, maneuvering to strike a
maximum of his own force while firing
combat air patrol off Kyushu on 29 Mar
1945. Lt. (jg) Weickhardt faced a terrific
carrive of protective fire from friendly
vessels in an effort to break off the attack
of the oncoming plane. He pursued the
hostile aircraft skillfully maneuvering
for maximum advantage, succeeded in
blasting the enemy and diverting his
course before his own craft was struck
by antiaircraft fire.

**WILLIAMS, Clair T., Lt., USN, Highland
Park, Ill. (MIA): Fighter plane pilot in
BombRon 16 attached to USS Randolph, Lt.
Williams was one of four pilots assigned to
sink rail/way car from another vital
railway and shipping operating between Honshu and
Hokkaido on 14 July 1948. Withholding
his bombs until assured of maximum
damage opportunity he remained over the
target alone and made a shallow gliding
approach to a large passenger ferry, leaving it ablaze,
later to sink. He placed his last bomb
directly amidships of a railway car ferry,
leaving it in flames.

---

Silver Star Medal

Gold star in lieu of third award:

**ZAHM, John C., Capt., USN, San Diego,
Calif.: OTC, radar picket station unit,
Okinawa, 4 May 1945.

Gold star in lieu of second award:

**DOBRONTSE, Ernest, PhM3c, USN,
Trenton, N. J.: Serving with 1st Batt. 23d Mar-
riors, 4th MarDiv, Saipan, 19 June 1944.

**JOHNSTON, Stephen L., Lt. Comdr., USN,
LaFayette, Ind.: Assistant approach
officer of a submarine.

**MAURER, John H., Comdr., USN, Groton,
Conn.: US, Atule during war patrol.

**SIMPSON, U. S. Grant Jr., Capt. (then
Comdr.), USN, Rosemead, Calif.: US, Boyd,
action at Nauru Is., 8 Dec 1943.

First award:

**BROWN, James H., Jr., Comdr., USN,
Chamberlain, S. D.: CO, USS Ammen,

**BURNS, Edward S., Comdr., USN, Pitts-
view, Ala.: CO of destroyer on radar
duty, Okinawa, 1-4 Apr 1945.

**CLARK, Bernard A., Comdr. (then Lt.),
USN, Oskaloosa, Iowa: Assistant approach
officer, USS Anhuy during war patrol.

**CLINE, Dean A., Sp(P)2c, USNR, Holly-
wood, Calif. (posthumously): Service in
China theater 8 Nov 1945.

**COPP, Belton A., Lt., (then Lt. (jg)),
USN, Noank, Conn.: CO of OTC of a two-boat
patrol at Japanese-controlled Marivese
Harbor, P. L., 7 Feb 1945.

**DOBRONTSE, Ernest, PhM3c, USN, Trenton,
N. J.: 1stBattn.23d Marines, 4th MarDiv
on Saipan, 17 June 1944.

**DUNN, Davis H., Lt. (jg), (then Enr.),
USN, Ridgewood, N. J. (MIA): Torpedo
carpet computer operator, US, Bonefish
during eighth war patrol.

**DURBIN, Lloyd T., Corp., USNR, Tyler,
Tex.: Action in F. L. prior to 1945.

**FREIVAL, James W., Lt. (jg), USN, Vin-
cennes, Ind. (posthumously): Abadred USN
Leaffy off Okinawa, 16 Apr 1945.

**HAYES, Vernon A., Jr., PhM3c, USN,
North Bend, Ore.: Serving with 2ndMar-
Div at Tarawa, 21 Nov 1943.

**HUBBARD, Edwin J., PhM3c, USN, San
Francisco: Service with 2ndMarDiv. at
Tarawa, 21 Nov 1943.

DSM WINNERS

Rear Admiral Cotter Rear Adm. Flanagan

Rear Admiral Kiland Admiral Ramsey

Golden Eagle (PerSecCen (enlisted), Great Lakes, Ill.)

"But sir—I take this a hardship case—I have to
support my new convertible!"

JUNE 1946
Silver Star (Cont.)

- Howard, Herbert E., Ph.D., U.S.N., Los Angeles, Calif.: Member of A.D., 1st Naval Reserve Group, 4th MarDiv on Saipan and Tinian, 15 June to 1 Aug 1944.
- Lee, Arch M., Jr., Comdr., U.S.N., Atlanta, Ga.: Co. of a U.S. ship off Okinawa, 4-19 Oct 1944.
- McClellan, Ira E., Capt. (then Comdr.), U.S.N., Honey Grove, Tex.: Co. of U.S. Navy L.L. Wing, Luzon, P. I., on 6 Jan 1945.
- Ross, Russell A. II, Lt. (jg), U.S.N., Dallas, Tex. (MIA): Gunnery and plotting officer, USS Bonefish, during eighth war patrol.
- Stewart, Robert G., Lt. (jg), U.S.N., Bellflower, Calif.: Pilot during a glider bombing attack on enemy heavy cruiser.

Gold star in lieu of fourth award:
- Dudock, Theodore D. Jr., Rear Adm, U.S.N., New Orleans, La.: Assistant chief of division of aviation medicine, BuMed prior to and during World War II.
- Anderson, Thomas C., Rear Admiral, (then Commodore), (MC), U.S.N., Violin, S. D.: Fleet burial officer and chief staff of CINCPacPo, September 1943 to September 1945.
- Bailey, Carlos A., Commodore (then Capt.), U.S.N., Great Lakes III: Chief of staff to Com and CINCMidwest area, June 1944 to 20 April 1945.
- Bolomey, Capt., (Ret), U.S.N., Youngstown, Ohio: Head of ships and installations branch, engineering division, BuAer, May 1940 to October 1945.

Sky Supply (Naval Aviation Supply Depot, Philadelphia, Pa.):

"I like to get it all down while it's still fresh in my mind!"

- Bonvillian, Claude A., Capt., U.S.N., Louisville, Ky.: Director of naval boiler and turbine laboratory, Philadelphia, throughout World War II.
- Breese, Harold M., Capt. (then Comdr.), U.S.N., Shelbyville, Mich.: Subsection chief, and assistant director of production division, BuD, October 1940 to February 1945.
- Carter, James B., Capt. (then Commo.), U.S.N., Newport, R.I.: Head of naval mail division, BuD, 29 July 1943 to 1 Sept 1945, naval member, plane division until 1 Jan 1945.
- Coleman, William E., Capt., U.S.N., San Diego, Calif.: Co. of U.S. warship operating in the Western Pacific, September 1944 to July 1945.
- Condon, Carl L., Lt., U.S.N., Kingston, Pa.: Assistant to OIC naval supplementary radio station, Guam, Mariana Islands, 1 Sept 1944 to 10 Feb 1945.
- Deringer, Harry H., Comdr., U.S.N. (Ret.), Chesterfield, Md.: Chief of ammunition division in naval ordnance laboratory.
- Donahue, Francis J., Capt., U.S.N., Charlottesville, Va.: Assistant head, maintenance division, BuShips, December 1941 to October 1945.
- Dorsett, Benjamin H., Rear Admiral, (MC), U.S.N. (Ret.), Washington, D. C.: President of Navy retirement board and
President of board of medical examiners of the Navy, prior to and during World War II.

**DREISER, Joseph Y., Capt., USN (Ret.)**, Washington, D. C.: Inaugurating and directing maintenance program of landing craft in support of amphibious operations of U. S. Fleet during World War II.

**DEFFER, Louis, Capt., USN, Drull Hill, Pa.** Design superintendent, planning officer and production officer, Philadelphia Navy Shipyard, August 1942 to September 1945.

**ECCLES, Henry E., Capt., USN, Washington, D. C.: OnC of advanced base section, on staff of ComServPac, December 1944 to December 1945.**

**FOXX, Theodore E., Capt. (then Lt. Comdr.), USN, Cleveland Heights, Ohio:** Head of postwar planning section of the production division, and office of AsstChief, BuAer, 15 Apr 1942 to October 1945.

**FRAZIER, Claude E., Lt. Comdr. (DC), (then Lt.), USN, Chevy Chase, Md.: Dental officer at Manila and Bataan during action against the enemy, USS Trujillo, on Wake Island prior to World War II until taken prisoner, 22 Dec 1941.**

**HATCH, Sinclair L., Lt. Comdr., USN, New York City:** Director, contract termination division, Industrial readjustment branch, office of procurement and material, 16 Feb 1944 to 20 Aug 1945.

**HAYES, John A., Capt., USN, Annapolis:** Gunnery officer for commander of amphibious attack group during assaults on Gilberts, Marshalls, Marianas, Iwo Jima and Okinawa, 1 Oct 1944 to 11 June 1945.

**HENSCH, Karl G., Capt., USN, Arlington, Va.: ComSubDiv, January 1943 to October 1944, administrative representative, SubPacPlt, Hunters Point, Calif.: October to December 1944, ComSubForPacPlt Administrator, December 1944 to April 1945.**

**HIBBARD, Donald H., Capt., USN, New Haven, Conn.: Assistant chief of the shore electronic group, installation and maintenance branch, USN, November 1941 to November 1945.**

**HEATH, John A., Comdr., USN, Vicksburg, Miss.: Director of the price revision division, BuOrd, April 1942 to October 1945.**

**KEMPNER, Frederick G., Lt. (jg), USNR, Arlington, Va.: Head of industrial engineering section of joint and combined chiefs of staff, October 1941 to November 1945.**

**KEMPNER, Isaac H., Capt., USN, Houston, Tex.: Contract negotiator and later chief of the price revision unit, November 1942 to October 1945.**

**KEMPNER, Isaac H., Lt. (jg), USNR, Houston, Tex.: Contract negotiator and later chief of BuOrd negotiation Unit, November 1942 to October 1945.**

**KEMPNER, Isaac H., Capt., USN, Coronado, Calif.: CO of Fair Detachment from Pacific to Wake Island and from Wake Island to prior to World War II until taken prisoner, 22 Dec 1941.**

**KEMPER, Harris L., Comdr., USNR, Galveston, Tex.: Advisor to chief of procurement, BuAer, later as special assistant and chief of the price revision division, June 1942 to December 1945.**

**KIPPS, Chester H., Capt., USN, New Haven, Conn.: Resident director of naval officer procurement, 1st Naval District and later CO of all naval training schools, University of California, 7 Dec 1941 to 31 Aug 1945.**

**KILGOUR, Frederick G., Lt. (jg), USNR, Arlington, Va.: Readiness division of ComSubForPacPlt, USN, December 1941 to January 1946.**

**LAYTON, Edwin T., Capt., USN, San Francisco:** PacPlt combat intelligence officer, China, 12 to 3 Sept 1945.

**LONNQUIST, Theodore C., Capt., USN, Chevy Chase, Md.: Assistant director and later director of the shore electronic group, installation and maintenance division, BuShips, December 1941 to January 1946.**

**LUDWIG, Joseph W., Capt., USN, Washington, D. C.: Head of financial division and later fiscal director, BuShips, December 1941 to January 1946.**

**LYNCH, Edward L., Capt., USN, San Diego:** Pacific fleet combat intelligence officer, China, 12 to 3 Sept 1945.

**MIDDLEBROOKS, James L., Comdr., USN, Washington, D.C.: Assistant director of the shore electronic group, installation and maintenance division, BuShips, December 1941 to January 1946.**

**MILES, Paul D., Comdr. (SC), USN, Falls Church, Va.: Frequency section of the division of naval communications, CNO, 7 Dec 1941 to 20 Sept 1945.**

**MYERS, Gilbert B., Capt., USN, Aurora, Ill.: Secretary of the joint communications board and U. S. secretary for the combined communications board under the joint and combined chiefs of staff, March 1942 to November 1945.**

**NEP, Edward F., Capt. (SC), USN, Chevy Chase, Md.: OIC of the submarine division, BuS2A, 30 Nov 1940 to 15 Oct 1945.**

**NORMAN, Howard T., Capt., USN, Rawlings, Wyo.: Head of the aerology section, BuAer, 1941 to 1943, under deputy CNO (Air), 1943 to 1945.**

**ORVILLE, Howard T., Capt., USN, Rawlings, Wyo.: Readiness division of ComNavUnits, eastern China, 1 Dec 1941 to 15 Dec 1944.**

**ORVILLE, Clarence W., Comdr., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Howard T., Capt., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Clarence W., Comdr., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Howard T., Capt., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Howard T., Capt., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Clarence W., Comdr., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Howard T., Capt., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**

**ORVILLE, Howard T., Capt., USN, New Haven, Conn.: Chief of instruction and OIC of the Naval ACT school, NAS, Quonset Point, R. I., April 1942 to 31 Aug 1945.**


**DECORATIONS**


**Legion of Merit (Cont.)**

1. **Engineer Division**
   - W. Taylor Model Basin during World War II.
   - Director of engineering division, BuOrd, September 1942 to May 1945.

2. **Schoeppel, Malcolm F., Rear Admiral, USN, Washington, D.C.:**
   - Assistant director for acquisition, research and development division, BuOrd, later aviation assistant to the chief of the bureau, December 1941 to 28 April 1945.

3. **Schoelcher, Theodore, Capt., USN, Heron Lake, Minn.:**
   - Design superintendent and later planning officer, Philadelphia Naval Ship Yard, 7 Dec 1941 to 17 Dec 1943.

4. **Sheppard, Richard D., Comdr., USN, San Diego: Surface anti-submarine material officer of the 16th Fleet, serving with CominChic.

5. **Crawford, Malcolm C., Rear Admiral (SC), USN, Washington, D.C.:**
   - Design of the USS Ohio, NRD Norfolk, November 1942 to November 1945.

6. **Smith, Harold T., Rear Admiral, USN, Tacoma, Wash.:**
   - Fleet maintenance officer attached to staff of CincPac/Foa, 25 April 1944 to 8 May 1944.

7. **Smith, Harold W., Rear Admiral (MC), USN, (Ret), Boston: OIC of all research under cognizance of BuMed and Liaison officer for research with other government activities and civilian organizations.

8. **Smith-Hutton, Henri H., Capt., USN, Washington, D.C.:**
   - Intelligence officer on staff of CominChic and CNO, 8 Dec 1945 to 12 Oct 1944.

9. **Sullivan, James E., Capt., USN, Norfolk, Va.:**
   - Head of the equipments and materials branch, engineering division, BuAer.

10. **Thomp, Herbert R., Lt. Comdr. (ChC), USN, Columbus, Ohio (posthumously):**
    - Chaplain for the 4thMarine Regiment at Corregidor, 8 May 1942 to 8 May 1942, and POW at Corregidor and at Philippine military prison camp 1, Cabanatuan, and aboard prison ship Olongapo, Philippines, 3 July 1942 to 15 Dec 1944.

11. **Van Kueren, Alexander H., Rear Admiral, USN (Ret), Chey Ch'uan, Chih., Director of the naval research laboratory, Bellevue, Washington, D.C., Nov 1942 to 30 Dec 1945.

12. **Van Pienpen, Hubert J., Comdr. (MC), USN, Kalamazoo, Mich.:**
    - POW at Zentsuji war prison camp on Shikoku Island, Japan, 1 Sept 1942 to 23 June 1945.

13. **Van Rensselaer, John M., Comdr., USNR, VARIOUS BASES: Director of planning for industry, BuAer, and development, March 1944 to May 1945.

**DISTINGUISHED FLYING CROSS**

**Gold star in lieu of third award:**
- **Offenberger, George M., Comdr., USN, Member of CNO's naval aviation staff, appointed as deputy to chief of carrier division, March 1944 to 31 Aug 1945.**
- **Zimmer, Herman H., Capt., USN, San Francisco: Duty with CincPac, July 1943 to August 1945.**

**Gold star in lieu of second award:**
- **Mcdonald, Harold W., Comdr., USN, Wetumpka, Ala.:**
  - Patrol plane commander, South Pacific theater, 4 Dec 1944 to 28 Dec 1944.
- **Powell, Gwenda S., Lt. (JG), USNR, Cowpena, S. C. (posthumously):**
- **Smith, Grant A., Ens., USN, Mankato, Minn. (MTA):**
  - Pilot, BomBFtRon 136, Paramushiro Straits, 26 Aug 1944.
- **Serrell, Richard S., 1st Lt., USMC, Jackson, Mich.:**
  - Scout bomber pilot, Philippine Islands, 3 Mar to 16 June 1945.

**First award:**
- **Bazell, Adrian S., Lt. (JG), USN, Bremerton, Ga. (posthumously):**
  - Fighter pilot, USS Lunga Point, off Okinawa, 6 Apr 1945.
- **Dolan, Edward H., Ens., USN, Chicago (MTA):**
  - Fighter pilot, USS Hancock, Nansel Shoto, Kyushu, Tokyo, Wake Is. and Hokkaido, 18 Mar to 24 May 1945.
- **Dulan, Eugene F., Lt. (JG), (Then Ens.), USN, Kingsford, Mich.:**
  - Navigator, TBM-3V, BuBomRon 136, Paramushiro Straits, 26 Aug 1944.
- **Eskil, William C. Jr., Ens., USN, San Diego, Calif. (MIA):**
  - Fighter pilot, USS Hancock, Nansel Shoto, Kyushu, Tokyo, Wake Is. and Hokkaido, 18 Mar to 24 May 1945.
- **Fisher, Oren F., Jr., Ens., USN, Mexico, Tex. (posthumously):**
- **Florence, Joseph F., Ens., USN, New York City (posthumously):**
  - Torpedo plane pilot, Torpedo Sqd 17, South China Sea, 28 Apr 1945.
- **Frank, Lewis C., 1st Lt., USMC, Charlotte, N. C.:**
  - Fighter pilot, Philippines, 17 Jan to 22 Jan 1945.
- **Healy, James H., Capt., (Then Lt. Comdr.), USN, Selma, Ala.:**
- **Hynes, Irvin L., Portland, Ore.:**
  - Pilot, Philippines, 18 Dec 1944 to 11 Apr 1945.
- **Joyce, James J. Jr., ARMC, USN, Portsmouth, N. H. (posthumously):**
  -
**Gold star in lieu of third award:**
- **WHITEFIELD, James D., Jr., Capt.** (then Comdr.), USN, Franklin, Tenn.: CO of destroyers, Okinawa, 26 Mar 1945.

**Gold star in lieu of second award:**
- **DRake, Donald L., Lt., USN, Shelton, Wash. (MIA):** Engineer officer, USF, during patrol, Ryukyu, March 1945.
- **GILLIAMS, Charles E., Gunner, USN, Croton, N.Y.:** Assistant torpedo data computer operator, USS Tadacoy, Truk and Marshall Islands areas, 24 April to 11 June 1945.
- **MILLARS, Shirley S., Capt., USN, Annapolis, Md.:** Commander of an air support control unit, Guam and Palau Islands, July to October 1944.
- **PETerson, Abbot Jr., Comdr. (ChC) USN, Hanover, Mass.:** Senior chaplain, USS Bunker Hill, Okinawa.
- **RELAND, William F. Jr., Ens. (then Lt.) USN, Jacksonville, Fla.:** Act as the Bunker Hill, Okinawa, May 1944.
- **ANTLe, W., Lt., USN, Port Royal, S.C.:** Executive officer of a cruiser, North Pacific, October to 21 Aug 1945.
- **FERRARA, Maurice, Comdr., USN, San Francisco:** Gunnery officer and later executive officer of a cruiser, North Pacific, 1 Jan to 15 June 1945.
- **EMERSON, Walter W., Comdr. (then Lt. Comdr.), USN, Des Moines, Iowa:** Damage control officer and first lieutenant, USS OBERONER, Manus, 10 Nov 1944, off Okinawa, 9 May 1945.
- **Foley, William T. Comdr. (then Lt.) USN, Flushing, N.Y.:** POW in China, camp comdr., Sendai, Japan.
- **GALBRAITH, William J., Comdr., USN, San Francisco: Gunner officer, USS Pope, Java Sea, 1 Jan to 3 Apr 1945.
- **FitzGIBBON, Thomas E., Comdr., USN, Boston: Damage control officer, July to 11 July 1945.
- **VanCleve, Bert F., Capt., USN, Menlo Park, Calif.:** Executive officer, USS BOSTON, Pacific area, 30 July to 20 Aug 1944 and 12 Nov 1944 to 17 July 1945.
- **Hidalgo, Edward L., Lt., USN, New York City:** OIC officer, night TorpBombRon9, Philadelphia, Pa., Pacific area, 5 January to 14 Apr 1945.
- **Hoffman, Carleton C., Capt., USN, Arlington, Va.:** CO, USN,沪深复活, Pacific area, 30 July to 20 Aug 1944 and 12 Nov 1944 to 17 July 1945.
- **HornRIGER, Robert F., ET1c, USN, Lebanon, Pa.:** Radar operator, USS Pogy, patrol in Japan Sea, 2 July to 21 Aug 1945.

---

**First award:**
- **Al'hel, Donald A., Lt. (jg), USN, Chicago (MIA):** Assistant spotting officer, USS Byngfhel, action against the enemy, Japan Sea, 18 Mar 1945.
- **MILLERS, Shirley S., Capt., USN, Annapolis, Md.:** Commander of an air support control unit, Guam and Palau Islands, July to October 1944.
- **GILLIAMS, Charles E., Gunner, USN, Croton, N.Y.:** Assistant torpedo data computer operator, USS Tadacoy, Truk and Marshall Islands areas, 24 April to 11 June 1945.
- **ANTLe, W., Lt., USN, Port Royal, S.C.:** Executive officer of a cruiser, North Pacific, October to 21 Aug 1945.
- **FERRARA, Maurice, Comdr., USN, San Francisco:** Gunnery officer and later executive officer of a cruiser, North Pacific, 1 Jan to 15 June 1945.
- **EMERSON, Walter W., Comdr. (then Lt. Comdr.), USN, Des Moines, Iowa:** Damage control officer and first lieutenant, USS OBERONER, Manus, 10 Nov 1944, off Okinawa, 9 May 1945.
- **Foley, William T. Comdr. (then Lt.) USN, Flushing, N.Y.:** POW in China, camp comdr., Sendai, Japan.
- **GALBRAITH, William J., Comdr., USN, San Francisco: Gunner officer, USS Pope, Java Sea, 1 Jan to 3 Apr 1945.
- **FitzGIBBON, Thomas E., Comdr., USN, Boston: Damage control officer, July to 11 July 1945.
- **VanCleve, Bert F., Capt., USN, Menlo Park, Calif.:** Executive officer, USS BOSTON, Pacific area, 30 July to 20 Aug 1944 and 12 Nov 1944 to 17 July 1945.
- **Hidalgo, Edward L., Lt., USN, New York City:** OIC officer, night TorpBombRon9, Philadelphia, Pa., Pacific area, 5 January to 14 Apr 1945.
- **Hoffman, Carleton C., Capt., USN, Arlington, Va.:** CO, USN,沪深复活, Pacific area, 30 July to 20 Aug 1944 and 12 Nov 1944 to 17 July 1945.
- **HornRIGER, Robert F., ET1c, USN, Lebanon, Pa.:** Radar operator, USS Pogy, patrol in Japan Sea, 2 July to 21 Aug 1945.
Bronze Star (Cont.)

*HOWE, George T., Lt. Comdr., (MC), USN, Detroit: Member of landing craft crew, during invasions in New Guinea area.

*JONES, Charles A., Lt., Comdr., (MC), USN, attached to naval group, China, 3 Oct 1943 to 22 July 1945.

*KATZ, Benjamin, Capt. (then Lt. Comdr.), USN, Chelsea, Mass.: CO of a destroyer 

*MCILVAIN, George E., Capt. (then Lt. Comdr.), USN, HUFF group, China, USN, Chelsea, Mass.: CO of a destroyer 

*MIDGELY, Donald, USN, Forreston, Ill.: Member of landing craft crew, in the Coral Sea, Midway, Saipan, Tinian, Ponape, Feb 1944 to Jan 1945.

*MOSINEE, Frederick, Wis.: Attached to US SubPacFlt, April 1944 to June 1945.

*NM, Gaius W., Jr., MoMM2c, USNR, Lynn, Mass.: Gunnery officer, USS Iowa, executive officer, staff of ComTransDiv 60, Atlantic and Pacific, November 1942 to 30 Sept 1943.

*OMONER, Frederick J., FIC, USNR, Toledo, Ohio: Member of landing craft crew, action against the enemy, New Guinea area.


*MILLS, Clarence Y., Lt., USN, Smithville, Tex.: Deck watch officer, boat wave commander, communications officer and operations officer, Staff of ComTransDiv 60, Atlantic and Pacific, November 1942 to 30 Sept 1943.

*MONIES, R. M., Jr., MoMM1c, USNR, Nashville, Tenn.: Member of landing craft crew, action against the enemy, New Guinea area.


*Phillips, Thomas W., Sgt., USMC, Grand Prairie, Tex.: White serving with marine 


*Ross, Robert S., Rear Admiral, USN, Anamalino, Philippines: ComDesDiv 60, action against enemy, Bougainville, 26 Feb 1942, Battle of Coral Sea, 7 May 1942, Battle of Midway, 4-6 June 1942.

*PHILLIPS, Thomas W., Sgt., USMC, Grand Prairie, Tex.: White serving with marine 

*Reed, Joseph F., Lt. (jg), (then Ens.), USN, Oklahoma City, Okla.: Only surviving officer, YMS-20, rescue of part of crew, Anzio, Italy, 25 Jan 1944.

*REIS, John F., Lt., Comdr., USNR, Hope-dale, Mass.: Member of landing craft crew, New Guinea.

*Schweber, Marvin C., W2c, USNR, Hope-dale, Mass.: Member of landing craft crew, New Guinea.

*Stewart, Marvin C., WT2c, USNR, Hope-dale, Mass.: Currency-hard-earned pay to you).

*Stroud, John S., LT, USN, Hope-dale, Mass.: Diving officer, USS Gudgeon, east China Sea, 31 October to 10 Dec 1943.

*The Medal of French Recognition:

*Phillips, Thomas W., Sgt., USMC, Grand Prairie, Tex.: White serving with marine 

*Anthony A., EM2c, USN, Lyndwood, Pa.: Attached to US SubPacFlt, April 1944 to June 1945.

*McMillan, William E., Capt. (then Comdr.), USN, Honeys Grove, Tex.: Gunnery officer, staff of amphibious task force commander, Dec 1944 to Aug 1945.

*Metzger, Edward F., Comdr. (SC) USN, Lynn, Mass.: Force supply officer, Staff of ComSubPacFlt, April 1944 to June 1945.


*O’Brien, John F., Lt., USN, Honeys Grove, Tex.: Gunnery officer, staff of amphibious task force commander, Dec 1944 to Aug 1945.

*Philips, Thomas W., Sgt., USMC, Grand Prairie, Tex.: White serving with marine 


*Ross, Robert S., Rear Admiral, USN, Anamalino, Philippines: ComDesDiv 60, action against enemy, Bougainville, 26 Feb 1942, Battle of Coral Sea, 7 May 1942, Battle of Midway, 4-6 June 1942.

*Schweber, Marvin C., W2c, USNR, Hope-dale, Mass.: Currency-hard-earned pay to you).

*Stroud, John S., LT, USN, Hope-dale, Mass.: Diving officer, USS Gudgeon, east China Sea, 31 October to 10 Dec 1943.

*The Medal of French Recognition:

*Phillips, Thomas W., Sgt., USMC, Grand Prairie, Tex.: White serving with marine 

*O’Brien, John F., Lt., USN, Honeys Grove, Tex.: Gunnery officer, staff of amphibious task force commander, Dec 1944 to Aug 1945.

*Philips, Thomas W., Sgt., USMC, Grand Prairie, Tex.: White serving with marine 


*Ross, Robert S., Rear Admiral, USN, Anamalino, Philippines: ComDesDiv 60, action against enemy, Bougainville, 26 Feb 1942, Battle of Coral Sea, 7 May 1942, Battle of Midway, 4-6 June 1942.

ADVANTAGE OF THE PLAN is one man acts as a ‘balance’ to the other. 

BUDDY, CAN YOU SPARE YOUR TIME?

In union there is strength—strength of character, apparently, as well as the extra muscular power accruing from eight, six, or four biceps instead of the two with which the ordinary Navy man is endowed. This, at least, is the reason conclusion of ships which have made profitable use of the "buddy system" to keep their personnel from getting fouled up in oriental ports.

The port of Jinsen, Korea, and the neighboring capital city of Seoul constitute an area which in the past has provided its share of trouble for sailors on liberty. The two cities are typical of that area. They offer the usual attractions of a liberty port—and the usual hazards for strangers.

There are narrow, twisting, unlighted streets where servicemen can easily, and have, become lost or have been sluged and robbed. As a result of contact with wily sharpers, venereal disease has been high in the crew was assaulted, and all men going ashore returned on schedule after the plan was in effect.

Mutual responsibility has maintained the health of the crew, and has cut sharply the number of undesirable entries in service records, despite the high percentage of inexperienced recruits—ages 17 to 19—among the ship’s company.

Furthermore, the crews favor the system. Men pick their own buddies, and voluntarily travel in good-sized groups while ashore. The ship’s officers of the Guadalupe, as a matter of fact, arrange group tours when the ship reaches a new port.

In Seoul and other places, incidents, sight-seeing excursions have been arranged by such organizations as the American Red Cross. The excursions give the men a chance to get their bearings for further individual liberties— with their buddies.

ALL HANDS
The kernel of literary art through the ages has been the study of mankind; the touchstone of literary excellence has been the ability to record human experience and to make come alive the pictures of the individuals living that experience. Perhaps the most direct approach to this aim has been that of the biographical writers—from Plutarch to Carlyle—but whose material has been living men. Not necessarily great men; the subject may be of the great, he may be of the humble. The only test that need be applied is, are we interested in what makes the subject tick?

A Filipino immigrant, an itinerant reporter, an American military hero, and the founder of a great religion—these are the subjects of four books, biographical and autobiographical, which are being forwarded by BuPers to ship and station libraries.

One of Our Own

• "My Three Years with Eisenhower" by Captain Harry C. Butcher, USNR; Simon and Schuster, $3.

This book, the personal diary of General Ike’s naval aide during the battle years of 1942-1945, was named by the Book-of-the-Month Club as its May selection. The choice was a good one. It is what it purports to be—a personal diary, and no more—but Capt. Butcher’s ability to record the minutiae of war as well as its hugeness, and his faithfulness in depicting what and who the General is as well as what he says and does, entitles "My Three Years with Eisenhower" to discussion as a biographical work. It is excellent as it stands, and it will increase in value as source material for the future formal biographer and historian.

Capt. Butcher recounts the intimate, day-by-day life of the General in his growth from a comparatively unknown staff officer to his emergence as the commander of one of the great military operations in the world’s history. Throughout one feels the weight of events, the inner struggle and the external pressure, and the quality of the man who could deal effectively not only with the enemy but also with his allies and subordinates. Steadfast decisions, unsatisfying compromises, sometimes distasteful bargains—all these Ike had to deal with. These and the men, great and small, who were concerned with them, are faithfully recorded in Capt. Butcher’s diary.

The book is rich in detail and the maps and illustrations are good.

The Last of the Bison

• "A Solo in Tom-Toms" by Gene Fowler; the Viking Press, $3.

Two months before Gene Fowler was born, his father asked for a cup of coffee. The demand was directed at the woman’s father, not brother-in-law, and was not softened by an appended “please.” The coffee was not forthcoming; Charles Devlin kissed his wife, picked up his hat, and sallied forth to Squaw Mountain, near Denver, where he lived in solitude for thirty years. That much time had elapsed before Gene Fowler saw his father, or Devlin, his son.

Bizarre? When you have finished "Solo in Tom-Toms" (and once starting it, you are likely to finish it), you will not consider this incident particularly remarkable. The book is the story of Gene Fowler’s life; Fowler is romantic, irreverent, colorful, a little fantastic, and he has lived that kind of a life.

Born in Denver in the gay nineties, Fowler (that is one of three surnames that he bore) lived a tumultuous boyhood which included work in a taxidermist’s shop, delivering groceries to the city’s red-light district, and an introduction to journalism through the characteristic (to Fowler) approach of encountering by chance a piccolo player in a cemetery. Some of his friends were Jack Dempsey, then a rugged but unknown young fighter; Damon Runyon; Buffalo Bill Cody; Trixie, until her marriage and reform a lady no better than she needed be; and Paul Whiteman.

Though Fowler ultimately found a niche as a New York newspaperman, the cut-size figures of the old West never lost their fascination for him, nor was the mark of the West upon him ever completely eradicated. Hence the aptness of the sobriquet the late Ring Lardner bestowed on him—the last of the bison.

Fowler has always written ably and with gusto of exciting, non-conformist figures—as witness his "Goodnight, Sweet Prince," the biography of John Barrymore. And he himself is an admirable subject for his own pen.

Attention, Americans!

• "America Is in the Heart" by Carlos Bulosan; Harcourt, Brace & Co., $3.

This is the story—a familiar one, unfortunately, in American biography of 1940’s—of a young manhood lived in privation, squalor, and contempt as the result of being born one of America’s minority citizens. What is unfamiliar is that the youth was not embittered by his experience; the result is, as one reviewer has expressed it, "loyalty in spite of all." The reader, the conventional racial sense, finally lays aside the book shamefaced.

Carlos Bulosan, Filipino, born of a simple peasant family on the island of Luzon, found life a struggle. At first the struggle, shared by his family and his folk for generations past, was to wrest a living from the stubborn land. And tragedy resulted when that land was lost, principally as the result of efforts to educate an older brother. The second struggle—to win the right to individual, decent existence in the shining land of America—has been lost, too, one suspects, by any person less courageous, less steadfast, and perhaps less talented than the author. But it was not lost; after poverty, insults, beatings, Bulosan’s final word is this: "I knew that no man could destroy my faith in America that had sprung from all our hopes and aspirations ever." The book is simply, directly, and powerfully written, and it is written without self pity. It is easy to read, if any strongly based indictment of the betrayal of America’s democratic ideals is easy to read. Anyone interested in driving from America the scourge of intolerance should read this book; and all of us may find it profitable to look into our own hearts to see if America, in its truest and best sense, is there.

Prophet and Fighting Man

• "The Messenger" by R. V. C. Bodley; Doubleday & Co., $3.

During the first 40 years of his life, Mohammed was a thoroughly extraordinary youth and man; then he had a vision.

The vision, revealing to him his mission as founder and leader of a new religious cult, had far reaching consequences. The Moslems can point back to a history of glory—and blood, but more important, to a sustained vitality. About one-seventh of the world’s population, some 300,000,000 persons, are Mohammedan. Mohammed himself was at once Pope and Caesar. When persuasion failed, he encouraged conversion by the sword and the battle that first burst from his followers’ throats in 624 A.D. has been heard down the centuries by many nations. Yet he moderated some of the blood-thirsty hails of life that his followers improved in some respects the position of their women.

Islam will not often enjoy a more qualified or sympathetic advocate than Bodley—a friend of Lawrence of Arabia.
Navy Needs Your Constructive Ideas
To Improve Performance of Equipment

Got any good ideas, mate? Well, the Navy wants and needs 'em, and is planning to make it worth your while.

The Office of Research and Inventions has asked the men who use Navy gear and Navy methods to send constructive ideas or possible solutions (inventions) to problems to the Navy Department via the CO, in Alnav 227-46 (NDB, 15 May).

The Navy may send out a ship-load of trained engineers to study and improve gear, but it's the bluejacket who uses the equipment every day who is best able to see what's wrong with it and how it can be improved. The engineers don't sleep in a bunk every night, or fire a gun. They don't man the galley ranges, the signal lights, stand boiler watches, train the torpedo tubes, load ammo, rev up the main or auxiliary engines, drop the hook, lower the whale boat, scrape paint and swab decks. The bluejacket is the one who knows the most about those jobs.

Possible suggestions might be improved safety devices of all kinds; simplified maintenance, or redesign of certain parts of machinery that wear out too frequently; simplification of the use and operation of equipment; reduction of man hours or energy required to perform a specific operation; new types of weapons and equipment; desirable additions to present equipment; new and improved uses for present equipment; and even new methods for handling office work problems.

Many enlisted men have sent in suggestions that ORI has found to be useful and valuable for both war and peace. Some of the ideas that have been used, or will be used in the future are: a straightedge pivot angle gauge, for measuring or determining rotor pivot angle, invented by a Wave AMM(1)c; a valve for aero riveters, developed by two AMMS3cs; an engine transfer sheet, production rate and progress report, thought of by a Marine FPC; and a reference book held at time of discharge, and pay and allowances for training duty are paid to members of the Organized Reserve.

Twenty-one more rates have been opened for changeover of USNR and USN-I personnel to the regular Navy, and three rates deleted from the original list of ratings open for changeover, by Alnav 238-46 (NDB, 16 May). Alnav 238 modifies Alnav 112-46 (NDB, 15 March) which published the original list.

Effective on 1 June the following rates will no longer be open to changeover: AOM3c, AOMT3c, AB2c.

Effective immediately, rates newly opened for changeover are: QM3c, SF2c, PM2c, MMG2c, E2c and 3c, AMM3c, AMMG3c, AMMF3c, AMMH-3c, AMM3c, AMMP3c, AMMT3c, AR3c, PhoM1c, Y1c, SK1c, SKD1c, Prtr2c, CPrt2c.

Alnav 112, as modified by Alnav 238, provides a complete listing of rates open for changeover to USN except for CB and specialist ratings (see ALL HANDS, April 1946, p. 67).

1 July Discharge For Marines With 30 Months Service

Marine Corps Headquarters has announced that any inductee or reservist in the Corps with 30 months of active duty will be eligible for discharge on 1 July, regardless of his point credits. Male personnel with 28 discharge points were eligible for separation from the service on 1 June. Previously announced schedules for demobilization of the Marine Corps Women's Reserve are: 1 June, four points; 1 July, 0 points.

Naval Reserve Enlistment Available Upon Discharge

Enrollment in V-6, the Naval Reserve, was clarified under two dispatches issued by BuPers in April: AlStaCon 152105 and 171852.

- AlStaCon 152105 declared that enlistments and reenlistments in V-6 may be made on the date of discharge, such enlistments to be effective on the following day.
- AlStaCon 171852 ruled that written consent of parents for enlistees between the ages of 18 and less than 21 is not required in cases of men who served in World War II on active duty in USN, USNR or USN-I, and who desire to enlist in V-6. Such consent is required for regular Navy enlistments.

Enlisted personnel will be able, while on inactive duty in the naval Reserve, to train and advance at a rate comparable to men on active duty in the regular Navy, it was pointed out. Enlistments in the Reserve generally are accepted in the same rate held at time of discharge, and pay and allowances for training duty are paid to members of the Organized Reserve.
V-5 Training Program Will Remain Active Through Summer

All students qualified for retention in Navy V-5 program will remain on duty during the summer of 1946, according to Navy V-12 Bulletin No. 369. A peacetime plan for the Navy’s flight training program will be placed in operation at the beginning of the academic term in the fall of 1946, if authorized by legislation now being considered.

Students may at their own option, so far as possible, either enroll for a summer semester at an accredited college or university, with payment of tuition, normal fees and cost of books by the Navy; or if it is found that admission is not possible due to crowded conditions, prior to 1 June students will be transferred to a NAS having a selective flight training program unit. If possible they will be given an opportunity to fly.

Responsibility for application and acceptance for any school rests on the individual students, who will remain in an active duty status but will be authorized to wear civilian clothes.

Trainees not qualified and those not desiring to remain in the flight training program will be transferred from class V-5 to general service and separated from the naval service in accordance with the provisions of Alnav 161-46 (NDB, 15 April) which set up the quota system for demobilization to insure release of all personnel prior to 1 Sept 1946.

Recruit Centers Train Rated Men as Physical Fitness Instructors

A 36-day training program to prepare men to serve as physical fitness instructors in recruit areas was started 3 June. The men will replace Specialist (A)s, whose total strength in the program dwindled to less than 200. About 15,000 Specialist (A)s were trained during the war.

Schools were opened at the naval training centers at San Diego, Bainbridge, Md., and Great Lakes.

Men taking the course will be given no special rate. Only rated men on duty at the above stations may apply to their training officers for the course. They will retain their present rates while on duty as instructors.

After completion of the course, men will remain on duty at the center where they received their training. They will operate the physical fitness program in recruit camps and serve as coaches.

No special quotas have been set for the schools. The number of men trained will be determined by the commanders of the recruit centers, based on need. It has been recommended, however, that there be one instructor for each 500 recruits.

Supply Corps Opens Postgrad Instruction

The Supply Corps’ postwar postgraduate educational training program was under way last month as 19 officers went into industry to study their specialties at first hand, and 20 others prepared to enroll at Harvard Graduate School of Business Administration this month. (See story on postgraduate education, ALL HANDS, May 1946, p. 70.)

There was a slight departure from announced plans. Ordinarily, about 20 officers (generally those having completed about seven years of service and entering their second shore cruise) would be assigned first to the School of Business Administration and then would go into industry. This year, however, the class has been split, and half of the class will take its industrial training before the schooling; the other half will complete the two-year business course before going into industry. The industrial training phase will be from four to six months, permitting the 19 officers to enter Harvard about October of this year.

The training program in industry was worked out by the Navy Department and the Navy Industrial Association, which is a result of more than 400 nationally prominent industrial concerns. All of the industries in which the officers will study are located in the Third Naval District.

Specialties represented by the 19 officers include purchasing, accounting, inventory control and transportation. Their industrial training will be in concerns which include these fields as important phases in their operations.

Purchase of Khakis Once Again Approved

Officers again may purchase khaki working uniforms, it was announced in Alnav 21-46 (NDB, 15 May). The Alnav states that either the gray or khaki uniform may be bought, and wearing of either is optional. Previously, gray was the approved working uniform, although officers were permitted to wear khakis until stock on officers’ possession or manufactured were exhausted. The regulations apply also to CPOs.

Transferring Procedure Clarified for Appointees to Academy from V-12, V-5

A clarification of procedure for transfer of V-6, V-12, and NROTC students who have received Congressional appointments to the Naval Academy has been made in BuPers Circ. Ltr. 99-46 (NDB, 15 April). The superintendent of the Naval Academy has requested that the procedure be as follows:

• Candidates will be ordered to the Naval Academy on temporary additional duty orders for a physical examination prior to admission as midshipmen.

• V-5, V-12, and NROTC activities concerned should retain the records and accounts, and as much of the government clothing and equipment as possible.

• Candidates accepted for admission to the Academy will be ordered an honorable discharge from the USN or USNR by letter promptly forwarded by the superintendent, U. S. Naval Academy, to the CO who ordered the candidate to the Academy.

• Candidates who fail to fulfill the requirements for admission as midshipmen will have their orders appropriately endorsed for return to the naval activity from which they were ordered.

Navy V-12 Bulletin No. 200, para. 1020-22, provides opportunity for Navy V-5, V-12 and NROTC students to take examinations for entrance to the Naval Academy upon receipt of an appointment.

Film Damage Reduction Instructions Issued; Inventory Directed

If the film breaks in the middle of the movie tonight, mate, you can be assured that the Navy is taking action to prevent such interruptions.

Instructions have been issued to COs to make sure that only competent projectionists run the movies, and that all equipment is kept clean and in good mechanical condition. This directive was issued by BuPers in Alnav 185-46 (NDB, 30 April). Disciplinary action will be taken in cases where negligence and carelessness by personnel result in destruction of film.

In an effort to determine more accurately future movie requirements, BuPers in Alnav 179-46 (NDB, 30 April) directed all distributors under the optional naval district motion picture plan. Under this plan, various naval districts obtain pictures from commercial distributors and book them at activities within their areas.
Enlisted Repatriates Will be Considered For Officer Status

Enlisted repatriates who held rates below first class prior to capture, escape, or evasion of capture by the enemy may be given special consideration by their COs leading to promotion to grades or commissioned status. This point was made by BuPers in Alnav 208-46 (NDB, 30 April). BuPers stated that, except for their capture, exit of evacuation, they presumably would have been advanced to first class in the period of separation from U.S. jurisdiction and subsequently some would have been recommended for appointment to warrant or commissioned status.

"When an enlisted repatriate is advanced to a first class petty officer rating retroactively in accordance with BuPers CIRC. LTR. 39-46," the Alnav said, "it is considered that on the date from which this rating is made effective for seniority purposes he became eligible for subsequent recommendation for appointment to warrant or commissioned officer status." CIRC. LTR. 39-46 (NDB, 15 February) provides for retroactive advancement in rating of repatriates. It also established the dates from which such advancements are made effective retroactively for seniority purposes. Alnav 208-46 also broadened the definition of enlisted repatriates eligible for recommendation for warrant or commissioned officer status to include those who escaped enemy custody or evaded capture, in addition to ex-prisoners of war. Alnav 122-46 (NDB, 15 March) governs the recommendation for warrant or commissioned officer status to men who were first class or chief petty officers at the time of capture.

COs having repatriates ordered to them for duty, following hospital and rehabilitation leave, were directed to check each man carefully and to submit recommendations, in appropriate cases, for appointment to warrant or commissioned status.

Ex-POWs Get More Time to Qualify for Rates

Ex-prisoner-of-war (POW) personnel (former POWs) will have more time to qualify professionally for successive retroactive advancements in ratings under provisions of CIRC. LTR. 101-46 (NDB, 30 April). They now will have 18 months after reporting to new permanent duty stations, following hospital and rehabilitation leave, to qualify for retroactive advancements instead of eight months. CIRC. LTR. 101-46 amended paragraph 8 (d) (7) of CIRC. LTR. 39-46 (NDB, 15 February) to provide for this additional time. Paragraph 8 sets up standards for promotion of repatriated enlisted personnel.

In cases where the retroactive date of advancements in rating would occur prior to 10 March 1946, service in present pay grade requirements specified in paragraph 8 (d) (2) of CIRC. LTR. 39-46 (NDB, 15 February) are to be used. The retroactive date of advancements occur or subse-quent to 10 March service requirements specified in CIRC. LTR. 72-46 (NDB, 21 April) may be applied. Sea duty requirements are waived.

CIRC. LTR. 101-46 listed seven common errors that have occurred in the administrative handling of repatriates, and that said positive steps should be taken to adhere strictly to existing directives to avoid penalizing repatriates for administrative errors.

President Authorizes Regular Navy Transfer in Warrant Grades

The President on 15 May authorized appointments to permanent commissioned warrant and warrant grade in the regular Navy in numbers not to exceed 2,566 respectively. Appointments are to be made from the ranks of temporary officers, commissioned warrants and warrant grades of the regular Navy who have been recommended for transfer to the regular Navy or to provide for this additional time.

Public Law 247 (See ALL HANDS, May, p. 41) established the permanent authorized strength of the Navy in regard to enlisted men and officers and commissioned warrants and warrant grades of the Naval Reserve who have been recommended for transfer to the regular Navy.

Temporary and reserve officers of the Navy who have been recommended by the selection board convened by SecNav to the Senate for transfer to the regular Navy totalled 4,490 according to Alnav 107-46 (NDB, 10 April) and Alnav 206-46 (NDB, 30 April), with a third Alnav scheduled to appear. About 45 percent of the applications for transfer received have been reviewed by the selection board. About 2,900 applications for transfer in the line and staff corps were not satisfactory or have not been received.

A breakdown by corps of the officers recommended for transfer to the regular Navy follows: General service and line officers, 3,440; aeromedical engineering, 4; aeronautical engineering, 4; ae rogological engineering, 5; communications intelligence and security, 21; diesel engineering, 9; electrical engineering, 14; electronic engineering, 50; industrial and management engineering, 8; law specialists, 6; mechanical engineering, 42; metallurgical engineering, 2; naval architecture, 75; naval intelligence, 13; ordinance, 10; photography, 1; petroleum engineering, 3; Medical Corps, 216; Supply Corps, 285; Civil Engineer Corps, 120; Dental Corps, 77; Chaplain Corps, 51.

Latest reports released by the Marine Corps show that 51 officers have been recommended for transfer to the regular Marine Corps.

Latest Developments Of Warfare Stressed in New Academy Courses

Aerial science and other up-to-the-minute developments in warfare will be stressed in future midshipman training at the Naval Academy, Vice Admiral Aubrey L. Fitch, superintendent announced. The course will cover everything from atomic energy to huge submarines, capable of discharging close to the target, whole coveys of either airplanes or guided missiles.

Annapolis will teach about 1,000 men a year in a course which is estimated to make pilots out of 40 percent of the graduates.

Midshipmen have a required total of 2,188 hours of recitation, of which 181 will be in aviation; 1,458 laboratory hours, with 296 in aviation; and 141 lectures, with 42 on air warfare.

Foreign Language Training Offered

A chance to learn a foreign language is offered under BuPers CIRC. LTR. 37-46. Officers of Naval Academy Classes 1938 to 1948 inclusive and temporary and reserve officers transferring to the regular Navy with corresponding dates of precedence, and between the ages 19 to 21 inclusive, may submit application. Classes in Chinese, Japanese, Persian, Spanish, French and German will begin 1 July at the Naval School (Naval Intelligence), Building T-30, Naval Receiving Station, Washington, D. C.

The course in Chinese will last 18 months, Japanese 14 months, Russian and German six months, Spanish and French three months with a minimum of four and a half hours of classroom instruction daily, six days a week.

Upon satisfactory completion of the course, students will be qualified as translators and interpreters of the language studied, with the qualification of "language officer."

Form OpNav 23-164 rev. 1-46 should be used in making this request and should be forwarded through official channels by the CO to the Chief of Naval Personnel. Attn: Pers-422, Navy Department, Washington, D. C.

Spot-Promoted Officers To Remain If Needed

Officers who were promoted in return for agreement to stay on active duty beyond date of eligibility for separation, may remain on active duty in certain circumstances dated 20 August, it was announced in Alnav 210-46 (NDB, 15 May).

Officers in this situation shall be retained on active duty by agreement of their agreements, if their agreements extend beyond 20 August and their services are required beyond that date. This may be done by Alnav 161-46 (NDB, 15 April), which provided that, with certain exceptions, all reserve personnel were to be on their way to September call by 20 August under a quota system (see ALL HANDS, May 1946, p. 63).
National Guard Duty
Before 18th Birthday
Counts on Longevity

Service in the National Guard before attaining the age of 16 may now be counted in computing service for longevity, it was announced in Alnav 191-46 (NDB, 30 April). Under authority of Alnav 200-44 (NDB, July-December 1944), such credit was denied.

This ruling was made retroactive to 1 June 1942 and will remain in effect until six months after the present war has been officially declared terminated by the President or Congress.

Disbursing officers are authorized to adjust pay accounts for checkages made subsequent to Alnav 290-44 and to credit personnel not formerly credited for such underaged service, provided such credits do not involve lapse appropriations.

Existing rules authorizing credit for other National Guard Service (Alnav 200-44) remain in effect.

Plastic Artificial Eye
Production Is Limited

The production of plastic artificial eyes, as developed by the Navy, has been discontinued at all but three activities, it was announced by BuMed in AlNAV 229, April 1944. Naval Dental School, National Naval Medical Center, Bethesda, Md.; Naval Hospital, Philadelphia, and the Naval Hospital, San Diego, will continue making the artificial eyes.

The plastic eye differs from the conventional glass eye in that each one is custom made for the individual.

Six-Month CIC Courses, Starting 6 July, Offered

USN and USNR line officers of ranks of lieutenant commander and below may apply for a six-month training course in which Billets are said of combat information center, including fighter direction, under NavAct 50 (NDB, 31 May). Classes will convene 6 July and every two months thereafter at NRITS, Saint Simons Island, Ga.

To be eligible, reserve applicants must transfer to the regular Navy in accordance with BuPers Cir. Lt. 228-45, revised (NDB, 15 November). Letters of application must include a signed statement to remain on active duty for one year after completion of the course, if selected, and be forwarded through official channels to reach BuPers, attn: Pers 4223, 30 days prior to the convening date of each class. Naval aviators must forward applications via CNO. Applicants must indicate by date the class desired. Endorsement by CO should include a statement of availability and suitability for the training.

Marine Corps Eligible
For Navy Prep Schools

Marine Corps reserve and selective service personnel who volunteered to remain on active duty until 1 March 1947, were eligible for appointment to the Naval Academy Preparatory School classes convening 1 October of this year. Application deadline was 17 May.

Regular Marine Corps enlisted personnel also are eligible for appointment to the Preparatory School each year. Dates for nomination of future classes have not been set.

To be eligible, applicants must have three years of high school or the equivalent, must pass the required physical examination and must be between 17 and 21 years of age. For candidates who had had one year or more of active service, the age limit has been extended to 23.

Commercial Airlines
Call for Communicators

Commercial airline companies of the U.S., among many other businesses, need trained radio operators, Veterans who were trained in communications while in the service comprise a large percent of communications personnel employed this year by airline companies.

When forwarding applications for employment, applicants should have in their possession a government license issued by the Federal Communications Commission. Telegraph licenses are issued in three classes, namely, radio telegraph operator first class and second class, and the restricted telegraph operator. License requirements include practice and theory, extent of each depending on type of license. Application for license should be on FCC Form 556, in duplicate, filled out as an affidavit, but does not have to be notarized. Submit form to the examining officer or to the office concerned at the time the examination is to be taken.

Pamphlet containing part 13 of the rules and regulations of FCC, priced at five cents, is available on request addressed to the Superintendent of Documents, Government Printing Office, Washington, D.C. The same office will forward, on request enclosing 15 cents in cash, the study guide and reference material for commercial radio operators examinations.

Ships To Fly Citation
Pennant At Forefoot

Ships authorized to fly the Presidential Unit Citation Pennant at the forefoot from sunrise to sunset while at anchor. General Order No. 292, thus amended provisions of General Order No. 187.

Public Information Service Being Placed On Firmer Footing

The Navy's Public Information Service has been put on firmer footing by the following developments:

- Enlistment of USNR and USN-1 naval correspondents; the regular Navy was made possible by Alnav 220-46 (NDB, 15 May). They would enlist in the rating Sp(X) (NC), with provision for change over to a general service rating (possibly journalist's mate, if that rating is established).

- SecNav has revealed postwar plans for the Public Information Service in a letter to the Chief of Naval Personnel.

- BuPers is considering establishment of a journalist's mate rating in the postwar rating structure (see p. 57).

Alnav 220 added Sp(X) (NC) to the list of specialist ratings which may be enlisted in the regular Navy under Alnav 51-46 (NDB, 31 January). The naval correspondent rating was added to category B of the list under Alnav 51, which states "functional specialist ratings in category B will be integrated with general service ratings as determined by studies now in progress. Male specialists in category B will be required to change to general service ratings prior 1 Sept 1948..."

SecNav's letter to the Chief of Naval Personnel declared the Navy's war-expanded Public Information Service will be continued in peacetime, and it was expected at least 250 enlisted billets would be open in the field. The letter said that experience gained in the war had demonstrated the worth of enlisted naval correspondents and the Fleet Home Town News Center as news gathering and information agents, and that it is considered essential that Navy Offices of Public Information continue to function in peacetime. The Fleet Home Town News Center is the agency which, toward the close of the war, began channeling news of naval personnel to their home town newspaper. ENCs gathered the news which the News Center published.

It is planned that billets will be established within all staffs, ashore and afloat, and in other naval activities as deemed necessary, for assignment of PIO personnel to assure adequate public information coverage, SecNav said. Provisions will be made for training personnel assigned to PIO activities.

The number of naval personnel assigned to public information will be prescribed by SecNav. Initially it will be limited to 500 persons, of whom not more than 200 will be commissioned correspondents.

For further information on ENCs, see ALL HANDS, April 1946, p. 77. For information on officer public information specialists, see ALL HANDS, February 1946, p. 87, and May 1946, p. 72.
Method of Changing Insurance Beneficiary Outlined for Personnel

Naval personnel desiring to change beneficiaries on National Service Life Insurance and Government Life Insurance policies have in many cases misunderstood the correct procedure, resulting in failure to effect a change. BuPers pointed out that according to Veterans' Administration rulings, the following procedure must be followed:

"A change of beneficiary to be effective must be made by notice in writing, signed by the insured or his agent, and must contain sufficient information to identify the insured. Whenever practicable, such notice shall be given on blanks prescribed by the Veterans' Administration."

Changes of beneficiary are not accomplished by such forms as the confidential data sheet, the AV (N) beneficiary slip or the beneficiary slip for the service record and fitness report. These are only information forms only and do not in any way authorize changes of beneficiary of any NSLI or GI contracts. While it is advisable to use direct correspondence to the VA requesting a change of beneficiary the procedure is adequate.

Dependents to Fly Free Only in Emergencies

Dependents' travel by air transportation on "TR" now is authorized only in cases of emergency, it was announced in Alnav 190-46 (NDB, 30 April).

Air transportation on "TR" has been restricted to cases where it is necessary to make steamers connections for overseas travel, or when other emergency or hardship circumstances prevail as determined by the CO of the local activity at which the transportation request is issued.

Under circumstances other than the above, air travel within the U. S. must be performed at own expense, subject to claim for reimbursement. In such cases reimbursement will be made on basis of 4 cents per mile for each dependent 12 years of age or over and 2 cents per mile for each dependent 5 to 12 years of age.

New Bases Made Available To Dependents Overseas

Personnel based on Okinawa, the Philippines or Japan, or attached to fleet units based there, now may request their dependents be sent overseas to join them. Alnav 201-46 (NDB, 30 April) announced that these dependents may be made subject to specified restrictions (including approval by the area commander) provided that personnel, after arrival of dependents, will have normal expectancy of at least one year of duty in the area. Alnav 215-46 (NDB, 15 May) later revised this to the extent that in Japan, personnel must have an expectancy of one year of duty only after submission of the application for transportation of dependents. Approved applications are forwarded to Com 12 for furnishing of transportation.

Class A (dependents of officers, CPOs, PO1c, and PO2c) dependents will have preference over Class B (dependents of all ratings below PO2c).

Secretary Urges Salvaging of Lead

SecNav has directed that every effort be exerted to further the salvaging of lead from ships and equipment being scrapped, to help relieve the serious lead shortage. From a scrapped submarine approximately 560 tons of lead can be salvaged while airplanes contain from 20 to 250 pounds of salvageable lead, depending on the type.

The Navy declared surplus about 7,250 tons of lead and lead alloys worth $940,000 between September, 1945, and 27 Apr 1946. Lead accumulated from equipment being decommissioned and scrapped in the U. S. is now declared surplus in 25-ton lots to the War Assets Administration. Lead declared surplus at overseas bases is given high priority space on ships returning to home ports.

The Irish Pennant (USN ROTC, Notre Dame, Ind.)

"But it's fresher this way!"

Baggage Allowances Doubled for Dependents Traveling Overseas

The amount of personal baggage allowed for dependents of Navy personnel overseas in areas within the U. S. and commercial steamers in overseas travel, increases the allowance for each person 12 years of age or over from 175 pounds to 350 pounds. For each child 5 to 12 years of age, it has been increased from 87½ pounds to 175 pounds.

Distribution of Three Navy Medals Delayed

Delay in design and production of American Defense, Area Campaign and Victory Medals probably will hold up until late this year distribution of these medals to commands for further distribution to personnel entitled to wear them, BuPers announced in Alnav 177-46 (NDB, 15 April). BuPers Cir. Ltr. 4-46 (NDB, 15 January) previously established procedure for distribution which now may have to be altered.

Meantime, BuPers Cir. Ltr. 86-46 (NDB, 30 April) announced previously announced dates beyond which service will not be counted toward eligibility to wear campaign medals. In an Executive Order signed by the President, the final dates were set as follows: European-African-Middle Eastern Campaign Medal, not to be awarded for any service rendered subsequent to 8 Nov 1945; American Campaign and Asiatic Pacific Campaign Medals, not to be awarded for any service rendered subsequent to 2 Jan 1946.

WAY BACK WHEN—

Pathfinder of the Seas

The traditions of our Navy come from the great deeds of our officers and men. Names such as John Paul Jones, Porter, Farragut and Dewey immediately spring to mind when naval heroes are considered. However, there are "peace time naval heroes" as well as wartime heroes. Perhaps their feats are not so spectacular, but these men have served their nation and their Navy with distinction.

Among these peacetime contributers was Matthew Fontaine Maury. In the field of science, navigators and those in the 19th century rendered so valuable a service as this "Pathfinder of the Seas."

Starting as a midshipman in 1825, he served at sea until he was beached for an injury. During this period he was shocked to learn that practically no information was available to aid the mariner in respect to winds, currents, best courses, etc. Thus in the early 1840’s, when he was appointed superintendent of the Depot of Charts and Instruments, he conceived the idea of cataloging available data found in numerous log books and supplementing this with observations made several times daily by our ships—merchant as well as Navy. He instructed navigators to cast overboard at stated periods bottles containing a record of the ship’s latitude, longitude, and date. They were also requested to pick up similar bottles, wherever found, and to note the exact time and position.

From these experiments, crude as they may seem to the precision instrument scientist of today, Maury derived enough information to draw important conclusions about winds, currents, paths of storms, quickest routes between given shipping ports—thereby laying the foundations of the modern science of navigation. To this day Maury’s pilot charts brought up to date are indispensable in making ocean travel safe and expeditious for all hands at sea.
Directive Clarifies
Leave Policy for Men
Returning to States

Men coming back to the States from
journeys overseas can expect reha-
bitual leave for 30 days if they come
under the following categories:
• Those ineligible for immediate
separation but who will become eli-

gible for separation prior to 1 July.
• Those who departed from conti-

nental U.S. prior to 1 June 1945 and
who have not had rehabilitation leave.
• Those entitled to combined reha-

bitual-reenlistment leave for enlist-
ments, reenlistments or extensions in
accordance with BuPers Circ. Ltr.
308-46 (NDB, 15 October).

As announced in Alnav 226-46
(NDB, 15 May) men reporting from
overseas who are not eligible for re-
habilitation leave under the above
provisions will be assigned by Com-
WesSeaFron and ComServLant respec-
tively, and transfers pertaining to
separation will be administered by the
command to which assigned.

Rehabilitation leave accrues only for
the period of continuous active duty
outside the continental U.S. from the
date of departure to the date of re-
turn. Sea duty in waters of the con-
tinental U.S. does not count for this
leave.

Higher Pay Privileges,
Cash Subsistence
Ordered for Nurses

Navy nurses “got a raise” last
month when Alnav 183 (NDB, 30
April) ordered subsistence payments
in cash rather than in kind and ruled
that nurses shall receive pay of higher
pay periods when eligible. The Alnav
based on Public Law 244 approved 3
Dec 1945, put nurses on an equal pay
and allowance basis with all other
Navy officers.

Prior to Alnav 183, nurses had been
subsedied in kind at hospitals. Ef-
tective 1 May nurses can receive an equal pay
and allowance basis with all other
Navy officers.

To Guard Provisions
From Deterioration

Further Navy efforts to conserve
food in these days of mounting world-
wide scarcities were seen in AlNAVCon
262-36 April. The dispatch ordered
all activities receiving provisions from
decommissioned vessels for storage to
take every precaution to protect the
stores from deterioration. The mes-

sage covered all provision stocks, in-
cluding those which are or may be
declared surplus.

Previously, Alnav 71-46 (NDB, 15
February) had directed conservation
of flour and reduction of waste, and
Alnav 121-46 (NDB, 15 March) had
directed conservation and effective use
of food stocks on hand. SecNav James
Forrestal has declared: “The U. S.
Navy gladly joins in the vitally im-
portant work of conserving food for
the relief of starving populations abroad.”

Retired Enlisted Men,
Some Fleet Reservists
May Remain Until March

Fleet Reservists transferred to or
recalled from the Fleet Reserve prior
to 15 Aug 1945, and retired enlisted
men, may remain on active duty vol-
untarily after 1 Sept 1946, but not
beyond 1 Mar 1947, under Alnav 213-
46 (NDB, 15 May). Previously, under
Alnav 137-46 (NDB, 31 Mar), only
USNR and USN-1 men were accepted
for this program.

Activities Reminded
To Guard Provisions
From Deterioration

Overcoats no longer will be issued
to seaport areas where in the opinion
of the commanding officer weather
conditions at the ultimate destination
warrant them, according to AlNA
186-46 (NDB, 30 April). All-
navs 385-46 (NDB, 30 November) and
437-45 (NDB, 31 December) author-
ized issuance of one dress blue jumper,
one pair of blue trousers and one over-
coat. With advent of warmer weather,
however, it was decided that overcoats
in general are no longer necessary.

12,040 First Enlistments
From 15 April to 10 May

During the period 15 April to 10
May there were 11,797 first enlist-
ments in the regular Navy at recruit-
ing stations: 243 first enlistments in
the regular Navy outside the conti-
nental limits of the U.S.; 4,785 trans-
ferred to the regular Navy from USN
and USN-1; and 2,405 reenlistments
and extensions of enlistments in the
regular Navy.

From V-J Day through 10 May
218,556 men had enlisted in, trans-
ferred to or reenlisted or extended
their enlistments in the regular Navy.

On 15 May, 465,390 regular Navy
enlisted men were on active duty. On
that same date there were 39,100 of-

cers on active duty.

"Bostrum sure knows how to get those dress edges!"

JUNE 1946
Here Are Rules Governing Wearing of Awards

Rules outlining the correct manner in which decorations, medals and ribbons must be worn have been summarized by BuPers. The rules previously have been published separately in circular letters, Alnavs and other directives.

Ribbons of decorations, medals and badges should be worn in horizontal rows of three each without intervals between ribbons, and the rows should be spaced 3/4 inch apart. If not in multiples of three, the upper row should contain the lesser number and the center of this row should be over the center of the one below.

Ribbons. The ribbons are to be worn on the left breast and clear of the lapel, so far as is practical, or in the same approximate position if the uniform has no lapel. The arrangement of ribbons by seniority shall be from top down and from inboard to outboard. The upper edge of the bottom row shall be on a line one inch below the point of the shoulder, or halfway between the top and bottom of the shoulder where the sleeve is joined.

Precedence Of Ribbons. Ribbons of American decorations, medals and badges are worn in the following order:

- Medal of Honor (Navy and Army)
- Distinguished Service Cross (Navy and Army)
- Distinguished Service Medal (Navy and Army)
- Silver Star Medal (Navy and Army)
- Legion of Merit (Navy and Army)
- Distinguished Flying Cross (Navy and Army)
- Navy and Marine Corps Medal
- Soldier's Medal (Army)
- Bronze Star Medal (Navy and Army)
- Air Medal (Navy and Army)
- Commendation Ribbon
- Purple Heart (Navy and Army)
- Specially Meritorious Medal (no longer given)
- Presidential Unit Citation
- Distinguished Unit Badge (Army) worn by naval personnel on left breast awarded after awards
- Navy Unit Commendation
- Army Commendation Ribbon
- Navy Good Conduct Medal
- U. S. of America Typhus Commission Medal (awarded by the President)
- Gold Life Saving Medal (Treasury)
- Silver Life Saving Medal (Treasury)
- Dewey Medal
- Sampson Medal
- NC-4 Medal
- Byrd Antarctic Expedition Medal (1928-30)
- Second Byrd Antarctic Expedition Medal (1933-35)
- Reserve Special Commendation Ribbon
- Good Conduct Medals (Marine Corps, Coast Guard and Army)
- Organized Marine Corps Reserve Medal
- Civil War Campaign Medals (Navy and Army)
- Indian Campaign Medal (Army)
- Expeditionary Medal (Navy and Marine Corps)
- Spanish Campaign Medal (Navy and Marine Corps)
- Spanish War Service Medal (Army)
- Army of Puerto Rican Occupation Medal (Army)
- Army of Cuban Occupation Medal (Army)
- Philippine Campaign Medal (Navy and Army)
- Philippine Congressional Medal (Army)
- China Relief Expedition Medal (Navy)
- China Campaign Medal (Army)
- Army of Cuban Pacification Medal (Navy)
- Nicaraguan Campaign Medal (1912)
- Mexican Service Medal (Navy and Army)
- Haitian Campaign Medal (1915)
- Mexican Border Service Medal (Army)
- Dominican Campaign Medal
- Victory Medal—World War I (Navy and Army)
- Army of Occupation of Germany Medal (1918-23)
- Haitian Campaign Medal (1919-20)
- Second Nicaraguan Campaign Medal
- Tongtsze Service Medal
- China Service Medal
- American Defense Service Medal (Navy and Army)
- Air Medal (Navy and Army)
- Navy Cross
- Army Distinguished Service Cross
- Navy and Marine Corps Medal
- Distinguished Service Cross
- Navy and Army
- Distinguished Service Medal
- Navy and Army
- Silver Star Medal (Navy and Army)
- Legion of Merit (Navy and Army)
- Distinguished Flying Cross (Navy and Army)
- Navy and Marine Corps Medal
- Soldier's Medal (Army)
- Bronze Star Medal (Navy and Army)
- Air Medal (Navy and Army)
- Commendation Ribbon
- Purple Heart (Navy and Army)
- Specially Meritorious Medal (no longer given)
- Presidential Unit Citation
- Distinguished Unit Badge (Army) worn by naval personnel on left breast awarded after awards
- Navy Unit Commendation
- Army Commendation Ribbon
- Navy Good Conduct Medal
- U. S. of America Typhus Commission Medal (awarded by the President)
- Gold Life Saving Medal (Treasury)
- Silver Life Saving Medal (Treasury)
- Dewey Medal
- Sampson Medal
- NC-4 Medal
- Byrd Antarctic Expedition Medal (1928-30)
- Second Byrd Antarctic Expedition Medal (1933-35)
- Reserve Special Commendation Ribbon
- Good Conduct Medals (Marine Corps, Coast Guard and Army)
- Organized Marine Corps Reserve Medal
- Civil War Campaign Medals (Navy and Army)
- Indian Campaign Medal (Army)
- Expeditionary Medal (Navy and Marine Corps)
- Spanish Campaign Medal (Navy and Marine Corps)
- Spanish War Service Medal (Army)
- Army of Puerto Rican Occupation Medal (Army)
- Army of Cuban Occupation Medal (Army)
- Philippine Campaign Medal (Navy and Army)
- Philippine Congressional Medal (Army)
- China Relief Expedition Medal (Navy)
- China Campaign Medal (Army)
- Army of Cuban Pacification Medal (Navy)
- Nicaraguan Campaign Medal (1912)
- Mexican Service Medal (Navy and Army)
- Haitian Campaign Medal (1915)
- Mexican Border Service Medal (Army)

Ribbon Rules

The correct manner in which ribbons of decorations, medals and badges are worn is shown in the drawings below.

- Ribbons are worn in horizontal rows of three each, if you have that many; the rows are 3/4 inch apart. Any row with less than three ribbons becomes the top row and is centered over the row or rows beneath it.

- Only one "V" (Combat Distinguishing Device) may be worn upon a single ribbon. Personnel awarded the Legion of Merit or the Bronze Star for services or acts performed in actual combat with the enemy are authorized to wear the "V".

- Stars shall be placed in a horizontal line close to and symmetrically about the center of the ribbon. A silver star, worn in lieu of five bronze or gold stars, shall be located as near the center of the ribbon as the symmetrical arrangement permits.

- Ribbons for medals or badges for excellence in small arms firing are worn immediately following (note striped ribbon above) all decorations, medals and ribbons, as outlined in accompanying article. Foreign decorations and medals are worn to the left of all American decorations.

- The ribbons are to be worn on the left breast and clear of the lapel, so far as is practical, or in the same approximate position if the uniform has no lapel. The arrangement of ribbons by seniority shall be from top down and from inboard to outboard. The upper edge of the bottom row shall be on a line one inch below the point of the shoulder, or halfway between the top and bottom of the shoulder where the sleeve is joined.

- The correct manner in which ribbons of decorations, medals and badges are worn is shown in the drawings below.

- Only one "V" (Combat Distinguishing Device) may be worn upon a single ribbon. Personnel awarded the Legion of Merit or the Bronze Star for services or acts performed in actual combat with the enemy are authorized to wear the "V".

- Stars shall be placed in a horizontal line close to and symmetrically about the center of the ribbon. A silver star, worn in lieu of five bronze or gold stars, shall be located as near the center of the ribbon as the symmetrical arrangement permits.

- Ribbons for medals or badges for excellence in small arms firing are worn immediately following (note striped ribbon above) all decorations, medals and ribbons, as outlined in accompanying article. Foreign decorations and medals are worn to the left of all American decorations.

- The ribbons are to be worn on the left breast and clear of the lapel, so far as is practical, or in the same approximate position if the uniform has no lapel. The arrangement of ribbons by seniority shall be from top down and from inboard to outboard. The upper edge of the bottom row shall be on a line one inch below the point of the shoulder, or halfway between the top and bottom of the shoulder where the sleeve is joined.

- The correct manner in which ribbons of decorations, medals and badges are worn is shown in the drawings below.

- Only one "V" (Combat Distinguishing Device) may be worn upon a single ribbon. Personnel awarded the Legion of Merit or the Bronze Star for services or acts performed in actual combat with the enemy are authorized to wear the "V".

- Stars shall be placed in a horizontal line close to and symmetrically about the center of the ribbon. A silver star, worn in lieu of five bronze or gold stars, shall be located as near the center of the ribbon as the symmetrical arrangement permits.

- Ribbons for medals or badges for excellence in small arms firing are worn immediately following (note striped ribbon above) all decorations, medals and ribbons, as outlined in accompanying article. Foreign decorations and medals are worn to the left of all American decorations.
ribbon, and the Navy Unit Commendation ribbon, indicate subsequent awards. In lieu of five such stars, one silver star is worn.

Stars to indicate participation in certain engagements with Area Campaign Medal theaters are of bronze. In lieu of five such stars, one silver star is worn. The official list of engagements for which "battle stars" have been authorized will be found in Operations and Engagement Use, NavPers 15,632, published 31 Aug 1944. A revision of this publication now is being developed. It will be ready soon and will be an up-to-date list of engagements for which stars have been authorized.

The first star authorized to be worn upon a ribbon shall be centered upon the ribbon. If more than one star is worn, they shall be placed in a horizontal line close to and symmetrically about the center of the ribbon. A silver star, worn in lieu of five bronze or gold stars, shall be located as near the center of the ribbon as the symmetrical arrangement permits. Stars are placed upon the ribbon point down.

**'V' For Combat.** Personnel awarded the Legion of Merit or the Bronze Star Medal for services or acts performed by individuals against the enemy are authorized to wear a Combat Distinguishing Device, a bronze block letter "V" in the center of the ribbon. Only one "V" may be worn upon a single ribbon. Gold or silver stars indicating more than one award of the same decoration are arranged symmetrically, the first star to the wearer's right of the "V", the second to the left, etc. Personnel officially authorized to wear foreign decorations and medals place the decorations or medals to the left of all American decorations or medals. They may not be worn unless at least one American decoration or medal also is worn.

**Marksmanship Awards.** Medals or badges for excellence in small arms firing are worn immediately following all decorative decorations and medals listed above. When ribbons are prescribed, any of these medals or badges may be worn immediately following the ribbons of the decorations, medals or badges listed above shall be worn. The first star authorized to be worn upon a ribbon shall be centered upon the ribbon. If more than one star is worn, they shall be placed in a horizontal line close to and symmetrically about the center of the ribbon. A silver star, worn in lieu of five bronze or gold stars, shall be located as near the center of the ribbon as the symmetrical arrangement permits. Stars are placed upon the ribbon point down.

(a) The following are medals or badges for excellence in small arms:

1. Marine Corps sharpshooter's badge
2. Marine Corps marksman's badge
3. Marine Corps rifle competition badge
4. U. S. Fleet, Fleet and Force rifle match "place" medal
5. Marine Corps division rifle competition pin and badge
6. Marine Corps pistol competition badge
7. U. S. Fleet, Fleet and Force pistol match "place" medal
8. Marine Corps division pistol competition badge
9. Louckheimer trophy badge
10. Medals won by winning teams in Marine Corps division rifle and pistol matches
11. Medals won in the national matches
12. Medals won by the National Rifle Assn. at matches held under the cognizance of that association
13. Short-range battle-practice medal for midshipmen
14. Medal for Naval Reserve Officers' Training Corps
15. The Marine Corps Basic Badge (for infantry weapons other than rifle) has the following bars fastened between the holding and medalion of basic badge:
   a. Expert, bayonet (no longer issued)
   b. Expert or sharpshooter, pistol (.38 and .45 cal.)
   c. Expert or sharpshooter, automatic rifle
   d. Expert or sharpshooter, sub-machine gun
   e. Expert or sharpshooter, machine gun (no longer issued)
   f. Expert or sharpshooter, Thompson sub-machine gun (no longer issued)
   g. Expert or sharpshooter, howitzer (no longer issued)
   h. Expert or sharpshooter, light artillery (no longer issued)
   i. Expert or sharpshooter, defense artillery (no longer issued)
   j. Expert or sharpshooter, carbine
17. Badges of military societies commemorative of wars of the U. S.
   a. Badge of the Regular Army and Navy Union of the Army and Navy Union of the U. S.
   b. Corps and division badges of Civil War and Spanish War
   c. Badge of the Enlisted Men's Association
   d. Badge of the Enlisted Men's Association

**Naval Personnel Urged To Buy Savings Bonds**

Fleeting Navy cooperation in the fight against inflation, Assistant Secretary of the Navy for Air John L. Sullivan urged naval personnel to invest in U. S. Savings Bonds, in Alnav 209-46 (NDB, 15 May).

In the dispatch, Mr. Sullivan stated: "The struggle to control inflation must be greatly intensified. A basic cause of inflation well known to all of us is an excess of spending coupled with a shortage of products. It is our duty as citizens to help combat inflation by combating rising prices. To combat rising prices means resisting the desire to acquire, the temptation to spend those extra dollars. The key is continued saving for future needs and the best and safest way to save is still U. S. Savings Bonds, their purchase through the allotment plan, and their retention.

"It is my hope that all Navy personnel will support the program to control inflation by putting more money into savings bonds that would otherwise compete for scarce goods. We are all vitally interested in our country's future, with the dangers that threaten its well being, and just as we backed the attack we must now back our future by investing regularly in U. S. Savings Bonds."

**Red Cross 'Home Reports' Now Available To COs**

Navy men with family problems, other than cases of discharge, may request their COs to refer directly to the American Red Cross for a "home report" on the case, according to BuPers Circ. Ltr. 99-46 (NDB, 30 April.

Dependency discharges, on the other hand, must be referred to BuPers which will take action to get a "home report" if necessary. This procedure was established in BuPers Circ. Ltr. 299-44 (NDB, July-December 1944). The CO may, however, request the Red Cross to assist dependents in preparing the required affidavits.

COs referring cases to the Red Cross should consult the nearest field director, or if none is available, they should forward request to the American Red Cross, Washington, D. C. Requests are not to be submitted to BuPers or to local chapters of the American Red Cross.

Transmission of emergency welfare messages was speeded up AlCom 77, 11 March, which authorized use of Navy communications by the Red Cross.

**Security Measures Lifted on Meal Chits**

Security measures affected even Navy meal tickets during the war. To keep military movements secret, the starting point of the line was omitted in filling out the tickets. Now under AlStaCon 242224 April, the meal tickets are to be filled out completely as required by Naval Travel Instructions, Article 2509-11(c).
Latest Word on Enlisted Retirement

Retirement laws and regulations affecting enlisted personnel of the Navy and Marine Corps are very comprehensive. A summary of retirement procedure follows:

**RETIRED PERSONNEL FOR SERVICE**

Enlisted men of the regular Navy and Marine Corps, upon completion of 20 years service in the active Naval Service, or upon their own application, are entitled to be placed on the retired list. After retirement, a man, while on inactive duty, draws retired pay at the rate of 75 percent of the base pay and 75 percent of longevity he was receiving on the date he was retired. For the purpose of computing service, all active duty service in the Navy, Marine Corps, Coast Guard, and Army and the various reserve components thereof is counted as service with a complete enlistment during minority counting as four years. Double time is counted for the following:

- Spanish-American War, from 21 April 1898 to 11 April 1899 inclusive.
- Marine Corps and Army service in Panama, from 21 April 1904 to 24 April 1904, from date of arrival to date of departure.
- Marine Corps and Army service in Haiti.

On the inactive list of the Fleet Reserve, an accrued pay credit stops and never begins again unless

---

**FLEET RESERVE, RETIRED ENLISTED PAY TABLES**

*(for members of the Fleet Reserve and enlisted personnel retired after 30 years of service, when on inactive list)*

The following tables are based on the Pay Readjustment Act of 1942, the provisions of which are explained in detail in the accompanying article.

The totals below were arrived at in each case by adding the percentage of base pay paid for each class of the Fleet Reserve and the specified amount of longevity pay allowed. Time spent in the inactive Fleet Reserve does not increase the longevity credit upon transfer to the retired list.

**FLEET RESERVE IF-3 AND 4-D, 20-YEAR CLASS**

<table>
<thead>
<tr>
<th>Pay Grades</th>
<th>1949</th>
<th>1950</th>
<th>1951</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-17 yrs (30%)</td>
<td>73.80</td>
<td>72.90</td>
<td>72.00</td>
</tr>
<tr>
<td>18-20 yrs (25%)</td>
<td>80.80</td>
<td>79.90</td>
<td>79.00</td>
</tr>
<tr>
<td>21-24 yrs (20%)</td>
<td>94.80</td>
<td>93.90</td>
<td>93.00</td>
</tr>
<tr>
<td>25-27 yrs (15%)</td>
<td>104.80</td>
<td>103.90</td>
<td>103.00</td>
</tr>
<tr>
<td>28 yrs (10%)</td>
<td>115.00</td>
<td>114.00</td>
<td>113.00</td>
</tr>
</tbody>
</table>

Add 10% if credited with extraordinary heroism.

**FLEET RESERVE (F-3 AND 4-D), 20-YEAR CLASS**

<table>
<thead>
<tr>
<th>Pay Grades</th>
<th>1949</th>
<th>1950</th>
<th>1951</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-17 yrs (30%)</td>
<td>130.40</td>
<td>129.50</td>
<td>128.60</td>
</tr>
<tr>
<td>18-20 yrs (25%)</td>
<td>137.40</td>
<td>136.50</td>
<td>135.60</td>
</tr>
<tr>
<td>21-24 yrs (20%)</td>
<td>143.40</td>
<td>142.50</td>
<td>141.60</td>
</tr>
<tr>
<td>25-27 yrs (15%)</td>
<td>153.40</td>
<td>152.50</td>
<td>151.60</td>
</tr>
<tr>
<td>28 yrs (10%)</td>
<td>164.00</td>
<td>163.00</td>
<td>162.00</td>
</tr>
</tbody>
</table>

Add 10% if credited with extraordinary heroism or if conduct marks for 20 years exceed 95%

NOT ADD 20% if credited with both:

**FLEET RESERVE (F-5), NEW 20-YEAR CLASS**

<table>
<thead>
<tr>
<th>Pay Grades</th>
<th>1949</th>
<th>1950</th>
<th>1951</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-half base pay, as Fleet Reserve</td>
<td>40.00</td>
<td>39.00</td>
<td>38.00</td>
</tr>
</tbody>
</table>

Add all longevity upon completion of 20 years. Longevity, based on length of active service, makes total the same as those given in table immediately above, except 15% for service does not accrue to Class F-5 for extraordinary heroism or 95% marks in conduct.

**RETIRED LIST—30 YEARS OR MORE ACTIVE DUTY SERVICE**

<table>
<thead>
<tr>
<th>Pay Grades</th>
<th>1949</th>
<th>1950</th>
<th>1951</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 yrs base pay plus longevity</td>
<td>76.00</td>
<td>75.00</td>
<td>74.00</td>
</tr>
<tr>
<td>3-4 yrs</td>
<td>81.00</td>
<td>80.00</td>
<td>79.00</td>
</tr>
<tr>
<td>5-6 yrs</td>
<td>86.00</td>
<td>85.00</td>
<td>84.00</td>
</tr>
<tr>
<td>7-8 yrs</td>
<td>91.00</td>
<td>90.00</td>
<td>89.00</td>
</tr>
<tr>
<td>9-10 yrs</td>
<td>96.00</td>
<td>95.00</td>
<td>94.00</td>
</tr>
<tr>
<td>11-12 yrs</td>
<td>101.00</td>
<td>100.00</td>
<td>99.00</td>
</tr>
<tr>
<td>13-14 yrs</td>
<td>106.00</td>
<td>105.00</td>
<td>104.00</td>
</tr>
<tr>
<td>15-16 yrs</td>
<td>111.00</td>
<td>110.00</td>
<td>109.00</td>
</tr>
<tr>
<td>17-18 yrs</td>
<td>116.00</td>
<td>115.00</td>
<td>114.00</td>
</tr>
<tr>
<td>19-20 yrs</td>
<td>121.00</td>
<td>120.00</td>
<td>119.00</td>
</tr>
<tr>
<td>21-22 yrs</td>
<td>126.00</td>
<td>125.00</td>
<td>124.00</td>
</tr>
<tr>
<td>23-24 yrs</td>
<td>131.00</td>
<td>130.00</td>
<td>129.00</td>
</tr>
<tr>
<td>25-26 yrs</td>
<td>136.00</td>
<td>135.00</td>
<td>134.00</td>
</tr>
<tr>
<td>27-28 yrs</td>
<td>141.00</td>
<td>140.00</td>
<td>139.00</td>
</tr>
<tr>
<td>29-30 yrs</td>
<td>146.00</td>
<td>145.00</td>
<td>144.00</td>
</tr>
</tbody>
</table>

**NOTE:** In the above table, the 27 to 28-year longevity pay range is included because the 27 years' active duty service must be computed for pay purposes but NOT for pay purposes (i.e., discharge prior to expiration of enlistment, of minority enlistment counting as full enlistment). The rates of pay of enlisted personnel of the regular Navy (Philippine Islands, Guam, Alaska, and Panama, prior to 25 Aug 1925, from date of arrival to date of departure).
Class F-4-D, Fleet Reserve, Navy, or Class I (c), F.M.C.R.: Any man who can qualify for Class F-4-C, if he delays his application until the completion of 20 or more years of naval service, is transferred to Class F-4-D of the Fleet Reserve. A member of Class F-4-D, while on inactive duty, receives retain er pay at the rate of one-half the base pay he was receiving at the time of transfer, plus all (not one-half) longevity pay. In addition, this pay will be increased 10 percent if he is credited with extraordinary heroism in line of duty or if his average marks in conduct for 20 or more years are not less than 95 percent of the maximum. He may not receive 20 percent credit for both, however.

Retirement for Commissioned and Warrant Officers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Yrs.</td>
<td>NOT ELIGIBLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 Yrs. or More</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Envisage over 5 yrs.: $131.81; Lt. (jg) over 10 yrs.: $172.56; Lieut. over 17 yrs.: $224.30; Lt. Comdr. over 23 yrs.: $265.81.

June 1946
their rating at sea, with due allowance for age and length of service. A man so qualified for mobilization ashore only (including foreign shores)...

Class B-2—Physically qualified for mobilization ashore only, limited to duty within the continental limits of the U.S. Fleet Reservists, Class F-5, who are physically qualified for duty within the continental limits of the U.S. Fleet Reserve, but who have not been physically qualified for duty at sea, will be transferred to the retired list of the regular Navy upon receipt of authorization from BuOrd via BuPers. All men being physically examined for transfer to Fleet Reserve will be physically qualified to perform duty in time of war. Those men physically examined for this class who are not qualified to perform duty in time of war will be transferred to the retired list of the naval service. All cases of this nature will be referred to BuPers for final decision.

Discharge from Fleet Reserve

Fleet Reservists, Class F-4, and F-5, who have completed 30 years' service, and who have been physically examined for transfer to the Fleet Reserve, Class F-4, may be transferred to the Fleet Reserve Class or retired.

(Transfer to Retired List Via Fleet Reserve)

Members of Class F-4 and F-5, members of the Fleet Reserve and members of F.M.C.R., upon completion of 30 years' service, active and reserve, are transferred, without application, to the retired list of the regular Navy. Any such person on active duty at the time would normally be immediately transferred to active duty on the retired list. They will also be placed on the retired list prior to completion of 20 years' service if they are found physically qualified for duty as sea or on foreign shores. They are entitled to pay at the rate of $30 per month and are eligible for disability compensation; however, the person in receipt of disability compensation will be the same for Class F-4 members as that received by Class F-5 members.

In addition to the above classes of naval personnel the men of the insular force...

INDOOR GUN RANGES

Small bore pistol and rifle ranges for recreation at Navy shore activities are recommended in BuPers Circ. Ltr. 52-46 (NDB, 15 March). The ranges are a part of station welfare and recreation programs, and not official Navy qualification ranges. The size of the range would depend on facilities available. Firing distances for indoor small bore rifle ranges are usually 50 ft., and outdoor ranges from 50 to 200 yds. A typical range area at the University of Maryland is set 57 x 82 ft. (the actual range)...

S:...

FALL HANDS
our physical disability while serving in
the Navy or Marine Corps, or for other than physical reasons, will be
placed on the retired list or advanced
to permanent status, to serve in the
permanent rating held at time of retire-
ment. They are eligible for retirement at
higher grade or rating, or pay, if they
meet any of the conditions listed in ex-
ceptions (3), (4), and (5) listed under retire-
ment of regular officers for service.

Enlisted men of the Coast Guard also
may be retired upon their own application after 20 years of active service at 50 percent of base pay plus longevity, unserviceable for
prime time. May not be counted by regular
more active service.

Enlisted men serving under regular en-
listments in the regular Coast Guard are eligible for retirement for service con-
ducted at 50 percent of base pay plus longevity, unless eligible for
retirement in higher grade or rating, or pay, unless exceptions (3), (4), and (5) listed under retirement of regular officers for service.

**RESERVE PERSONNEL**

**SPECIAL TEMPORARY ENLISTMENTS**

There are no provisions for retirement for service for these classes. In cases of disability in line of duty, personnel in these classes are discharged from the Coast Guard for action of the Veterans Administration.

**COAST GUARD SERVICE AS NAVAL SERVICE**

Service in the Coast Guard counts as naval service only in time of war. Current wartime service of the Coast Guard began 1 Nov., 1941 by authority of Executive Order 8929.

Wartime service in the Coast Guard qualifies as armed-forces service for purposes of retirement of Navy or Marine Corps enlisted personnel, that is, for transfer to the retired list after 20 years of active service.

Enlisted men, wartime or peace-time, may NOT be counted by regular Navy or Marine Corps enlisted personnel toward transfer to the Fleet Reserve of the Fleet Reserve of the Fleet Marine Corps Reserve, although it may count toward transfer to the honorary retired list of the Naval Reserve.

Coast Guard service, whether or not under the Navy, may be counted if computing time for retirement when serviceo

**QUIZ ANSWERS**

ANSWERS TO QUIZ ON PAGE 53.

1. Main battery gun-
   → 50%, secondary battery-5%.

2. Field for aid and assistance to members of armed forces may use post card in
   50%, secondary battery-5%.

3. Upper left-airship insignia, upper right-gun pointer, lower left-bombight mechanic, lower right-rifle sharpshooter.

4. Ship's insignia and rifle sharpshooter.

5. 1-chock, 2-cleat, 3-bollard, 4-bitts.

6. False. Bitts are used aboard ship for securing and lowering lines.

7. President is not credited for service.

8. Star is added for each additional citation—up to 5 stars may be added.

**JUNE 1946**

5,000 WARRANTS TO REVERT

Five thousand temporary chief war-
rannt warrants will revert to
permanent enlisted status, effective 1
September. BuPers announced later
last month. Budget limitations for
fiscal 1947 will necessitate terminating
these temporary appointments, it was
announced in Alnav No. 36-46 (NDB, 31
May).

Not affected by the Alnav were
radio electricians, aerographers and
photographers, who will retain war-
grant. There is no excess of
personnel in these specialties.

Officers whose appointments will be
terminated will be selected first from
those who have completed 20 years or
more of service, and second from those
who were appointed to warrant grade
on or about 1 Sept. 1944. This date
shall vary several months, depending
upon the specialty.

Any officer whose temporary ap-
pointment is terminated will be issued
BuPers orders detaching him from his
present duty station, granted accrued
leave, and directed to report to the
commandant of the naval district near-
by. He will report in his home wearing
the uniform of his permanent rating.

All officers whose appointments are
terminated because of budget limita-
tions will be issued certificates of
satisfactory service.

**INFORMATION FOR VOTERS**

Elections will be held during July, Au-
gust and September in the states listed
below. Unless otherwise indicated, mem-
bers of the armed forces, merchant ma-
rine, American Red Cross, USO and the
Society of Friends may use the postal card
(USWBC Form No. 1, or Standard Form No. 76, when available)
as an application for absentee ballot.

As noted below, information as
to voting by all civilians overseas at-
tached to and serving with the armed
forces has not been furnished to the Navy.

Except as noted, all elections are primary
elections for the nomination of candidates
to Congress and state offices.

In some states, county and township officials are
also to be nominated. Post card applica-
tions for ballots may be obtained from the
the CO or the voting officer.

**EARLIEST DATE BALLOT WILL BE MAILED TO BE COUNTED**

<table>
<thead>
<tr>
<th>State</th>
<th>ELECTION DAY</th>
<th>BALLOT WILL BE RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>16 July (a)</td>
<td>16 May</td>
</tr>
<tr>
<td>Arkansas</td>
<td>30 July (b)</td>
<td>20 July</td>
</tr>
<tr>
<td>Colorado</td>
<td>5 August (c)</td>
<td>5 August</td>
</tr>
<tr>
<td>Georgia</td>
<td>15 July (d)</td>
<td>15 July</td>
</tr>
<tr>
<td>Kansas</td>
<td>6 August (e)</td>
<td>6 August</td>
</tr>
<tr>
<td>Louisiana</td>
<td>15 October (f)</td>
<td>15 October</td>
</tr>
<tr>
<td>Maine</td>
<td>8 August (g)</td>
<td>8 August</td>
</tr>
<tr>
<td>Minnesota</td>
<td>9 September (h)</td>
<td>9 September</td>
</tr>
<tr>
<td>Mississippi</td>
<td>10 July (i)</td>
<td>10 July</td>
</tr>
<tr>
<td>Missouri</td>
<td>11 September</td>
<td>11 September</td>
</tr>
<tr>
<td>Nevada</td>
<td>12 September</td>
<td>12 September</td>
</tr>
<tr>
<td>New York</td>
<td>13 September</td>
<td>13 September</td>
</tr>
<tr>
<td>Ohio</td>
<td>14 September</td>
<td>14 September</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>15 September</td>
<td>15 September</td>
</tr>
<tr>
<td>Texas</td>
<td>16 September</td>
<td>16 September</td>
</tr>
<tr>
<td>Utah</td>
<td>17 September</td>
<td>17 September</td>
</tr>
<tr>
<td>Vermont</td>
<td>18 September</td>
<td>18 September</td>
</tr>
<tr>
<td>Virginia</td>
<td>19 September</td>
<td>19 September</td>
</tr>
<tr>
<td>Washington</td>
<td>20 September</td>
<td>20 September</td>
</tr>
<tr>
<td>West Virginia</td>
<td>21 September</td>
<td>21 September</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>22 September</td>
<td>22 September</td>
</tr>
<tr>
<td>Wyoming</td>
<td>23 September</td>
<td>23 September</td>
</tr>
<tr>
<td></td>
<td>24 September</td>
<td>24 September</td>
</tr>
<tr>
<td></td>
<td>25 September</td>
<td>25 September</td>
</tr>
<tr>
<td></td>
<td>26 September</td>
<td>26 September</td>
</tr>
<tr>
<td></td>
<td>27 September</td>
<td>27 September</td>
</tr>
<tr>
<td></td>
<td>28 September</td>
<td>28 September</td>
</tr>
<tr>
<td></td>
<td>29 September</td>
<td>29 September</td>
</tr>
<tr>
<td></td>
<td>30 September</td>
<td>30 September</td>
</tr>
<tr>
<td></td>
<td>31 September</td>
<td>31 September</td>
</tr>
</tbody>
</table>

**INFORMATION FOR VOTERS**

(a) Law does not apply to American

(b) Democratic primary for state

(c) Democratic primary for state and county offices.

(d) Democratic primary for state and county offices.

(e) Letter from qualified voter in armed forces to county clerk designating voter's choice for any proposal or measure, of his choice—first, second, third, etc.—for all candidates to be voted for all offices will be counted the same as a ballot in the primary or runoff election if acknowledged before a commissioned officer and sent within 10 days prior to the election.

(f) Democratic-run-off primary for members of Congress.

(g) Democratic primary.

(h) Wallops voting only to gen-

(i) Run-off primary elections (if neces-

(j) No information concerning absentee

(k) Only members of armed forces may

(l) Must not be received by county

(m) Members of armed forces or mer-

(n) Members of armed forces or mer-

(o) Candidates for congressional offices only.
ALNAVS, NAVACTS IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs, not as a basis for action. Personnel interested in specific directives should consult Alnav or NavAct files directly for complete details before taking any action.

Alnavs apply to all Navy, Marine Corps and Coast Guard ships and stations; NavActs apply to all Navy ships and stations.

Alnavs

No. 170—Directs conservation of lumber.

No. 171—Orders reduction of radio and teletype dispatch traffic.

No. 172—Directs conservation of remaining stocks of painsook drawer and cotton undershirts and issuance only to permanent personnel in actual need.

No. 173—Corrects Alnav 160-46 (NDB, 15 April), adds DCNO (logistics) to list of offices for which Army Industrial College will prepare USN officers.

No. 174—Corrects Alnav 148-46 (NDB, 15 April), adding certain activities to list of those needing technically trained personnel (see ALL HANDS, May 1946, p. 76).

No. 175—Publishes first list of reserve and temporary MarCorps officers recommended for transfer to regular MarCorps.

No. 176—Directs naval vessels or aircraft carrying civilians to radio report when communicable diseases are aboard prior to landing at any port under U. S. military or civilian jurisdiction.

No. 177—Notes American Defense, Area Campaign and Victory Medals probably not available until end of 1946 (see p. 70).

No. 178—Weekly report of USN enlisted strength.

No. 179—Directs inventory of entertainment motion picture programs on hand at 1800 GCT 30 April.

No. 180—Authorizes Reserve Special Commendation Ribbon (see p. 59).

No. 181—Directs at least two checks after smallpox vaccination to differentiate immune reactions from failures to take.

No. 182—SecNav urges all hands to cooperate in the fight against inflation.

No. 183—Provides Navy nurses shall receive same pay and allowances as USN officers (see p. 71).

No. 184—Cancels Alnavs 161-45 (NDB, 31 July), 300-45 (NDB, 20 September) and 335-45 (NDB, 15 October), first two involving officer flight training, third involving officer aerial photography training.


No. 186—Weekly report of USN enlisted strength.

No. 187—Allows dependents traveling to or from overseas areas by government transport 350 pounds of personal baggage for each person over 12, and 175 pounds for each child 5 to 12 (see p. 70).

No. 188—Modifies Alnav 282-45 (NDB, 30 September) and provides that nurses will be separated at certain Wave Separation Centers (see p. 71).

No. 189—Notes enactment of Public Law 347 authorizing personnel strength of Navy and MarCorps and allowing permanent appointment of regular officers (see ALL HANDS, May 1946, p. 41).

No. 190—Modifies Alnav 96-46 (NDB, 28 February) to extend that issue of air travel to dependents is limited to that necessary to make steamer connection for overseas or where otherwise determined by CO of issuing activity (see p. 70).

No. 191—Allows longevity credit for National Guard service performed prior to 18th birthday (see p. 72).

No. 192—Lists additional officers recommended for transfer to regular MarCorps.

No. 193—Gives instructions for adding to roster of officers the dates for which reserve and temporary officers have requested retention on active duty. Modifies Alnavs 270-45 (NDB, 30 September) and 409-45 (NDB, 30 November).

No. 194—Announces USNR and USN-1 EM volunteering for active duty until 1 Mar 1947 according Alnav 137-46 (NDB, 31 March) whereon nominated for Naval Academy Preparatory School prior 17 May 1946.

No. 195—Directs excess narcotics and unfit narcotics be transferred to nearest medical supply activity.

No. 196—Announces issue of overcoats to separatees will be made only where CO decides ultimate destination of separatee justifies issue because of weather conditions. Modifies Alnavs 385-45 (NDB, 30 November) and 457-45 (NDB, 31 December).

WHAT'S IN A NAME?

Keelhauling

Times change and so do the meanings of words. Keelhauling, today, means a reprimand, being "called on the carpet," but originally it was a form of punishment favored above all others by the Mediterranean pirates of the 16th century. Later it was popular in the early English and Dutch navies for a certain class of offenses. It consisted of binding the offender hand and foot, attaching weights—causing the body to sink—then drawing it under the ship's bottom from one fore yardarm to the other by means of whips. The bottom was covered with sharp barnacles, and it frequently was, the torture proved extreme and oftimes fatal. It was only late in the 19th century that the practice was finally banished from the seas.

No. 197—Requests reserve Dental Corps officers submit early applications for transfer to USN.

No. 198—Directs ships, stations and units submit by airmail to BuMed complete NavMed HC-3 card on all USN enlisted Hospital Corps personnel aboard, with copy by air to appropriate personnel distribution commands.

No. 199—Announces cancellation of Alnavs 114-45 (NDB, Jan.-June), 168-45 (NDB, 31 July), and 113-46 (NDB, 15 March) by BuPers Circ. Ltr. 72-46 (NDB, 31 March) giving new service, sea duty and marks requirements for advancement in rating (see ALL HANDS, May, p. 68).

No. 200—Directs commanding officers having surface targets advise BuShips by air mail serial number, type, condition and location of each. Cognizance of such target has been transferred from BuOrd to BuShips.

No. 201—Gives rules for travel of dependents to Okinawa, Philippines and Japan (see p. 70).

No. 202—Announces limitations of punishment in SecNav Ltr. 12 Oct 1945 (item 46-630; NDB, 31 Mar 1946) apply only to offenses committed prior to 1 Jan 1946. Offenses committed after 31 Dec 1945 governed by Art. 457 Naval Courts and Boards.

No. 203—Orders colors at half mast 25 April to 22 May in respect to late Chief Justice Harlan F. Stone.

No. 204—Requests applications not for current month of Navy enlistment be considered.

No. 205—Gives instructions for adding to roster of officers the dates for which reserve and temporary officers have requested retention on active duty. Modifies Alnavs 270-45 (NDB, 30 September) and 409-45 (NDB, 30 November).

No. 206—Lists additional USNR and USN(T) officers selected for transfer to USN.

No. 207—States amendment to Surplus Property Act, awaiting President's signature, orders no government agency may transfer property to

78
another without reimbursement or transfer of funds.

No. 208—States procedure for promotions of former enlisted POWs (see p. 68).

No. 209—Warns of dangers of inflation.

No. 210—Allows USNR officers promoted in return for agreement to remain on active duty a specified period, to remain on duty for that period or until their services no longer are required, modifying Alnav 161-46 (NDB, 15 April).

No. 211—Modifies Uniform Regs to again permit officers to purchase khaki working uniforms (see p. 69).

No. 212—Provides, effective 1 July, that supplies, equipment and spares carried aboard ship in custody of the supply officer, shall be accounted for in terms of money value.

No. 213—Adds personnel transferred to, or recalled from, Fleet Reserve prior 15 Aug 1945, and retired enlisted men, to quotas assigned in Alnav 137-46 (NDB, 31 March) for voluntary retention on active duty.

No. 214—Weekly report of USN enlisted strength.

No. 215—Modifies Alnav 201-46 (NDB, 30 April) and states expectancy of continuation of duty in Japan shall be computed from date of submission of application for transportation of dependents instead of from date of arrival of dependents.

No. 216—Terminates authority for exchange of patent rights and information under lend-lease, contained in para. 3, Alnav 82-46 (NDB, 28 February).

No. 217—Announces 10 scholarships for Chinese culture study, available to servicemen who served in China. Application deadline was 31 May.

No. 218—Lists additional officers selected for transfer to regular Marine Corps.

No. 219—Announces board of officers to meet on or after 20 May to consider retirement of regular Marine Corps officers, ranks of captain through lieutenant colonel.

No. 220—Adds Sp(X)(NC) to list of ratings eligible for transfer to USN under Alnav 51-46 (NDB, 31 January).

No. 221—Announces President has signed Surplus Property Act amendment referred to in Alnav 207-46 (above).

No. 222—Requests applications from USNR and USN(T) officers to apply for transfer to Hospital Corps, USN.

No. 223—Clarifies Alnav 180-46 (NDB, 31 April), which created the Reserve Special Commendation Ribbon.

No. 224—Cancels Alnav 322-45 (NDB, 15 Oct), which requested applications from certain officers desiring instruction in electric tabulating equipment.

No. 225—Requests applications prior to 1 June from USNR officers with degrees in civil engineering now serving in other than CEC classification, to request retention on active duty until 1 July 1947 under Alnav 126-46 (NDB, 15 March) and change of classification to CEC, USNR.

No. 226—Restricts rehabilitation leave to certain classes of personnel after 7 May (see p. 71).

**Navacts**

No. 43—Announces as of 16 April naval mail directory functions transferred from CNO to BuPers.

No. 44—Cancels NavAct 22-46 (NDB, 28 February) and restates conditions for application for duty in naval confinement activities.

No. 45—Requests applications prior 1 June from certain warrant radio electricians and temporary officers for a one-year course in electronics engineering at Naval Research Laboratory, Washington, D. C.

No. 46—Cancels NavAct 16-46 (NDB, 15 February), which requested USNR line ensigns and lieutenants (jg) to apply for supply duty ashore. All billets have been filled.

No. 47—States procedure for USNR officers in legal assignments to remain on active duty. Deadline for requests was 1 June.

No. 48—Refers to Alnav 157-45 (NDB, 15 July), and forbids extra compensation for postal duties (see p. 71).

---

**ALL THUMBS**

**CLOUDY WEATHER**

_JUNE 1946_
FANTAIL FORUM

QUESTION: Of all the places you have seen since you've been in the Navy, which would you prefer to return to for a visit?

(Interviews on the above question were conducted at NAS, Jacksonville, Fla.)

Richard E. Lightfoot, CPhOM, Kansas City, Mo.: The Island of Maui. That's in the Hawaiian Islands. It's a photographer's paradise; I have stacks of pictures of its volcanoes, mountains, girls, sunsets, animals. The town had all modern conveniences...and 10¢ stores and all. It is the friendliest place I've ever seen. Everyone treats you like one of themselves, takes you home to dinner.

Harry Hammel, AMM1c, River Edge, N. J.: Chicago in the USA. I've seen those far-away romantic places and those quaint little towns, but I'll take the place where there's something to do - sports, amusement, night clubs, where people aren't always trying to clip you, where the girls are good sports as well as good lookers, where there's cheap transportation, good food, plenty of bars. That place is Chicago.

Robert A. Goulet, Y3c, Philadelphia, Pa.: Los Angeles, where I just spent seven days, but made friends in whose homes I'd be welcome any time again. That city is just like the Chamber of Commerce says it is. The girls should all be in the movies; they're so beautiful. An ideal vacation spot - what do I mean vacation spot? I'd be willing to sell apples on the corner just to stay there.

Wesley S. Bellomy, Y1c, Luthersville, Ga.: Three things about Glasgow and Edinburgh, Scotland, really impress me. The quaintness of the towns; the people were marvellous, and the towns were beautiful. If you climbed to the top of a hill on a clear day, the city is so colorful it takes your breath away. It is really a very beautiful place.

William Sirgent, AOM1c, Des Moines, Iowa: Manila, any day. People there don't bother themselves with worry and worry. There was no "keeping up with the Joneses" - no one cared what his neighbor did. And good times - every sport I ever heard of and a few more! There's every amusement you can find in the States, and even a big luxurious summer resort at Baguio where you can spend your leave.

Cecil B. Wood, Jr., Y1c, Winter Haven, Fla.: I like the island life of Samoa and it's clean you can enjoy it without fear of so many of the usual diseases. The natives are well-built, outstanding looking people, the women are beautiful. Yes, I'd like to go back on a pleasure cruise, eat baked octopus and raw fish, go lobster hunting on the reefs and spear-fishing again.

Donald E. Clark, Sp(1)c, Hastings, Mich.: I'd like to see Honolulu when it's settled back to normal and the service people have gone home. I liked the curious blend of the white man's customs practiced right along with the oriental ones, especially the colorful "presenting of the leis," with kisses from the local belles. The whole atmosphere of the city, happy-go-lucky way of life got into my veins.

Harry N. Luttmore, SK3c, Savannah, Ga.: I fell in love with Chapel Hill, N. C. It has all the romance and atmosphere of a college town. If I didn't plan to go to school there as soon as I get out of the Navy, I'd go back and visit anyway, just to enjoy the atmosphere of peace and beauty, good fellowship - and the sense it gives you that everyone is going somewhere, soon.

ALL HANDS

THE BuPERS INFORMATION BULLETIN

With approval of the Bureau of the Budget, this magazine is published monthly in Washington, D. C., by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired. Original articles of general interest may be forwarded to the Editor.

DATES used throughout are local times at scene of action unless otherwise indicated.

Since this magazine is classified, it sometimes is limited in its reporting and publication of photographs. If therefore cannot always fully record achievements of units or individuals, and may be obliged to omit mention of accomplishments even more noteworthy than those included.

REFERENCES made to issues of ALL HANDS prior to the June 1945 issue apply to this magazine under its former name, The Bureau of Naval Personnel Information Bulletin. The letters "BNB" used as a reference, indicate the official Navy Department Bulletin.

DISTRIBUTION: By BuPers Circ., Ltr. 167-43 (NDP, cum. ed., 31 Dec., 43-1362) the Bureau directed that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicated that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the directive.

In most instances, the circulation of the magazine has been established in accordance with complement and on-board count statistics in the Bureau, on the basis of one copy for each 10 officers and enlisted personnel. Because intraactivity shifts affect the Bureau's statistics, and because organization of some activities may require more copies than normally indicated to affect thorough distribution to all hands, the Bureau invites requests for additional copies as necessary to comply with the directive. This magazine is intended for all hands and command officers, who may apply for copies through the Bureau, on the basis of one copy for each 10 officers and enlisted personnel to accomplish the directive.

The Bureau should be kept informed of changes in the numbers of copies required; requests received by the 20th of the month can be affected with the succeeding issue.

The Bureau should also be advised if the full number of copies is not received regularly. Normally copies for Navy Mail are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary, where special circumstances warrant resending direct to sub-activities, the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant, U. S. Marine Corps. Requests from Marine Corps activities should be addressed to the Commandant.

PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.; 20 cents per copy; subscription price $2.00 a year, domestic (including FPO and APO addresses for overseas mail); $2.75, foreign. Remittance should be made direct to the Superintendent of Documents. Subscriptions are accepted for one year only.

• AT RIGHT: The two halves of a giant Bikini clam are held by Lt. [jg] B. B. Pribble. Clams such as this one, found on the ocean floor inside the lagoon at Bikini atoll, often measure more than three feet across and weigh approximately 300 pounds.
The Navy is pledged to conserve food and eliminate waste as its contribution to the relief of starving populations abroad.