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• FRON T COVER: Natives of Bikini Atoll leave their village homes, carrying household goods, to board LSTs as preparations are made for the first peacetime test of the atom bomb at the Pacific Island.

• AT LEFT: Basking on Hoover Beach near Apra Harbor, the port of embarkation from Guam. When sun gets too hot, men can retreat under the sunshade pavilion. Separates pass hours here while awaiting transportation home.

• INSIDE BACK COVER: It's snowjackets for bluejackets of the USS Juneau as they stand at attention during commissioning ceremonies at the New York Naval Shipyard 16 February. The new 6000-ton light cruiser replaces her namesake, sunk off Guadalcanal in 1942.

To the North, from Point Barrow to Baffin Bay, the winds of Arctic winter howl across the bleak wastelands. Ice barriers high as a house rise in jumbled confusion above the cold-tortured plains. Boulder-strewn ridges form angry slashes across the face of the snowbound land. At 60 degrees below zero, frost hangs in the air like fog and turns daylight—when there is daylight—into darkness.

At sea, ice chokes the waters and ice sheathes the rigging. Aloft, visibility may be unlimited one moment, and zero-zero seven minutes later. Magnetic compasses won't work, radios go haywire, and ordinary engine oil freezes to solid ice. It is even a problem to keep the sparkplugs hot in a racing aircraft engine.

This is a land in vast areas uncharted and by most men unloved. Breath turns to icicles, eyelids freeze together, chilled metal burns the bare skin, and frostbite is an ever-present enemy. Nowhere is the friendly warmth of bunk or wardroom more welcome after watches at sea—but ashore men must case themselves like mummies in sleeping bags so snug that some awake screaming in a panicky claustrophobia.

Into this bitter land, its perilous seas, and its dangerous and icy air, the armed services of Canada and the United States last month sent men and machines in a search for information. For a new concept of global strategy—the concept of the air age—had focused the spotlight on the Far North as the shortest route to almost everywhere.

These were no military maneuvers. Rather, they were tests of equipment—and men—and a further probing into the natural resources of a land whose assets mostly are frozen. They were quests for facts—and the United States Navy was playing a major role.

To the east of Canada, where Davis Strait links Baffin Bay with the waters off the coast of Labrador, one of the Navy’s mightiest aircraft carriers—USS Midway—took on board three destroyers and a tanker on “Expedition Frostbite,” a momentous test of carrier-air operations and special equipment in ‘way-below zero weather.

In the northern “barren lands” of Canada, from Manitoba north through the Northwest Territories, west and then south to Alberta, Canadian soldiers and scientists, and observers from the United States and Britain—including a representative of the U. S. Navy—were engaged in a 3,130-mile trek by “snowmobile.” Supplies were coming in by air, despite weather which grounded planes for days at a time. The journey was equivalent in distances and directions to a trip from Memphis to Duluth to Cheyenne to Pecos, Texas, but the equivalent in difficulties to the progress of an ant in a gallon of ice cream mixed with rock salt. Again, it was primarily a test of equipment, and they called it “Exercise Musk-Ox.”

Less spectacular, but scarcely of less importance, was the activity in northern Alaska, where 62,000 square miles have been set aside as Navy Petroleum Reserve No. 4 since 1923. There, with headquarters at Point Barrow on Alaska’s extreme northern tip, civilian engineers were taking over where the Seabees left off in the quest for oil, the lifeblood of modern naval, air and ground forces.

And the U. S. Army Air Forces, which between April 1942 and August 1945 ferried 7,929 airplanes from Great Falls, Mont., to Fairbanks, Alaska, and turned them over to Russian pilots for an even longer journey across Siberia to the eastern front in Europe, was planning to expand tactical research at its cold weather experimental station at Ladd Field, Fairbanks.

These investigations of the Far North’s secrets were all part of the same general picture, but for Navy
ACROSS A VAST expanse of wilderness, ice, land and sea the armed forces of the United States and Canada are studying Arctic defense. The Air Age has focused attention on north as "shortest route to almost everywhere."

men, the greatest interest centered on the Midway's voyage. It was a trip of considerable interest to the American public as well, and seven newspaper and magazine writers, as well as three photographers and a newsreel cameraman, were aboard the 45,000-ton CVB as guests of the Navy.

As the Midway pushed through the icy waters off the coast of Greenland, Rear Admiral John S. Cassady, former AstCNO (Air) and commander of the Midway task group, told the newsmen the test had convinced him carriers of the Midway class could fight in any waters, even the windsept seas around the Arctic Circle, the Associated Press reported. He added that he felt Essex class carriers could operate in these waters as well, although such vessels are considerably smaller than the Midway class.

Admiral Cassady declared before sailing that the Navy had been interested in adding to its information on the feasibility of air operations in frigid regions since the Ranger, a carrier now obsolete, made experimental tests around Alaska in 1935.

Plans for "Expedition Frostbite" were in the making since last November, and many items of new equipment went along with the Midway. A Coast Guard helicopter for air-sea rescues, snowplows to operate on the giant flightdeck, recently-developed exposure suits designed to protect fliers forced down in frigid waters, and baskets attached to cranes projecting from the destroyers Vogelgesang, Ware and Stormes, also for fishing out downed pilots and aircrewmen, were included in the expedition's gear.

Most of the planes aboard the Midway were Chance Vought Corsair (F4U-4) fighters and Curtiss Helldiver (SB2C) bombers, but one of the Navy's new FR-1 jet-propelled planes and one of the new Grumann fighters, the Bearcat (F6F), were taken along for experimental purposes.

The plane complement was reduced deliberately from the normal 137 to 58 aircraft so the planes could be warmed up in hangars below the flight deck, instead of trying to start them "cold" from the deck. Special equipment for the planes included covers for wings and propellers, special starters and heaters, and diluters for the oil systems.

Although the original tests aboard the Ranger pointed the way to much of the cold-weather equipment subsequently devised, the recent war afforded little opportunity to learn what carriers can do under frigid weather conditions, since most of the
EYES NORTH (Cont.)

operations were confined to the Pacific.

Off Labrador, however, the Midway was making up for lost time. A near-
hurricane of 60 knots tore 40 of the 42 liferafts from their lashings on the
forecastle 35 feet above water. The gallery deck, 44 feet above water, was
buckled in places by waves which broke over the bow. Flight schedules
were cancelled as the Midway rolled 18 degrees. Escorting cans rolled as
much as 50 degrees one night. On the flight deck, eight steel cables were
used to secure each of the 33 planes lashed topside during the blow.

On another occasion, waves dam-
aged hangar deck doors of the deck-
edge elevator, which carries planes
between the port flight and hangar
decks amidships.

Launching and taking on planes in
cold weather presented new problems.
The group ran into hard luck a week
after leaving Norfolk, with one of its
pilots killed and three planes lost while
attempting landings.

In the “Musk-Ox” test, one of the
most important pieces of gear—the
snowmobile—was a development of an
invasion that never came off. Cana-
dians built the machine for the Nor-
way invasion.

The new snowmobile has a five-
passenger cabin mounted on sixteen
pneumatic-tired bogey wheels sheathed
in a yard-wide rubber track reinforced
with steel cleats. It weighs 8400
pounds, yet because the wide tracks
often leaves a lighter depression in
the snow than a man’s foot. It has
a ground pressure of only two pounds
per square inch of track.

Within the duralumin and plywood
body, which has large, armored-glass
windows, leather-cushioned double
seats provide a double bed at night.
The temperature inside is kept only
slightly warmer than the outside, to
prevent the men from perspiring,
which would destroy the insulation of
their clothing, although the interior
may be raised to room temperature

Official U. S. Navy photograph

SEABEES ENGAGED in the Alaskan oil exploration proj-
ect adopted raiment suited to rigors of the Far North.

WITH HEADQUARTERS at Point Barrow, the Navy
pushes development of 35,000-square-mile oil reserve.

BULLDOZERS SERVE as locomotives for this Seabee supply train moving inland to the oil reserve from Point Barrow.

Tractor sleds moved some of the world’s heaviest construction equipment over this barren North Alaska terrain.

All Hands
THE GIANT USS MIDWAY, completed too late to participate in the war, steamed north to test air operations off the coast of Labrador. Crew and observers aboard kept warm in rubberized nylon exposure suits shown at left.

ADMIRAL ROBERT E. PEARCY, below, left, discovered the North Pole. The USS Bowdoin, right, charted the North.
EYES NORTH (Cont.)

NAVY AIRMEN learned of the far north in the rugged experiences of the war. At left, Eskimos and their huskies greet a NATS plane at Point Barrow. At right, crewmen Wade in icy water to maneuver NAVY PBY to landing ramp.

for emergencies such as treatment of casualties.

Numerous difficulties were reported. Each division of three vehicles was equipped with radio and雷达. The major difficulties had been evacuated by air in the early stages of the trip, and minor mechanical breakdowns were reported several times. Yet the expedition pushed steadily onward.

Behind each snowmobile, two sleds were towed. A typical sled load included 20 five gallon cans of gasoline, a tent, four sleeping bags, six caribou skins, a mukha stove, lamp, four axes, a saw, rifle, two snow knives, frying pan, two pots, and emergency rations. The men's food provided 5,900 calories daily, compared to the average of 3,000 to 4,000. Food was pre-cooked, frozen, and dropped to the men from airplanes—then thawed out and warmed for consumption.

On ordinary stops, the men leveled off the snow, pitched nylon-lined tents, laid cocoa-fiber mats, carabou skins and quilted pads, then crawled, naked, into their feather-filled sleeping bags—an experience similar to diving into a mountain stream. When the weather was stormy, or time permitted, they built igloos from blocks of the snow hacked out with knives.

One of the stops on the Musk-Ox route was at Fort Radium, source of pitchblende from which uranium for atomic bombs is derived. The next stop was scheduled at Fort Norman, near the Norman Wells oil fields, which the U. S. developed during the war.

The Norman Wells project, known as Canol, was designed primarily as a source of fuel for equipment used in building the Alcan Highway and airtrips along the ferry route to Fairbanks, and for planes flying the route.

The operation of that ferry route by the Army Air Transport Command was an epic of the North all its own. Under incredibly bad operating conditions, with temperatures low as 67° F, and despite losses of men and planes—without a trace to this day, in some cases—the Army dug 3,300 medium bombers, 1,933 light bombers, 5,068 fighters, 710 trainers and 64 planes of other types were delivered from Great Falls by land-180 airline miles but 331 miles by land—to Umiat, where a test well 1,516 feet deep was dug. A later round trip by air over the magnetic North Pole revealed the presence of five different layers of oil-bearing sands.

Twelve shallower test wells were dug at Cape Simpson, many of them also indicating oil possibilities. At both Umiat and Cape Simpson, the Seabees found the ground frozen to depths of more than 500 feet. Tractor trains which covered 2,400 miles of terrain never before traversed by anything but a few Eskimo dog teams recorded temperatures as low as 45 degrees below zero, and at the drilling sites the thermometer fell at times to the minus 50s and 60s.

Last summer, a supply expedition returned to Point Barrow by sea, with the Liberty ship Mills this time accompanying the Spica and Harrington. Again the ice was a constant hazard, damaging one ship twice.

The mysteries of the Far North have intrigued man for centuries, yet only 30 major expeditions have been recorded since John Davis, an Englishman, ventured to the northwestern wastes of Greenland in 1587. One of the greatest explorers was Admiral Robert E. Peary, civil engineer officer of the U. S. Navy, who reached the North Pole just 27 years ago this month.

Admiral Peary's arrival at the North Pole climaxd 20 years of explorations in the Far North. On 16 May of last year, however, a British bombing plane took off from Iceland, circled the pole, and was back at its field in Iceland about seven hours after takeoff. A later round trip by air over the magnetic North Pole reported it was 200 to 300 miles away from its usual location. The magnetic pole is the principal reason for diffi-

ALL HANDS
cultures with compasses in the Arctic.

Lieutenant Commander (now Rear Admiral) Richard E. Byrd, USN (Ret.), flew over the North Pole in 1926, making a round trip from Spitzbergen. Three days later, the Amundsen-Ellsworth-Nobile Expedition also crossed the pole by air on a trip by dirigible from Spitzbergen to Alaska. These were the first flights over the North Pole, and came 17 years after Admiral Peary had reached his goal.

United States naval officers engaged in Arctic explorations as early as 1850, and in 1879, the steamer Jeanette, presented to the government by James Gordon Bennett and manned by naval personnel, set out from San Francisco to explore the then unknown approaches to the North Pole through the Bering Strait.

Caught in the ice in the Arctic ocean, the Jeanette drifted westward far beyond Wrangel Island and was finally crushed and sunk on 12 June 1881. For three months, the crew made perilous way together in three boats for nearly 500 miles toward the Siberian coast until separated by a gale. One cutter was never heard from again. The other two reached the Delta of the Lena river at widely separated points. One of these parties, including Commander G. W. DeLong, the skipper of the Jeanette, died of sickness or starvation with the exception of the two strongest men. Although disastrous, this expedition and subsequent relief expeditions contributed much to knowledge of the far north.

Through the years, the majority of the polar expeditions have been British or American, but Soviet Russia has come to the fore in this field more recently. During the recent war, Russia’s knowledge of cold weather operations proved to be a factor in the defeat of Germany. Today, Russia is farther advanced in Arctic warfare than any other Nation, according to Captain Clifford J. McGregor, famed Arctic explorer who was aboard the Midway.

Russia, for example, has approximately 800 weather stations in the Arctic regions of Siberia, compared with Canada’s ten in her northern territory. Russian planes flew across the polar ice cap from Moscow to the west coast of the United States as early as 1937, a month after another party of Russians flew to the North Pole and established a base on an ice floe, leaving behind a party of four men with a year’s supplies and a radio with which they sent out daily weather reports.

The Russian ice breaker Sedoff, ice-bound 23 Oct 1937, drifted to within 250 miles of the North Pole before she was rescued by another ice breaker three years later. This was the farthest north ever reached by surface vessel. The Russians in 1935 established the most northerly radio station, in Franz Josef Land. They have an ice breaking machine capable of smashing ice seven feet thick. Captain McGregor said the Russians had also perfected weapons and equipment capable of operation when other countries think it too cold for movement.
Proposed 20 Percent Increase In Income Will Be Considered

LEGISLATION WHICH MAY LEAD to a 20 percent pay increase for all hands of the Navy was headed for hearing in Congress last month. Up for consideration, possibly before a joint committee of the House and Senate, was a joint Navy and War department recommendation that the income of the nation's service men and women be raised to meet higher living costs and to spur recruiting for the postwar armed forces.

Pointed up by the possibility that the draft act will not be extended when it expires in May, the proposal calls for a 20 percent upward adjustment in the base pay of enlisted men and the base pay and allowances of officers of the Navy, Army, Marine Corps and Coast Guard, with provisions also extending to officers of the Public Health Service and the Coast and Geodetic Survey.

The aim of the recommendation was emphasized in a statement by Secretaries James Forrestal and Robert P. Patterson: "The purpose is to bring current pay scales more in line with increased living costs and also to provide additional incentive to recruiting. The security of the nation in this period of transition from war to peace will require the enlistment of the maximum number of volunteers for the armed forces."

The bill before Congress is an amendment to the Pay Readjustment Act of 1942 and if approved as introduced would go into effect the first day of the second month after it is signed by the President. Some of its results would be:

- The increases would apply to all members of the Navy, men and women, from apprentice seaman to fleet admiral, including those on the retired lists.
- The base pay of enlisted men, aviation cadets and midshipmen would be increased by 20 percent.
- A similar raise would be made in the base pay, rental and subsistence allowances of commissioned and warrant officers.
- Provision is made for payment of a $10,000 gratuity to dependents of service personnel killed in military aircraft accidents, providing they are on authorized flight and are not receiving flight pay.
- The present limitation of $458.33 on the pay of chief warrant officers and warrant officers would be lifted.

No changes were recommended in the present rates for longevity, sea duty, and submarine, flight and diving service, although an increase in base pay, would, of course, cause a corresponding gain in income from these sources. Clothing allowances and family allowances paid to the dependents of enlisted men would not be altered.

Here are two examples of how the men and women on the receiving end of the pay window would be affected by the proposed increases:

- A seaman first class with no longevity, who now receives $90 a month in base pay, would be paid $72.20 monthly, a raise of $12.20, or 20 percent.
- An ensign with dependents who has no longevity now receives a total of $252 monthly from base pay, rental and subsistence allowances. This would be increased to $305.40, the base pay being raised from $150 to $180; the rental allowance from $90 to $72, and the subsistence allowance from $42 to $50.40. If he were on flight pay, the $305.40 would be raised an additional $90, or 30 percent of his new base pay of $390.

The recommendation, sent to Capitol Hill on 25 February and later referred to the military affairs committees of both houses, grew out of a provision in the first Supplemental Surplus Appropriation Revision Bill, passed in February, calling upon the War and Navy departments to recommend revision of pay schedules. Back of this provision lay a Senate Appropriations Committee demand for a pay study. Members of the committee had asserted that there were abuses in the matter of flying pay.

The Navy and War secretaries answered this point:

"After long and careful consideration, the Secretary of War and the Secretary of the Navy recommended that no changes be made with respect to increases in pay authorized for flying pay, parachute pay, glider pay and submarine pay, or similar special pay and allowances."

The recommendation was drawn up and approved unanimously by a interdepartmental pay committee, on which were represented all six services including the air units. Heading the group is Lieutenant General Wade H.
Haislip of the War Department and the senior Navy representative was Rear Admiral Robert B. Carney, USN.

Committee members have prepared charts and statistics to illustrate for Congress the gap that exists between what a man can earn in the services and in civilian pursuits; the spread between a service man's income and what he has to spend for living costs also is shown.

If the proposed increase is granted, it is estimated that approximately $276,000,000 would be added to the Navy's annual payroll for a postwar force of 500,000 men.

In the future it is planned to conduct a continuing study of the whole service pay structure, with an eye to the elimination of any injustices which might exist in pay and allowances. Prominent civilians may be called in to serve on the interdepartmental committee and the earnings of service men would be considered continuously in the light of current economic conditions in the country.

The cost of living and flight and submarine pay and the comparative earnings of civilian workers were noted by such issues as the ingredients of a ration and the amount of spirits a ration should contain when the first official Navy pay and ration act was passed by Congress 153 years ago last month, in March, 1794. The bill also provided for the building of six ships for an expedition against the Barbary corsairs plundering American shipping. About 2,000 men were to be recruited.

Under provisions of the act, the skippers of the ships were to receive $75 a month. The surgeon was next man on the pay roll, with $50, and lieutenants, chaplains, sailing masters and pursers were down for $40. A surgeon's mate was to receive $30 and a lieutenant of marines, $26. The rate for boatswains, gunners, sailmakers and carpenters was $8 a month.

The act did not set definite rates for crewmen, but empowered the President to do so, provided the whole sum did not exceed $276,000 a month.

Congress in 1794 went into detail about rations, which were considered an integral part of the expedition's pay. The legislation allocated six rations a day to the captains, three to lieutenants, two to the rest of the officers and one to crew members.

One-half pint of distilled spirits went with each ration. If spirits were not available, beer to the amount of one quart per ration was to be provided.

Spirits and beer were a part of the Navy ration until 1862, when a Congressional act restricted the use of liquor to medical purposes only and raised the seamen's pay five cents daily as compensation. The story is that celebrations marking this milestone inspired a once-famous dirge:

"Jack's happy day will soon be past,
To return again—no, never!
For they've raised his pay
Five cents a day
And stopped his grog forever."

Here is the Navy's first official ration as set down in the 1794 act:

Sundays and Tuesdays—One pound of bread, and one and a half pounds of beef; on Sundays, a half pint of rice and on Tuesdays, a pound of potatoes or turnips, and pudding.

Mondays, Thursdays and Saturdays—One pound of bread, one pound of pork and a half pint of peas and beans; four ounces of cheese added on Mondays and Saturdays.

Wednesdays—One pound of bread, butter or molasses, four ounces of cheese and a half pint of rice.

Fridays—One pound of bread, one pound of salt fish, butter or oil, and a pound of potatoes.
MASSIVE STONE STATUE of Christ overlooks modern Rio de Janeiro in above panorama of the Brazilian capital taken by a photographer of carrier Franklin D. Roosevelt. Sugar Loaf Mountain is in near background beyond bay.

'SHAKING DOWN' TO RIO

THE COLOR OF A BRAZILIAN presidential inauguration and the famed attractions of Rio de Janeiro, scenic and otherwise, highlighted the first overseas mission of the USS Franklin D. Roosevelt.

The new 45,000-ton carrier and its officers and men, 3,600 strong, made a good will trip to the South American port to be on hand when Major General Enrico Gaspar Dutra was sworn in as chief executive of the United States of Brazil on 31 January.

Its streets bedecked with flags and its recreation centers in full swing, Brazil's capital was in a festival mood for the occasion and men of the Roosevelt were treated as guests of the city. They visited the statue of Christ atop Mount Corcovado, rode up Sugar Loaf by cable car, bought souvenirs and swam at beaches where the view featured more than the sea. Later, they toured the night spots, one of which presented the ship's swing band in its show.

More than 500 men attended military mass in the city's beautiful Candelaria Cathedral, marching to the church in a line headed by American and Brazilian colors.

Rear Admiral John Cassaday, ComCarDiv 1, and Capt. Apollo Soucek, the Roosevelt's skipper, were hosts to noted guests during the stay. Among them were President Dutra; F. H. LaGuardia, President Truman's personal envoy to the inauguration; Vice Admiral Jorge Martins, Brazilian minister of marine; Vice Admiral Jose Neira, chief of staff of the Brazilian navy; and Admiral of the Fleet Sir James Sommerville of Great Britain.

The Roosevelt, commissioned at New York Naval Shipyard on 27 Oct 1945, went on a shakedown cruise in the Caribbean before proceeding to Rio.

SWINGING AT ANCHOR off Rio is the Navy's new super carrier Franklin D. Roosevelt, her flight deck dotted with some of the 132 planes the 45,000-ton ship carries. The carrier visited Brazil on a goodwill trip after its shakedown.
SOUTH OF THE EQUATOR it's white hats and sunshine for these sailors on liberty from the carrier Roosevelt in Rio. Touring American bluejackets get a striking view of the Brazilian city from cafe atop Sugar Loaf Mountain.

IT'S SALUDOS AMIGOS and plenty of sightseeing too for these FDR sailors pacing broad boulevards of downtown Rio.

A COOL CERVEZA (that's beer, mate), among friends at the cafe atop Rio's high Sugar Loaf.
AIRCREWMAN J. P. Dinsmore, ARM 2/c, swaps some stories with Naval Administration guards in Rio.

'SHHERE'S TO GAY RIO' say these bluejackets drinking a toast in front of the Copacabana Palace Hotel on 'Cope' Beach. Yender at left likes the idea.

SERENE BEAUTY of Rio's Candelaria Cathedral is shown above as the Roosevelt bluejackets attend divine services.

TIME OUT to look over the offerings of a sidewalk newsstand is taken by these
POINTING THE WAY to Rio for W. A. Ross, PhoM 1/c is Olga J. de Silva, model, with friend, Fernando de Brito.

sailors from carrier Roosevelt. Crew-spent liberty touring Rio’s scenic spots.

BRAZILIAN MONETARY system is based on cruziero (crew-sher-oh), native explains to Roosevelt crewmen.

FINGER WAVE is added to the GI haircut of an FDR crewman by a pretty Brazilian. Somehow, Rio’s beaches were favorite spots for visiting bluejackets.
ACKSTAGE
AT BIKINI

Test Preliminaries
Turn 'Atom Atoll'
Into Busy Beehive

ONCE UPON A TIME ON A CORAL BEACH in the far reaches of the Pacific where the sand is like crushed glass that hurts your eyes, unsuspecting hermit crabs and sea urchins swished about in the surf. Scrappy palms went on bearing coconuts as they had since time immemorial and outlandish little fishes played tag in shallow pools the sea left behind atebb tide.

That was Bikini before the coming of the great experiment. Today extensive preparations for laying the next atomic egg and recording the accompanying explosions are transforming this remote Marshall Islands' atoll and adjacent hopping-off places from lonely outposts into hives of activity.

Overseas movement of the Army Air Force personnel scheduled to participate in the tests, named “Operation Crossroads,” began early last month with the main ground echelon and advance air group departing from the Roswell Army Air Field, N. M., for Kwajalein, 170 miles southeast of Bikini. They comprised units of Brigadier General Roger M. Ramey’s Task Group 1.5, the AAF’s component of Joint Task Force 1 which is running the show.

One part of the vanguard included 600 AAF service personnel, many of whom were administrative and technical experts, under the command of Maj. Harry L. McMillen of Winona, Minn. The other section made up the first air movement from Roswell Field. Giant C-54’s led by Lt. Col. Louis Thorup of Salt Lake City, Utah, took an advance unit of 175 officers and men to Kwajalein where they promptly set up housekeeping and began laying the groundwork for their assignment in the project.

Meanwhile, the first scientists arrived in the Bikini area. The initial party numbered 14 and included biologists, botanists, oceanographers and two commercial fishermen. Their mission is to catalogue plant and animal life to get a before-and-after picture. “Crossroads” was originally scheduled for 15 May and the second test for 1 July. However, on 22 March President Truman announced a postponement of both events for “about six weeks.”

Well in advance of the first test, a dress rehearsal of all phases of “Crossroads” will be held at Bikini. The general plan calls for evacuation of all task force personnel from the atoll and subsequent rehearsals of the bomb drop, the radiological safety patrol and the methods to be employed in re-entering the area.

The demonstration will be held under the guidance of Capt. Charles H. Lyman, USN, assistant chief of staff for operations. A similar rehearsal will be conducted prior to the second test.

Early preparations took care of one necessary migration—the removal of Bikini’s sparse native population. By the middle of March, Joint Army-Navy Task Force 1 announced the MOVING DAY at Bikini means farewell to the atoll for these natives as they leave their island home where the atom bomb will be tested by the U. S. Photograph from Press Association, Inc.

island’s 167 men, women and children had been evacuated to Rongerik Atoll, a previously uninhabited island 109 miles east of Bikini in the Marshalls.

According to the report, “King” Juda and his 12 chiefs, unanimously agreed to the evacuation as their contribution to the advancement of science. The Army and Navy have constructed attractive new homes on Rongerik for the natives.

Seabees were among the early arrivals in the area. They are currently busied with the construction of six 75-foot steel towers on tiny islands surrounding Bikini to hold the “eyes” of the operation.

High-speed motion picture cameras shooting at the rate of 3000 frames a second, spectroscopic and photometric cameras for coverage of radioactivity and scores of aerial and general purpose cameras with special filters and lead cases will be employed in the test. In addition, cameras without lenses to accurately record “Crossroads” even if the explosions are 1000 times brighter than the sun, have been developed.

Although the tests are being designed primarily to determine the effects of the bombs on naval vessels, employment of a wide assortment of “guinea pig” material to show the effect of the bombs on military equipment is revealed in details of the Army Ground Forces’ participation in the coming operation.

 Tanks, armored cars, trucks, mili-
They number 200 goats, 200 pigs and 4,000 white rats. The animals will be placed in the GQ stations a crew would normally man during an emergency. Some of the pigs will be clad in standard Navy anti-flash suits and smeared with anti-flash lotion. Others will get new and secret protection.

Despite mounting complaints from anti-vivisectionists and animal lovers, the medics generally feel they could do much more good in the interests of science if the animals were wounded than if they are killed. Capt. R. H. Draeger, head of the Navy's medical section, said that radiation-sick animals are wanted, not radiation-dead ones.

Following the blast the animals will be taken to the USS Burleson, a specially-equipped transport, where they will be closely studied with an eye to future protection of humans against deadly radiations and cures for those exposed to the rays.

While many of the actual plans for the operation are still in a formative stage, this much has been decided upon:

The bomb employed will be similar to that used at Nagasaki, which is the most powerful atomic-type bomb in existence today, and will be exploded "several hundred feet" above Bikini. The bomb will be dropped by one B-29 from 30,000 feet. Two other B-29's will have over the bomb carrying plane prepared to drop parachute-suspended pressure recording instruments and blast gauges simultaneous with the release of the bomb. Eight B-29's and two C-54's, each with 28 cameras, will swoop in next. Finally, four crewless B-17's radio directed by other B-17's will be shepherded into the radioactive cloud mushrooming from the center of the explosion.

Thirty minutes following the blast and upon order of Admiral Blandy, two PBM's will fly over the lagoon cortex of the explosion with Geiger counters to measure radioactivity. If the way is safe, they will come in low, 40 feet above the water. Next, two helicopters will drop in to pick up water samples. The first vessels to enter the lagoon will be a half dozen small gunboats also outfitted with Geiger counters. When they send out a favorable report by radio, launches carrying the first load of scientists will move in and investigation of the target ships will commence. Lastly, medical units, BuShipsmen, the remaining scientists and associated military service personnel will enter the lagoon.

The second atomic bomb test calls for an explosion on the surface of the water. A third and final test wherein the explosion will occur beneath the surface of the ocean, is contemplated for sometime late this year or early in 1947. Deep water will be needed for the last experiment to minimize effect of the ocean's bottom.

Doctors Reveal Findings. A world eager to learn the effects of the atomic bomb substituted a few suppositions with some choice morsels of factual matter when the Navy's medical investigation of the explosions at Nagasaki and Hiroshima was made public last month.

An account of the physiologic effects of radiation, given by Capt. Shields Warren, MC, USNR, before the American Association for Cancer Research, of which he is president, revealed along with other important data two pertinent facts:

- The harmful effects of short wave radiation upon those actually bombed ranged from slight to fatal;
- None of the many persons who entered the bombed areas soon after the explosions and who remained there was found to have suffered ill effects from residual radio-activity.

Studies conducted by Dr. Warren and his colleagues, under direction of the Naval Medical Research Institute and the Naval Technical Mission to Japan, in cooperation with the Army Medical Corps and Manhattan District, were concerned chiefly with injuries.

AMONG NATIVES on Bikini were many skilled craftsmen who learned their skills early. Family above weaves fans and mats before leaving island.

Associated Press Photograph

Marshall Islanders from the site of the atom bomb test. Everybody helped load household goods on waiting LSTs.
due to radiation. Their research was furthered by collaboration with the investigating group from the Manhattan District under Col. Stafford L. Warren and the Joint U. S. Army Imperial Japanese Government Atomic Bomb Commission under Colonel A. W. Oughterson.

According to Dr. Warren, one group of victims of radiation injury showed immediate effects. These were weakness, malaise fever and often death. They appeared usually within 48 hours after the explosion. A second group showed delayed effects manifested in a variety of ways. Unfortunately, the disorganization of the Japanese was so great that no adequate material exists to determine the exact nature of the immediate effects, Dr. Warren pointed out.

However, it was easy in the cities and villages around Nagasaki and Hiroshima to pick out persons suffering from delayed effects by characteristic flash burns and often baldness. When Dr. Warren left the stricken areas four months after the bombings, many of the cases where loss of hair had occurred showed some degree of regeneration in the form of new downy hair. Scalp hair was lost while that of the eyebrows and beard persisted.

Radiation also was found to affect the blood-forming tissues. Here cases fell into three general groups although there was an overlapping to some degree. The first was the leukopenic group. The white blood cells of these victims were virtually destroyed. The great bulk of leukopenic deaths occurred during the first three weeks following the bombings.

From three to five weeks after the cataclysmic blasts a considerable number of deaths by hemorrhage were recorded. In these instances the victims' blood failed to clot. Some cases had massive hemorrhages from various body orifices. Often blood filled the pleurae of the kidney, or the stomach, or elsewhere in the gastro-intestinal tract. The third group suffered serious damage to their bone marrow. Those who weathered the first few weeks later showed anemic manifestations with red blood cell counts in some cases dropping to one million or below, Dr. Warren explained.

Another effect of radiation was injury to the testis in the case of male victims and to the ovaries in female cases. Here the male patients were generally in the worse condition.

In conclusion Dr. Warren stated he was sure it would be necessary to follow the population of Hiroshima and Nagasaki for many years to determine the long range effects on the blood, resistance to disease and in genetic changes induced by the doses of radiation.

An earlier report by Comdr. Joseph J. Timmes, surgeon aboard the USS Wichita which reached Nagasaki 10 days before the first bomb investigating commission, told of radiation victims who complained of fever, malaise, loss of appetite, bleeding gums and hemorrhagic diarrhea.

"The oral changes consisted of glossy, smooth tongue with ulcerative lesions on the mucous membranes. The lesions bled easily, were often grossly infected, and showed no tendency to heal. The teeth generally were loose and easily removed by hand. Some of the gold removed from the teeth showed radiant energy," Commander Timmes stated. Hemorrhages were common, he said, and were difficult to stop. Sometimes bleeding would continue for three-quarters of an hour before it could be stopped.

Study Control of Bomb. Wrinkles in the discussion concerning who should control the atom bomb are slowly being ironed out but it appeared concessions will have to be made both by champions of military direction and those favoring civilian atomic control. The first piece of legislation covering the control phase of the bomb...
KING JUDA of Bikini (left) listens as Lt. Comdr. Harold H. Grieve explains how natives will be transferred to Rongorik. At right, Bikini natives sit quietly as they hear news of how the atoll will be used for atom bomb test.

business, the May-Johnson Bill, put the matter largely in the hands of the Army and Navy. This drew criticism from civilian scientists.

Dr. Harold C. Urey, Nobel Prize winner and one of the ranking scientists in the development of the bomb, objected to the Army’s Manhattan District Engineer Corps for its insistence that the control of atomic power be vested in the military. He said that by so doing the Manhattan District thus practiced and wishes to practice a whole number of things contrary to the Bill of Rights of the American Constitution.

Senator Brian McMahon (D, Conn.) predicted that failure of the U. S. to transfer control of atomic energy to a civilian agency would be a signal to the world that an atomic armament race is on. “We should now give notice to the world that we regard atomic energy as a force for peace by handing its control over to a civilian agency,” he advised.

The May-Johnson legislation was next superseded by the McMahon Bill which switched to the opposite extreme by placing control in the hands of an all-civilian commission.

Major General Leslie R. Groves, director of the Manhattan District Project, said that “until the time is reached when we are guaranteed against attack,” there must be representation on the controlling body by military men “who know that defense comes first and other things afterward.”

Last month the Vandenberg amendment to the McMahon Bill was adopted by the Senate Atomic Energy Committee. The amendment would give a military board far-reaching powers of review over that field of atomic energy which affects national defense.

Tidal Waves Predicted. Most of the world will hold its breath and cross its fingers when atomic explosions rend Bikini. Some distant observers, however, will be literally shaking in their boots.

Daily this becomes more evident as letters ranging from mildly fearful to hysterical continue to pile up on Vice Admiral Blandy’s desk. The letters, which he calls his “fan mail,” include dire prediction that the bomb explosions will result in earthquakes and tidal waves, will push up new mountain ranges or will turn oceans into gas.

One man complains that the concussion will blow out the bottom of the sea and let all of the water run down the hole. Another contends that the explosions will destroy gravity. In the midst of all this the Sun Life Assurance Society adds a cheerful note by announcing in London, England, that its future life insurance policies will not pay if death is caused by atom bombs.

In a recent telegram to President Truman, Lewis Mumford, author, stated that responsible scientific warnings indicated the test “may bring on disasters both near and far that would make the very name of America a curse to the rest of the world.”

The writer praised a full-page advertisement carried in The New York Times by the Military Order of the Purple Heart demanding that the proposed test be abandoned. He said the advertisement reflected “the best intelligence and moral conscience of the American people.”

Then there are other kinds of protests. There are letters from former Navy men who once served on certain ships which they now find on the roster of doomed ships of the target force. Objections from animal lovers continue although it has been announced that the “great majority of animals used will be rats,” according to Admiral Blandy.

Then, with fear and apprehension on all sides, there is the case of one man, 46-year-old William Parker of Los Angeles, who has volunteered to stay in the target area during the explosions. His offer was rejected by the Navy.
THIS CHART of the world shows areas covered by present loran service. Plans are being formulated for increasing the coverage of present stations by new stations already under construction and those planned by the Coast Guard.

NAVIGATING BY LORAN

Electronic Device Helps Ships and Planes to Fix Position at Long Ranges

THE NAVY TRANSPORT had battled 36 hours through the fury of the worst storm its crew had met since commissioning. Huge waves had swept the deck clean and stove in some of the light metal housings.

The shifting gales and brute force of the mountainous seas had cut the ship's advance to zero at times and made navigation by ordinary means impossible. Celestial navigation was out, the ship was too far from land for RDF, and the dead reckoning plot meant nothing.

The OD peered out into the whirling fury and then glanced at the clock. 0640. How could the navigator get a fix when you could hardly see the bow?

The answer is that the navigator in this instance was getting his fixes by LORAN—Long Range Navigation—quick and dependable.

This electronic weapon, developed and proven in war, will now take its important place as an ultramodern aid to peacetime navigation.

In two or three minutes, a ship or large plane, equipped with a single piece of equipment, can determine its position, day or night, regardless of weather, and the navigator or operator can be trained to become quite proficient in only a few days.

The need for accurate and reliable navigation was intensified by the growing hostilities in Europe and in 1940, under the auspices of the National Defense Research Committee, a special Loran Division was established. Work on loran was begun at the Radiation Laboratory of the Massachusetts Institute of Technology in 1941 and the first transmitting station was placed in experimental operation in 1942. The first units were set up in the North Atlantic area by the U. S. Navy, in cooperation with the Royal Canadian Navy and the National Defense Research Committee, and were later taken over by the U. S. Coast Guard and the Royal Canadian Navy.

The Battle of the Atlantic was critical and the loran chain of transmitters spread first up and down the Atlantic seaboard. Japanese action in the North Pacific led to the establishment of the Aleutian loran system in late 1942 and early 1943, followed in rapid succession by island chains—Hawaii, the Phoenix, Caroline, Marshall and Admiralty groups.

Loran navigation was also used for photo-reconnaissance and the bombing of Nazi-held territory and for flying the "Hump" from India to China. The ground transmitting equipment developed for the latter can be transported by plane.

While loran was of such great aid to our ships and planes, it afforded no "aid or comfort" to our enemies, largely because the enemy had no conception of the system and lacked the
equipment and charts necessary for using loran. Likewise, although jamming of loran by transmission in a particular locality was possible as an enemy countermeasure if properly executed, it was difficult for them to locate a particular loran transmitter because all stations in an area operated on the same frequency. However, a loran transmitter can be detected and DF’d by ordinary DF equipment if carefully used. Accuracy depends somewhat on position relative to stations, distance and knowledge of the system.

Today, approximately 40 loran stations are being operated by the Coast Guard and an additional 10 stations are under construction. It has been estimated that the major air and sea traffic routes of the world can be covered with about 70 stations. However, since some of the present sites were selected for purely military reasons, some changes in station locations may be expected.

To put it in simple terms, loran depends on the measurement of the amount of time between the arrival of two radio signals transmitted by a pair of shore stations of known positions. Each pair consists of a “master station” and a “slave station.”

Since radio signals travel at a constant speed, the measurement of intervals of time of receipt is, in essence, a measurement of distance itself. The radio signals transmitted by loran stations are not continuous but are “pulse signals,” or short bursts of radio energy transmitted at regular intervals. Thus, individual pulses can be identified and time measurements made.

Because loran evaluates only the difference in the distances between a navigator and each of the paired stations, he might be in any of infinite positions at which this difference would be identical. These positions fall along a smooth curve which is called a loran line of position. By taking loran measurements on a second pair of stations, a “fix” is established at the intersection of the two loran lines of position.

To interpret loran data in terms of latitude and longitude, charts are provided which show the loran lines of position (hyperbolas) superimposed upon Mercator charts. Each loran ray has a family of these hyperbolas or lines of position. On the charts each rate or group of curves is printed in a different color for ready identification. Thus, the navigator takes a reading on a particular rate, say 4H7, and then on the chart which has that rate, he locates the line corresponding. The same information is available in terms or loran tables navigators who prefer to work with tables instead of charts.

Loran transmitting stations are usually located on coastal promontories usually 200 to 300 miles apart so that a line drawn between the two stations would be mostly over water. The “master station” starts the cycle of transmission by sending a “pulse” signal which is radiated in all directions, including that of both the navigator and the “slave station.” After the “slave” receives the signal from the “master,” the “slave” sends out its own signal. Then the cycle is repeated again and again, day and night.

Three continuous checks are made of the accuracy of timing of the transmission signals; the “master” checks the “slave” signal, the “slave” checks the “master” signal, and monitor stations check both. The nature of the equipment makes it necessary for the operators in both stations to observe the signals of both stations continuously and any variation is apparent instantly. If transmission becomes faulty, due to equipment failure or error in control, a device known as “blinking” is introduced into the signals of one or both stations. This is easily recognized and warns navigators not to use the signals until the “blinking” ceases. Standby equipment can usually be put into service in less than one minute.

The loran timer which controls the transmission of the pulse signal has an extreme degree of precision and is comparable to a clock which does not gain nor lose one second in five years. The accuracy of loran timing has been proven under severe war conditions and navigators can rely upon it.

A single piece of equipment, called a receiver-indicator, is all that is needed aboard ship or plane. This unit receives and amplifies the signal and makes it visible in the indicator. Easy to operate and maintain, it has been installed on some 3,000 ships and 30,000 planes. The cheapest of the wartime units cost about $700; in peace time it may reduce to $500 or less.

Loran transmission is effective over longer distances than other types of radio navigational aids. During the day the signal travels on the surface of the earth to a range of 750 nautical miles, at night the range is increased to 1,400 nautical miles by the reflection of signals from the ionosphere.

In terms of accuracy and speed, loran can determine a position in two or three minutes with an accuracy compared to a good celestial observation requiring a much longer time. A rough rule is that the loran line of position has an accuracy to one per cent of the distance between the navigator and the stations. Thus, a ship 500 miles from the station is within
IF TWO stations are sending out pulses simultaneously, they arrive on the centerline at the same instant; hence, a ship having a zero time difference is on the centerline.

5 miles of the position of the fix. As the stations are approached the degree of accuracy increases still more and on the "base line"—the line between the "master" and "slave"—it is within several hundred yards. The accuracy is very poor on the extensions of the base lines from the stations.

The high degree of dependability of loran in all kinds of weather is another of its important features. The signals can be received under all of the usual conditions of storms and gales. Then when they are "seen" again in a few moments the necessary data can be quickly secured. The best assurance of loran is the fact that its accuracy is not affected by the weather. It is not more accurate in calm weather and less accurate in a storm. If the signals can be received at all, they can be depended upon for their accuracy.

While loran is self-sufficient and independent of all other navigational gear, it is not recommended that older methods of navigation be abandoned. Chronometers, magnetic and gyro compasses are needed to supplement loran for protection in cases of equipment failure and for navigation in areas not covered by loran systems.

Loran is a fundamental advance in the science of long range navigation. The resultant additional savings of lives, ships, fuel and time will accrue in direct proportion to the growth of its international acceptance.

The Coast Guard has just published a booklet, "Electronic Navigational Aids", from which much of this material has been taken, and naval personnel may obtain copies from the Public Information Office, Coast Guard Headquarters, Washington 25, D. C.

WHEN THE SHIP receives the pulse from one station earlier than that from another by a certain amount, she is somewhere on this line of position around first station.

NAVIGATIONAL FIXES are provided by two pairs of loran stations. The position 'X' is obtained by the time difference between master 'P' and slave 'Q' and the time difference between master 'P' and slave 'R' giving a two line
both in biology and in chemical industry. So im-
portant had this field of work become just before
the war that several large companies were consid-
ering the manufacture and sale of these radioactive
materials. Although the war interrupted this ac-
tivity and placed over all nuclear research a tight
secrecy restriction, it enormously accelerated the
research that ended so dramatically.

With the war ended we can now devote our
energies to active cultivation of the applications
of nuclear engineering to peaceful purposes—to
better ways of producing neutrons and high-energy
electrons for therapy and of artificial radioactive
materials for all kinds of uses. Moreover we are
standing on the threshold of the era in which
atomic power will be developed, surely to be the
most important engineering achievement of the
next generation.

All sorts of prognostications are being voiced
about the future of atomic power. Some say it will
come only in the very distant future and may not
then be practical; others are rashly predicting
WHILE EACH of the 92 elements has its own atom, all atoms have three parts: proton, neutron and electron. Atom is a 'solar system'; its central sun has one or more protons, also usually neutrons. Revolving 'planets' are electrons, attracted to the protons by their opposite charge but kept in their circular orbit by their terrific speed.

from Germany in January 1939, it was at once realized by physicists that the possibility of getting atomic power in useful form was within reach. But first let us say what uranium fission is. Uranium is the heaviest atom occurring in nature. The nucleus of uranium contains 92 protons surrounded by 92 electrons. One kind of uranium nucleus, U235, contains, in addition to the 92 protons, 143 neutrons, giving a total weight (i.e., atomic weight) of 235. Another and predominant kind, U238, contains 146 neutrons, raising the weight to 238.

When a neutron strikes a uranium nucleus in the right way, the nucleus breaks up by falling apart in two approximately equal fragments and to liberate several more free neutrons. It is this neutron liberation that makes a self-maintaining process possible. The splitting requires a neutron to make it go—and the splitting process itself acts as a source of neutrons which can cause more uranium atoms to split. Here is the basis of a self-maintaining process, technically known as a chain reaction, such as in ordinary combustion.

Why does not ordinary uranium explode? There are complications. Because several neutrons are released at every fission, a chain reaction is possible. But to make it an actuality, one of the several neutrons released must actually produce another fission to keep the process going. Otherwise, the nuclear "fire" goes out. All the neutrons contained in a single fission to keep the material would explode violently. But because neutrons are contained in a single fission the material would explode violently. But because neutrons move rather freely through matter (like X-rays) many are lost by escaping through the surface. Remedy: use a big enough lump to get a more or less equal fragment and to liberate several more free neutrons.

ABOUT THIS ARTICLE

From the moment the blast on Hiroshima announced its stupendous power to the world, atomic energy has been reshaping the thinking and the actions of mankind—military and naval considerations no less than political, social and economic. For the use of naval personnel BuPers is now preparing a correspondence course which will be available in approximately five months, and which will enable officers with special talents and qualifications to make more advanced studies. Plans are under consideration for including courses in nuclear physics at the Naval Academy, PG School and War College.


The Smyth report has been issued to all ship and station libraries.
THE ATOM is almost empty space, and nuclei are difficult targets. A neutron bullet may pass through a mass of atoms without a hit. Resisting ordinary chemical action, the great energy bound up in the nucleus can be released only by direct hits on the nuclei to break ties that bind protons and neutrons and cause fission of the uranium atom.

The absorption of neutrons by uranium is sufficiently great to prevent the explosion of perfectly pure uranium even in so large a lump that escape of neutrons through the surface is negligible.

Neutrons given out in the fission process are "fast", i.e., have speeds corresponding to several million electron volts or megaelectron energy. Such fast neutrons colliding with uranium atoms have a rather great chance of losing energy without being caught and without producing fission.

Neutrons of intermediate speed produced this way are unable to produce fission in U. They can do so only in U which forms only 1/140 part of natural uranium.

Neutrons of a particularly low energy (about 10 electron volts) are very likely to be captured by U to form U. This is very important. More on this later. This happens so readily that so many neutrons are used up this way that a chain reaction cannot be maintained in ordinary uranium.

An unabsorbed neutron continually loses energy by colliding with atoms as it diffuses throughout any material, until its average energy is that of the heat motion of the atoms of the material. Neutrons of extremely low energies are strongly captured by U to produce fission.

The clue to possibly making the chain reaction go with ordinary pure metallic uranium, which contains all kinds of uranium atoms but is predominantly U was to arrange the uranium in a lattice of small lumps so that many of the fast-moving neutrons would diffuse out of the uranium into some surrounding material. Here many of them would be slowed down before diffusing back into the uranium. The idea was that most neutrons would thus escape being caught by U until they had lost so much energy that capture by U was unlikely. Ultimately, though, they would return to the uranium lumps and be of sufficiently reduced speed to cause fission in U.

In the technical vocabulary of nuclear engineering this other material that keeps neutrons in custody and helps them lose energy until they are safe from capture by U is called the moderator. Evidently the moderator material must not absorb too many neutrons or the reaction will be slowed by this circumstance. Besides the quality of not absorbing neutrons, it is desirable to use material of low atomic weight. This is because the neutrons to be slowed collide elastically with the nuclei of the moderator and so give up more energy at each impact if the two partners of the collision have nearly the same mass. Graphite was finally adopted for this purpose, although not until processes were developed for manufacturing it to much higher standards of purity than is usual in ordinary industrial practice.

As this qualitative picture evolved prior to January 1942 the question of whether a chain reaction would go remained unanswered because of lack of exact quantitative knowledge of the various absorptions involved. But as knowledge accumulated, it became more and more probable that such a lattice of uranium lumps and moderator—now called a pile—would go, i.e., a chain reaction continuously releasing atomic energy by fission of the U in it would be self-maintaining.

How can the pile be kept from blowing up? If a pile is so arranged that, on the average, more than one fission results from the neutrons produced by each fission, then clearly the number of neutrons present, and the amount of heat generated, increases by the compound-interest law. If a great multiplication happens rapidly—say in a small fraction of a second—then the phenomenon becomes an explosion. In short, we have an atomic bomb. Even if the reaction occurs slowly the pile would soon be destroyed by melting if the multiplication were allowed to proceed.

One way to control the pile is to provide passageways through it into

RADIUM NUCLEUS spontaneously emits particles and energy, decaying to form nucleus of a lighter atom. Uranium 238 is the commonest form of nature's heaviest atom, important as raw material for new synthetic power atom, plutonium. An element may have several isotopes—alternate forms which differ in number of neutrons in nucleus.

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SLOW NEUTRON splits uranium 235 nuclear target, generating two lighter atoms, barium and krypton, and several free neutrons which act as bullets to split other U-235 atoms, causing 'chain reaction.' Self-propagating explosions may sweep through a block of U-235, releasing 11,400,000 kilowatt hours per pound in accordance with Einstein's law.

What is plutonium? This is a newly discovered chemical element not known to exist in nature but which is made from uranium by atomic transmutation. Plutonium is important because it, like U-235, is a material from which atomic bombs can be made.

That U-235 can capture neutrons has already been mentioned as a phenomenon detrimental to the operation of a pile. When U-235 captures a neutron it becomes U-236 and emits gamma radiation as does radium. This U-236 is not stable but emits high-speed electrons by a process of spontaneous radioactive activity. The mean life of the U-236 atoms is only about 20 minutes. By this activity they are transformed into atoms having essentially the same mass but one greater positive charge, 93, on the nucleus, and hence a new chemical element. It is called neptunium and written Np-236. Neptunium 239 is also spontaneously radioactive and emits another high-speed electron becoming thereby an atom having 94 positive charges on the nucleus but still essentially of mass 239. This process is slower; the mean life of the neptunium atoms is about 2 days. The result of a chain of charge 94 and mass 239 is another new element that does not occur in nature. It is called plutonium and written Pu-239.

Actually the purpose of piles in the military project was not to get atomic power but to produce the new element plutonium, which provides a second bomb material. It is, in short, a competitor to U-235. The process by which plutonium is formed — by a process of spontaneous radioactive absorption of neutrons by U-235 — has already been mentioned as one that tends to stop the chain reaction in a pile. Nevertheless, the uranium lumps in the pile are exposed to a dense atmosphere of neutrons, and so the means is at hand for changing a part of the U-235 into Pu-239.

The several large piles put in operation generated many hundreds of thousands of kilowatts as heat. This heat was, however, not utilized, as the primary aim of the reaction was the production of plutonium for use in the atomic bomb. To utilize the heat would have required additional engi-
PLUTONIUM is produced in huge uranium 'piles' at the Manhattan Project's plant on the Columbia River. Each pile is a very large block of graphite with holes in which are placed uranium-metal cylinders. Graphite acts as a 'moderator,' slowing neutron bullets and improving chance of hitting nuclear targets. Steps in process are shown.

Neering to operate the pile at a high temperature and there was not time for that.

The pile when run at a high power level also generates an enormous amount of radioactive material, far more potent than all radium ever mined. This greatly complicates the problem of operation of the large piles, requiring a high standard of reliable operation that must depend entirely on remote controls.

The plutonium is formed in the blocks of uranium in the pile. These have to be removed from the pile and the plutonium extracted by fairly simple chemical methods, because plutonium and uranium, being completely different elements, are dissimilar chemically. This process, however, is greatly complicated by the intense radioactivity of the materials.

**How is U235 separated from ordinary uranium?** The makers of the atomic bomb had plutonium at their disposal. An alternative material is U233. It was felt desirable, in view of all the uncertainties involved, to develop several methods and provide production facilities for extracting in almost pure form the 0.7 percent of U235 contained in ordinary uranium.

Because of the almost complete identity of all physical and chemical properties of two isotopes of the same element—in this case U235 and U233—this is an extraordinarily difficult problem. Several methods were tried, some of which were abandoned as not operative, or as requiring too great an effort, or as being too uncertain of success. These are mentioned in Smyth's report. Three methods were carried from the research stage into production plants:

- The mass-spectrographic method
- The gaseous-diffusion method
- The centrifugal method

**FOUR WAYS TO SEPARATE U235 FROM U238**

1. **Thermal Diffusion Method**
   - Fluid uranium circulates, tends to concentrate lighter U235 at top.

2. **Gaseous Diffusion Through Barriers**
   - Lighter U235 gas passes more readily through barrier.

3. **Centrifugal**
   - When mixture of gasified U235 and U238 is spun rapidly, lighter U235 tends toward center.

4. **Electro-Magnetic**
   - In strong field of giant magnet lighter U235 particles are deflected more than U238. Half way round, splitter separates two streams.

**CHEMICAL SEPARATION** of 'natural' metallic uranium from its ores is simple, but separation of the rare U-235 from the commoner U-238 by such means is not possible, since they are chemically the same. Only possibility lies in separation by physical differences, primarily by their one-percent weight variance. Several processes were used.

_APRIL 1946_
U-235 COULD COMPETE AT THESE PRICES
other things being equal

<table>
<thead>
<tr>
<th>Common fuel</th>
<th>Assumed prices</th>
<th>Comparable prices for Uranium 235, dollars per pound (nearest thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COAL</td>
<td>$6 per ton</td>
<td>$9,000</td>
</tr>
<tr>
<td>(13,000 B.T.U.)</td>
<td>$12 per ton</td>
<td>$18,000</td>
</tr>
<tr>
<td></td>
<td>$15 per ton</td>
<td>$23,000</td>
</tr>
<tr>
<td>FUEL OIL</td>
<td>2¢ per gal.</td>
<td>$5,000</td>
</tr>
<tr>
<td>(150,000 B.T.U. gal.)</td>
<td>4¢ per gal.</td>
<td>$10,000</td>
</tr>
<tr>
<td></td>
<td>8¢ per gal.</td>
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</tr>
<tr>
<td>CITY GAS</td>
<td>50¢ per 1000 cu.ft.</td>
<td>$39,000</td>
</tr>
<tr>
<td>(500 B.T.U.)</td>
<td>$1 per 1000 cu.ft.</td>
<td>$78,000</td>
</tr>
<tr>
<td>NATURAL GAS</td>
<td>25¢ per 1000 cu.ft.</td>
<td>$10,000</td>
</tr>
<tr>
<td>(1000 B.T.U.)</td>
<td>$50 per 1000 cu.ft.</td>
<td>$20,000</td>
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<tr>
<td></td>
<td>$1 per 1000 cu.ft.</td>
<td>$40,000</td>
</tr>
<tr>
<td>GASOLINE</td>
<td>10¢ per gal.</td>
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<tr>
<td>(150,000 B.T.U. gal.)</td>
<td>20¢ per gal.</td>
<td>$52,000</td>
</tr>
<tr>
<td></td>
<td>30¢ per gal.</td>
<td>$78,000</td>
</tr>
</tbody>
</table>

Note that "other things" are never equal. U-235 in normal uranium form is by far the cheapest, but involves use of excessively large and inefficient "piles." The unit cost of the U-235 in enriched mixtures increases with the degree of enrichment. Over-all cost comparisons can be made only for a specified concentration of U-235 and for apparatus suitable for that particular concentration. Possible explosion danger and need to protect personnel against radiation are other important considerations.

- The thermal-diffusion method.
- In addition to these three methods a fourth, that of separation of gas in high-speed centrifuges, was successfully applied to the pilot-plant stage. The centrifuges work on the same principle as the cream separator on the dairy farm, operating on the very slight difference in mass of the two uranium isotopes.

What about the bomb? Very little of this part of the story can be told as yet. Preliminary studies on this problem were made in 1941 and early 1942. At the end of the summer it was decided to concentrate all this work on a greatly expanded scale at a specially constructed laboratory at Los Alamos, N. Mex., about 40 miles northwest of Santa Fe. The first group of laboratory buildings, administrative buildings, homes for the personnel and barracks for the soldiers guards were built during the winter of 1942-43 and the scientific staff began to arrive and start work in April 1943. What these people achieved, starting with empty buildings on a remote mesa with only an old Diesel-driven mine generator as the laboratory power supply, thousands of miles from major industrial facilities and supplies, is an epic in the annals of science. The story of this group, continually growing in number and communicating with outside suppliers only by devious channels, because of requirements of military security, will be most fascinating when properly told.

Although discussion of the bomb's details is not permitted, these essential points can be enumerated:
- The active material is either Pu²³⁹ from the piles at Hanford, Wash., or U²³⁹ from the three different separation plants at Oak Ridge, Tenn.
- A bomb less than the critical size will not explode at all so it is not possible to experiment with little ones to learn how to make a big one.
- Before firing, the active material must be kept separated into two or more lumps of subcritical size. The act of firing consists of assembling these rapidly into a mass above critical size for that shape.
- This has to be done with great rapidity, using a firing mechanism, which was itself a difficult problem. The need for rapidity arises from the fact that if the parts come together slowly an explosive reaction begins before the parts are completely together. This would blow them apart again and stop the fission chain reaction with only an insignificant release of the atomic energy.
- Even with the best design possible, the stopping of the reaction due to the bomb's blowing itself apart was expected to prevent the effective conversion of fission of all the material in the bomb. Some estimates placed this conversion efficiency as low as a few percent. What was actually attained at the Alamogordo, N. Mex., test was not disclosed to date.
- The fission products are extremely radioactive and if all of them were to remain in a relatively small area (say a square mile) the radioactivity would be too intense to permit the existence of any living matter in the region for probably several weeks after the explosion.
- To get maximum destructive effect from the blast the bomb is fired while at a considerable height above ground, which also favors the dispersal over a wide area of the radioactive products so that the contamination of the area is not thought to be an important attribute of the weapon.

What of the future? While no reputable scientist ever makes definite promises about anything that lies in the future, it is fair to venture an opinion that the following significant developments are highly likely to be made within the coming decade:
- More effective ways of producing U²³⁵ and Pu²³⁹ will be developed, permitting greater production at lower cost.
- These materials in combination with ordinary uranium will make possible power-producing piles of smaller size than those thus far developed.
- Piles will have important peace-time uses as special-purpose energy sources, and as sources of neutrons and radioactive materials for medical and other scientific work.
- Piles will probably not be developed into small power units for automobiles or airplanes because of their overall weight including that of the material needed to shield the passengers from dangerous radiations.
- Also because of shielding difficulties, piles will probably not provide the driving power for railroad locomotives. However, it is reasonable to assume that some ships may be powered by piles.
- Besides uranium it is known also that fission may be produced in thorium, which is much more abundant in nature than uranium and therefore may be the fuel in piles of the future. Whether release of atomic energy from other materials can be achieved is a question which can be decided only by future research. At present no means of doing this is in sight—but it should be remembered that the atomic bomb would have seemed fantastic to the best nuclear physicists in 1938.

In conclusion, it is conducive to serious thought to reflect on these sobering paragraphs from H. D. Smyth's report:
- "The weapon has been developed that is potentially destructive beyond the wildest nightmares of the imagination; a weapon so ideally suited to unbridled attack by the city's major cities might be destroyed overnight by an ostensibly friendly power."

ALL HANDS
This weapon has been created not by the devilish inspiration of some warped genius but by the arduous labor of thousands of normal men and women working for the safety of their country. Many of the principles that have been used are well known to the international scientific world in 1940. To develop the necessary industrial processes from these principles has been costly in time, effort, and money, but the processes which we selected for serious effort have worked and several that we have not chosen could probably be made to work. We have an initial advantage in time because, so far as we know, other countries have not been able to carry out parallel developments during the war period. We also have a general advantage in scientific and particularly in industrial strength, but such an advantage can easily be thrown away.

"As to the future, one may guess that technical developments will take place along two lines. From the military point of view it is reasonably certain that there will be improvements both in the processes of producing fissionable material and in its uses. It is conceivable that totally different methods may be discovered for converting matter into energy since it is to be remembered that the energy released in uranium fission corresponds to the utilization of only about one-tenth of 1 percent of its mass. Should a scheme be devised for converting energy even as much as a few percent of the matter of some common material, civilization would have the means to commit suicide at will.

"We find ourselves with an explosive which is far from completely perfected. Yet the future possibilities of such explosives are appalling, and their effects on future wars and international affairs are of fundamental importance. Here is a new tool for mankind, a tool of unimaginable destructive power. Its development raises many questions that must be answered in the near future."

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GLOSSARY OF IMPORTANT TERMS

ALPHA-PARTICLE—This is the nucleus of helium atoms and is a composite nucleus of two protons and two neutrons. The name originally referred to the alpha radiation from naturally radioactive substances like uranium and radium, later recognized to be fast-moving nuclei of ordinary helium gas.

ATOM—Smallest unit of matter, remaining unchanged in chemical reactions. All atoms are about 10^-8 cm. in diameter. They consist of a central positively charged nucleus, about 10^-15 cm. in diameter, surrounded by enough electrons to make the atom electrically neutral.

ATOMIC NUMBER—An integer characteristic of each chemical element which tells how many protons there are in the atomic nucleus, also how many electrons there are in the atom, outside the nucleus. It is usually denoted by Z. Examples: hydrogen, Z=1; helium, Z=2; neon, Z=10; uranium, Z=92.

CHAIN REACTION—Any reaction, chemical or nuclear, in which the process continues by virtue of the action of one of the products to cause the reaction to continue. Example: uranium fission is caused by a neutron and the fission process releases more neutrons which can cause more fissions.

DEUTERON—This is the nucleus of heavy hydrogen atoms which occur in nature as about one part in 5,000 of ordinary hydrogen. It is the simplest composite nucleus known, consisting of a combination of one proton and one neutron.

ELECTRON—Smallest atomic particle. Unit of negative electricity.

HEAVY WATER—A kind of water whose molecules consist of the heavy hydrogen isotope, deuterium, in combination with oxygen, written D2O instead of H2O.

ISOTOPE—A particular variety of atom or nucleus characterized by a particular atomic weight as well as a particular atomic number. Example: all uranium atoms have a nuclear charge Z=92, those of the light isotope having an atomic weight of about 235 while those of the heavy isotope have an atomic weight of about 238. There is also a very rare isotope having an atomic weight of 234.

MODERATOR—A substance (carbon, heavy water, or beryllium) used as a means of slowing down neutrons by means of elastic impacts of the neutrons with the atoms of the moderator.

NEPTUNIUM—A new chemical element not known to occur in nature, having Z=93 and an atomic weight of 239. This is formed by radioactive decay of U238 which emits a B-particle (high energy electron) to become Np239.

NEUTRON—A basic constituent particle of atomic nuclei having no electric charge and having a mass of about 1.67 x 10^-24 gram.

PILE—Any arrangement involving lumps of fissionable matter, e.g., uranium, together with moderator, so arranged as to utilize the neutrons well enough to result in a chain reaction.

PLUTONIUM—A new chemical not known to occur in nature, having Z=94 and an atomic weight of 239, formed by radioactive emission of a B-particle from Np239.

PROTON—A basic constituent particle of atomic nuclei having a positive charge numerically equal to that of the negatively charged electron, and a mass about the same as that of the neutron. The proton itself is the nucleus of ordinary hydrogen atoms.
Island Wedding Memo

Among the Negritos of Luzon, marriages are arranged when the parties who should be most interested are too young to be interested at all. The prospective bridegroom's parents, after a night of haggling accompanied by feasting, drinking and dancing, pay the prospective bride's family an agreed sum.

A Navy flier, hiding with the natives after his plane was shot down, was alarmed to discover that the deals were being made in Jap money.

"Don't you know," he told one girl's father, "that Jap money won't be any good as soon as the Americans recapture the Philippines?"

The native was not upset, however.

"We can always use the Jap money for cigarette papers," he said, philosophically.

This same flier witnessed a solemn council called to settle the problem created by one wife who ran off with a man from another village. This was unheard of among the Negritos and there were no precedents to guide the "divorce" proceedings. Finally, however, a decision was reached. The abandoned husband not only got back the money his parents had paid for his bride in the first place, but he also got the erring bride's sister.

No Trouble Atoll

When Fighting Squadron 16 went ashore from the Lexington in February 1944 at Majuro in the Marshalls, the pilots discovered that the natives, female, wore dresses which, though multicolored, were designed along the styles favored by Mother Hubbard. This was attributed to an earlier invasion by American missionaries. On combat air patrols, however, Fighting 16 found a group of natives, female, on a tip of nearby Arno atoll whose costumes more closely resembled Mother Hubbard's cupboard.

Briefly: the girls were grass skirts—period.

Arno atoll became one of the most closely patrolled pieces of real estate in the Pacific. Planes formed a regular traffic pattern over this favored spot—low, flaps down—and the natives waved tirelessly and appreciatively at the dauntless sky warriors. The fact that these maidens of the Marshalls were handsome, light-skinned Polynesians did nothing to detract from the pilots' enthusiasm.

Then word came from a war correspondent who had visited this garden spot in person, just before the Lexington was ready to put to sea, that the natives of Arno atoll were out of soap and cigarettes. One pilot, a man of action, promptly had a small parachute made, attached a zipper bag, and filled the bag with 24 bars of the sweetest-smelling soap he could find, as well as four cartons of cigarettes.

The day the squadron took off to pick up the Lexington, by then already at sea, this pilot received permission to make a last visit to Arno, released his miniature parachute, and made a perfect hit. As he gave the atoll a farewell buzz, he could see the girls, standing in a row, clutching his gifts, and salaaming in gratitude.
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A Hellcat was strafing a Jap-held airfield in central Luzon on 14 December 1944 when it was hit by flak. The pilot tried to climb and head for the mountains but his motor froze and he hit the silk. A Filipino guerrilla appeared as if by magic when he landed, gave him a straw hat, shirt and pants, and told him to put them on, hiding his parachute and flying gear.

Then began a desperate game of hide-and-seek. Jap patrols were closing in from three sides. The pilot was expecting a fusillade of Jap bullets from behind every tree. Then they reached a grassy field, and as they were running across it—a again the pilot was certain he was about to be mowed down—the guerrilla jogged close beside him and unburdened his mind.

"There are just two things I want to know," the Filipino asked the Navy pilot. "Has Madeleine Carroll re-married since her divorce and has Deanna Durbin had a baby yet?"

**It's Swe(a)t Sixteen**

One of those horrible things that can happen to any man, particularly a married one, happened recently to 16 ex-servicemen living in Atlantic City, N. J.

The 16 received letters from the City Press Bureau inviting them to go to New York in a body to meet their war brides from England. This idea would have been 4.0 except for one minor fact—none of the 16 had married anyone in England.

The Press Bureau's phone started ringing.

"Say," one caller cried in an anguished voice, "I got a letter here inviting me to meet my bride in New York. Please tell my wife it's all a mistake, will you? I was never in England."

A woman called with this message:

"My son received a letter telling him he could meet his British bride in New York. He says he isn't married. I just wonder if the natal isn't pulling a fast one. Is he really married?"

One man said:

"I went around with a girl in England. I didn't marry her. You gotta ask the government to send 'em over here, don't you? I never asked them."

The Press Bureau quickly discovered its mistake. With a red face, the city officials admitted they had mixed up their lists of names.

**One Thing at a Time**

A. D. Bruce, a U. S. Army private who escaped from Bataan and became a captain in the Filipino guerrilla army, was talking early last year with a Navy pilot who, downed over Jap territory and rescued by the guerrillas, was about to return to his squadron through courtesy of General MacArthur's men, then advancing on Luzon.

The pilot, anxious to show his gratitude, asked Bruce to name the item he wanted most, and promised he would fly over the guerrilla territory and drop it as soon as he was allowed to fly again. Bruce, who had been out of touch with the little luxuries of civilization for more than three years, thought hard for a moment, and then placed his order.

"Two cans of beer," he said.

**Service Stripes**

The young ensign, fresh out of midshipman school, was greatly thrilled when the grizzled old "four-striper" offered to share his seat in the day coach. The captain had five rows of campaign ribbons, topped by the dolphins of the submarine service. While he was regaling the ensign with some of the experiences of his 40 years service in the Navy, his conversation was interrupted by:

*Civilian:* "Pardon me, sir, but my friend and I are having an argument and we thought that perhaps, you could settle it for us."

*Captain:* "Fire away!"

*Civilian:* "My friend insists that those four yellow stripes on your sleeves denote rank and I claim they indicate years of service. Who is right?"

*Captain:* "Son, you are absolutely right. They do indicate years of service—10 years for each yellow stripe."

**Key to the Situation**

An harassed woman reported at the Navy Information Center in New York that her son was AWOL. She wanted to know what she should do.

"Get him back to his ship as soon as you can," she was told.

"But I can't."

"Why not?"

"His girl friend has him locked in a closet and she won't give me the key."

*Moral:* If you must go on liberty, don't get in any closet; if you must get in a closet, make sure it doesn't have a lock on it.

**Takes the Cake**

Mrs. Mary Sandman of Chicago believes in going through the chain of command—from the top down. She wrote President Truman, enclosing $10, and the President forwarded the letter to the commanding officer of USS _ABSD1_. The CO read the letter and called in the cook. The cook saluted smartly and carried out his orders.

As a result, John Edward Sandman, 36, USNR, had a huge, fancy cake for his birthday—just as Mrs. Sandman had requested in her letter to the President.

**Distant Relation**

Bidding his bride goodbye, the bridegroom hung up the telephone receiver in the center at the Bremerton Naval Base and turning to his two witnesses said: "Congratulations, I'm married to the sweetest girl in all Wales."

*CEM Murray L. Petersen,* 43, had just been married by transatlantic telephone to Lorna Kay Groves, 36, in a six-minute ceremony. The bride was in her home in South Wales. The couple met at a dance in February 1944. Petersen returned home before they could be married in Wales.
SPEEDING THE WORDS OF WAR

Communications Underwent Rapid Wartime Changes To Help Win Sea-Land-Air Victory

When the Remnant of the Jap high command gets around to the inevitable post mortem of their failure and our success in World War II, chances are more than bright that one word is going to be underscored many times—communications. And they won't be very far from right if they come up with the conclusion that the star of our war fortunes rose in proportion to the development of our Naval Communication Service.

In the enthusiasm over our smashing victories high praise has been given to the conspicuous elements of our sea, air and land power—men, materiel, aircraft, command, supply and research, among many others. Very little has been said, however, on the role of communications in the Navy's great war achievements.

Two reasons explain this silence. The first and obvious reason was the necessity for military security during wartime. The other reason is that communications are so enmeshed in every naval activity—ashore, afloat or in the air—that no one can put his finger down and say: "Communications did that!" It's something like giving Joe Louis' nervous system credit for his fine fistic record. On the other hand poor communications frequently drew the finger of blame when operations were fouled or turned out to be unusually costly.

There was little glory or satisfaction to offset the heavy responsibilities and drudgery that fell to communicators. They never sank a ship, downed a plane or felled a foe except in freak circumstances, or got much of the praise that was passed around after successful operations. Flawless performance was demanded, not just at critical moments but all the time. The watchwords of the naval communication system are speed, security and reliability and under these standards communications personnel handled the billions of words involved in winning the war.

Communications enabled vast and diverse forces to operate as a team in amphibious operations. Communications signaled the attack and controlled the landings, making possible required split-second timing. Communications made it possible to hit a score of beaches at exactly the right moment to attain greatest tactical advantage, then sent reinforcements to critical spots, concentrated air support at the right place and directed artillery barrages so they moved only a few yards ahead of advancing troops. Communications got the planes up, guided them to their targets, brought them back and prompted rescue when a plane was downed at sea. Communications penetrated the jungle, kept isolated groups in touch with command posts and summoned whatever aid was needed in the attack. Communications—lightning-fast and accurate—were more than often the difference between life and death, victory and defeat.

Like every component of modern naval warfare communications have come a long way since Commodore Edward Preble set forth in 1803 with a "task force" of wooden sailing vessels to teach the pirates of the Barbary States to respect the infant United States. Then communications were limited to the use of the skipper's stout voice, perhaps a megaphone and a few bits of bunting. Prior to 1912, no communication division existed in the Navy. Since Pearl Harbor, however, progress in speeding the voice of command and extending the communication network around the world has surpassed everything done in this line for three decades preceding the war.

As a result of this intense development the Navy's wartime communication system carried more messages each hour than in many a month before the war. It involved literally tens of thousands of communication units, from gigantic shore installations to eight-ounce sets designed to fit in a Marine paratrooper's pocket. It also involved the design and manufacture of amazing new tools for use in naval communications, some of which have become household words, while others are still cloaked in secrecy.

Some of the difficulties in early campaigns reflected shortcomings in the inadequate communication system with which we began the war. The regular Navy force was short of radiomen, signalmen, radio technicians and officers who could supervise communication staffs for the rapidly expanding fleet. Equipment adequate for prewar traffic had to do until newer electronic gear could be produced and installed in old and new fleet units and at advanced bases. Lastly, communication procedure had to be geared to the new three-dimensional warfare into which the Navy was plunged.

Communication men serving in the Pacific during those desperate early days of 1942 still marvel at the mere
fact that communications existed at all. One torpedo squadron on patrol duty in the Pacific during the summer of 1942 had planes, a few torpedoes and a home base of sorts but no radio facilities for air-ground communications. A naval aviator who knew something about radio spent weeks grinding down 80-meter crystals, always managing somehow to wind up just one molecule layer too thin. Just as he neared the end of the stock, he produced one crystal which oscillated perfectly. The station was still operating when he left after five months.

But the picture wasn't completely gloomy. Fortunately, there was a sound base on which to expand the Navy communication system after Pearl Harbor. In addition to the experienced regular Navy personnel, the Naval Communications Reserve (NCR) numbered about 650 officers and 3,000 radiomen. These, with others who joined up from the ranks of amateur and professional radio people, qualified for many critical positions in training, plans, operations and procurement. Soon new schools set up by BuPers and staffed by USN and Naval Communication Reserve instructors were turning out RMs, RTs, ARTs, SMs and skilled strikers in increasing numbers.

These were later joined by Waves trained to perform communication duties in the shore establishments. Naval communications were among the first to recognize the abilities of Waves and to suggest their inclusion as an integral part of the Navy. At one time, Waves composed 75 percent of the total personnel in Radio Washington.

Procedure, especially tactical communications, was another matter. The Navy had developed efficient working methods for routine communications but these were inadequate for global warfare geared to the speed, range and limitations of aircraft. The leisurely call-up, delivery and acknowledgement methods employed between shore stations thousands of miles apart obviously were not suited to planes hurtling into combat. But the needed changes came about by evolution, not revolution, and reflected experience gained in actual operations. Other procedural changes developed as new equipment or tactics were introduced.

Prewar experimentation by the Naval Research Laboratory had cleared the way for the new gear needed to speed and expand wartime communications. Special radio sets were designed for each type of surface craft from BBs down to the agile PTs. Equipment was built to withstand all varieties of weather from the deep-freezing cold of the Arctic to the steaming tropics. In addition, sets had to be designed to undergo all forms of shock and abuse. Sets were designed which operated perfectly after complete submergence in water. During the war the parade of new, improved radio equipment—much of it for very special purposes—never stopped.

The scope of communication equipment, while it centered around radio transmitters and receivers, ranged all the way from the very simple to the terrifyingly complex. At one end of
the scale were small signaling mirrors for fliers downed at sea; at the other end, complex radio equipments costing $250,000 per unit. For radio, radar and sonar equipment alone the Navy spent $1,300,000,000 in 1944.

Among the devices adopted for the Naval Communication Service during the war are these:
- Portable receiver-transmitter units using frequency modulation (FM);
- Radios operating at ultra high frequencies (UHF);
- Radio teletypewriter;
- High speed automatic transmitters;
- Radiophoto transmitters and receivers;
- Special electronic identification gear (IFF);
- Underwater sound systems (sonar) useful in communications;
- Long distance radio telephone;
- Sonobuoys;
- Electronic homing devices for aircraft;
- Dyes, smoke and pyrotechnics used in identification and spotting;
- Special cryptographic devices;
- Radio facsimile equipment;
- Signaling systems employing extremely short waves.

These and other additions to communication facilities have helped to increase the speed, reliability and, most importantly, the security of naval communications. To a considerable extent, it was due to them that task forces and fleets were able to operate at sea for longer periods and at greater distances from bases than was possible for the enemy. For example, communications played no small part in the unparalleled feat whereby our fast carrier task force operated for nearly three months away from its bases while giving invaluable support to our occupation forces at Okinawa.

The communication system operates in four broad spheres, each employing methods and equipment best serving its particular requirements:
- Shore communications;
- Fleet communications;
- Air communications;
- Amphibious and joint communications.

Shore communications provide these varied facilities for quick transmission of information: Continental and intercontinental radio and cable, coastal radio, shore service radio, telephone, teletypewriter—including NTX (Navy's own networks) and TWX (commercial exchange) circuits—and messenger service. These were employed to link naval district and sea frontier headquarters, naval bases, ordnance plants, manufacturers, supply depots and the countless shore establishments which exist to supply and maintain the fleet.

Key station in the shore communications network and the entire Naval Communication Service is Radio Washington (NAA-NSS). Corresponding facilities exist at the principal naval bases in the United States and overseas. Also included in the extensive shore communication system are the advanced bases and shore-based activities overseas which exist to serve the fleet.

Today's naval vessels are moving communication centers. Even the tiny MTB has seven radio and radar circuits, while a battleship of the Iowa class employs as many as 80 major operating circuits. On a carrier there are more than 100 complete receiver or transmitter components. Certain types of landing craft may have as many as 13 complete sets while others may have as few as three.

A large ship may at any time be in radio contact with: Radio Washington or the nearest major affiliate of NAA-NSS; fleet headquarters and shore bases; force, group and unit commanders; type, division or squadron commanders; ships in company, submarines, aircraft and patrol vessels; merchant ships, sea-air rescue facilities; and news broadcasts.

Besides radio, fleet communications employ visual signaling (flag hoist, semaphore and flashing light), shortwave and radar contacts, and the inevitable mail service. Under conditions where radio silence is imperative, visual signaling and extremely short-range voice radio help to maintain communications between ships.

A high degree of development of air communications was accomplished during the war. It grew to provide complete communication facilities for 38,000 service aircraft, over 100 aircraft carriers, and hundreds of naval air stations and bases scattered around the world. Air communications had to provide facilities for air-ground, ground-air, point-to-point, plane-to-plane, air station and NATS communications, plus liaison service with Army and Allied forces. Also in the air sphere were the air navigational aids, aeronautical direction-finding nets, air-sea rescue and air warning services.

Radio and radar together led to the birth of a new and extremely useful war baby—the Combat Information Center or CIC. The intensive development of this nerve center of defensive and offensive activity gave our forces a tremendous advantage in skirmishes with the enemy and undoubtedly shortened the war by many months. Good communications provided the split-second transmission of intelligence flowing into and out of the highly dramatic centers.

Successful military operations depend on a large extent on fast and accurate communications and the war-tested system developed by the Navy was a vital part of our military organization.
of derelicts—all by radio and visual communications.

High over the target area, air coordinators in contact with ground observers directed carrier-based fighters and torpedo bombers by radio to strafe and bomb stubborn enemy pillboxes holding up the infantry's advance. Overhead the wheeling CAP was vectored to intercept unidentified aircraft picked up by radar pickets.

"Malamute One ... This is Delegate Base ... Vector zero four fire ... Angels twelve ... Buster ..."

As invasion forces slugged their way inland, communications continued to be the elastic and many-pronged system that helped to maintain liaison between ships-and-shore.

Radio was passing the word to other elements of the over-all operation: to hospital ships standing back to handle casualties, to salvage and fire boats ready to assist vessels in distress, to hydrographic reconnaissance units marking underwater obstructions and cleared channels and to tankers and ammunition ships awaiting orders to replenish supplies.

Landing craft approaching the beach were in constant communications with their wave commanders and used voice radio to request quick assistance—anything from air support to first aid.

Communications was the heartbeat of the amphibious operation. From submarines on lifeguard duty offshore to the beachmaster sprawled in a foxhole with his walkie-talkie, it was the same story: Good communications pay off when the chips are down.

The invasion was a severe ordeal, costly in men, material and ships. But Navy communications—wiser by experience learned from previous landings—helped to bring the price down and greatly aided toward attaining the final Jap defeat.

VITAL LINK between invasion forces and amphibious craft was provided by trained signalmen such as this one directing an LST to her beaching position.

Official U. S. Coast Guard photograph

Momentum of the invasion was gaining rapid headway.

As the center of a communications network extending from fighting units on the beach to transports, cargo ships and the controlling AGC offshore, the beachmaster was dependent on rapid radio and visual communications. He could order a wave of tank-carrying LSMs to delay their scheduled landing until artillery was brought ashore; he supervised return of wounded to hospital ships and called in salvage units to clear the beach.

HELLO ... RED BEACH' 

Invasions Required
Fast, Accurate Work
From Communications

TWELVE SECONDS AFTER the cruiser's salvo the low-flying SOC wheeled over the smoke-fogged invasion beach and the pilot saw the blossom of the exploding HEs.

"Hello Caribou ... hello Caribou ... on target Kitty ... up 20, right 20 ... up 20, right 20—over!"

Aboard the cruiser, errors in main battery range and deflection were corrected in central. Then a nine-gun blast and the ship's radio talker told the pilot:

"Hello Ace Caribou ... this is Caribou ... salvo ... salvo."

This time the pilot's report was a happy "No change."

"Hello Caribou ... no change, no change ... you're on the target."

Aircraft bombardment spotting from plane-to-ship was only one of the major jobs of Navy communications during island invasions from Guadalcanal to Okinawa; accurate support gunnery was aided by swift radio spotting from aircraft.

While the SOC pilot was spotting the cruiser's gunfire, a new wave of LCVPs churned toward the island. On Red Beach the beachmaster put down his walkie-talkie and told a signalman to send a message on a portable blinker to the control ship, an AGC.

"Red Beach needs two loads of .30-caliber ammo."

To a signalman with semaphore flags he shouted: "Bring in the next wave of LCVPs."

Then he picked up the walkie-talkie and spoke to an Army Command Post.

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WINGING OVER a Pacific island, planes like this Navy Kingfisher offered an instantaneous means of spotting bombardment fire from the guns of the fleet.
AMERICAN CQM and German crew member take a sight on the bridge of the cruiser. Living and eating quarters for the two crews are strictly designated. When they are not on duty, the American and German crews do not mix.

RENDEZVOUS WITH A BOMB

Nazis’ Prinz Eugen On Way to Bikini to Serve As Guinea Pig for U. S.

FROM ABOARD the former German cruiser, Prinz Eugen, steaming to the Bikini atom bomb test—an encounter even the fantasy-filled mind of Adolf Hitler never dreamed of—an ALL HANDS correspondent sends this story of the ship and her American-German crew.

IF YOU WERE at your station minding your own business when suddenly the bull-horn squawked “Herr Oberingenieur zur Brücke, bitte!” you might wonder if you’d gone off your rocker.

On this ship nobody gives it a second thought. Being up on your German, you’d know that the German chief engineer had been called up to the bridge.

Yes, the German engineer, for the IX 300 of the United States Navy was once one of Germany’s crack cruisers, the famous Prinz Eugen.

Awarded to the U. S. by the tripartite naval commission, set up at the Potsdam conference by President Truman, Prime Minister Churchill and Generalissimo Stalin, the cruiser was put into the service of the U. S. Navy at Bremerhaven, Germany, taken to the East Coast of the United States by the German crew under American supervision, and is now on her way to Bikini atoll to serve as a guinea pig in the atomic bomb “Crossroads” operation.

Although she flies U. S. colors, she cannot run up a commission pennant, for she is not a commissioned vessel, being merely “in service” of the U. S. Navy.

That the ship runs smoothly and without too many hitches is a tribute to American direction and German ability to carry out American orders.

That’s the way things are aboard: orders are given by the U. S. complement, orders are carried out by the German complement.

On the passage from Bremerhaven to Boston, there were 574 Germans aboard, and only 80 American crewmen and eight U. S. Navy officers. On that trip all operations were carried out by the German crew, many of whom had been aboard since the ship was commissioned in 1940.

There is one German female aboard of unknown ancestry and no fixed residence, the Captain’s dog “Fifi.”

When Philadelphia Naval Base was reached, most of the German deck crew, with the exception of a few leading petty officers, were shipped back to the fatherland, and American seamen and petty officers took over the deck duties.

The German engine room gang stayed aboard when the Prinz Eugen set out for Panama, to operate the below deck equipment. In the engine room compartments U. S. CPOs and firemen are standing by in observation capacities to learn the German gear.

At the side of the German chief engineer stand engineering division officers, getting the feel of the unfamiliar engines, boilers, and turbines.

The name data plate on the maze of dials, meters, gauges, and indicators, naturally enough, are all in German, but now above each one is the English translation. Above “Hauptventil” is a small strip of adhesive plaster with “Main valve” lettered on it. Every handle that carries the legend “Zu” and “Auf” is now doubly marked to read “closed” and “open.”

In many instances so that there is less confusion, the American crew has picked up a sort of pidgin German. The German crew kept referring, for instance, to the “Kommando Zentrale,” which is Central Station on an American ship. So that no German can come back to report he didn’t understand his orders, you often hear a loud, exasperated American reference over the intercom telephone to the “commando central.” Then there’s no mistaking just exactly what is meant.

Technically, the ship presents a problem with its European measuring system. The U. S. chief engineer is probably the owner of the biggest headache aboard, since he has to deal
with strange gear and with German officers and men who are used to thinking in terms of centimeters instead of inches, atmospheres instead of pounds per square inch. German tons of fuel oil instead of gallons, and centigrade temperature instead of farenheit.

On the bridge, despite a galaxy of German name and instruction plates, the Germans know—much to everyone's relief—what a knot is. They use the word themselves.

The relations of the German crew to the American crew are clear-cut. When it comes to matters of operation of the ship, and the situation demands it, the crews work shoulder to shoulder. Living and eating quarters, however, are strictly defined.

The Germans have their own specially designated areas. Other than on duty, the crews don't mix, nor is there any inclination on the part of the American officers and men who are used to thinking of other ways, besides their uniform.

In the enlisted men's quarters, in the space designated as the American galley, new ranges, ovens, and kettles have replaced the tremendous bathtub-like kettles in which food was prepared for the German crew. In the section of the ship set aside for the German crewmen, they have their own cooks. To a certain extent they still have some of their own stores, and they are allowed to prepare their food in any manner they wish.

Reflecting a tradition of the sea which has fallen into disuse in the U. S. Navy, many of the Germans swing a hammock every night. Consequently, in the American crew's quarters, there are no built-in bunks, and there has been no time to install them, so most of the men are sleeping on folding canvas hospital cots with their regulation mattress on top.

If you couldn't hear them talking, there is still a way to tell who's who aboard the USS Prinz Eugen. Look for the jokers with the long, hanging hair. They're from the Kriegsmarine, as sure as you're a foot high. German sailors seem to have a weakness for letting their hair grow down behind their ears. Germans can be told apart from the American crew in a number of other ways, too, besides their uniform. For one thing, they're short on shoes, and you see many of the crew running around in sneakers with their toes sticking out. They have brown dungarees for working, instead of faded blue.

The original German officers of the cruiser keep pretty much to themselves during off-duty hours. They have their own cabins, assigned to them in officers' country after American officers had been suitably billeted. The American skipper of the Prinz Eugen, Capt. Arthur H. Gruenart, USN, was assistant naval attaché in Berlin when Germany declared war on the United States. As a professional fighting man he was disgusted to have to spend the first five months of the war in German internment; but his German experience gave him an understanding of German psychology. He sets the tone throughout the ship. "Our attitude towards the Germans on the ship," he told his officers, "should be 'correct.'" The German word "Korrect" is one that they understand and use often themselves. It implies a firm, courteous, but finally distant attitude.

The captain has his quarters in the Prinz Eugen flag country, since the ship is equipped to carry a task force commander and staff. Kapitän zur See Reinicke, the former German commanding officer, has been moved to suitable nearby quarters where he is available for consultation.

Although there is a German doctor aboard, in medical matters the U. S. Navy surgeon naturally has the last word. The system worked out is that the German and American doctor each holds sick call for his own crew. The American doctor does not interfere in the treatment of Germans by their own physician unless he feels that the health of the American complement is at stake.

Should contagious disease break out among the German crew he would immediately step in with rigid controls. Arrangements are such that the German doctor sends his patients to one side of the main deck sick bay, the U. S. Navy physician to the other.

The rigidity of the German discipline system shows itself daily in the relations of the German enlisted men to their officers and to American off-
GERMAN BINOCULARS are inspected by American officers. All German gear name plates on ship now have English translations taped above them.

cers as well as the German officers' attitude toward their American opposite numbers. There is a continual clicking of heels (by those not wearing sneakers), rigid snapping to attention and "bracing," and a formality between officers unknown to Americans, to say nothing of the exquisitely formal German officer-enlisted man relationship.

The Germans are not technically prisoners of war, but considered "detailed personnel"! A great number of the crew are volunteers.

As in the case of prisoners of war, the detailed personnel are paid. For enlisted men of any rating, the pay is $27.00 monthly. Officers are paid $34.00, $54.00 and $64.00 a month depending on their rank. This allows them to make a certain number of purchases, mainly cigarettes and clothing at ship service.

Most of the German crew have their heads too full of their own defeat as persons to be much worried about their defeat as a nation. In the German quarters there is little discussion of politics. Of one rather negative politico-military action, however, a certain pride is shown. The German navy this time (as contrasted with after the last war) did not mutiny. This acts as a sort of rewinning of "face" with some of the men who give it a thought at all. They point out too, that for a few short hours a naval man, Grand Admiral Doenitz, was Fuehrer No. 2.

The cruise to the U. S. has solved for many of the men the puzzle of what to do with their lives, for a few short months, at least. It offers bed, work, and American chow. As to what they are going to do after this cruise, most of them shrug their shoulders and shake their heads. They just don't know.

German crewmen are aware of the prowess and history of their former cruiser, and it has been interesting to U. S. officers and men aboard to compare it to American ships they have served in.

Prince Eugen's armament, some of which has been removed for study by BuOrd experts, consisted of eight guns of 8-inch size in four twin turrets. Twelve 4.7 inch guns are mounted in six twin mounts, and four sets of triple 21-inch torpedoes are carried on the main deck. Center amidships is given over to a hangar which housed three Arado 196 scouting planes, and the catapult for launching them. They are no longer aboard.

Normally AA defense was handled by men at six 40 mm Bofors, eight SKC 30 guns, and 28 20 mm guns mounted in two quadruple and 10 double mounts. The four AA directors are set in gimbals and gyro stabilized.

Despite a number of superior but Rube Goldberg-ish separate parts of German gunnery gear, the overall results and operation are less desirable than those of American armament, gunnery officers feel.

Side armor on the cruiser is 3.15-inch nickel steel rolled and heat treated, extending 2.5 feet below the designated light water line. Armor is fastened almost entirely by riveting. Turret armor is 6.3 inches thick at the front, and 2.75 inches at the side.

As for radius, the Prince Eugen can cruise 2,055 nautical miles at full speed, or 6,100 nautical miles at 18 knots. Normally, she carries a complement of 1,390 men.

At the present moment the ship's trim lines are broken somewhat by installations for the atomic bomb test. Welded and secured by wire rope to the top of the pilot house is an army trailer—with the wheels off—equipped with modern U. S. Army radar gear. The gear is being used by the ship, since German radar equipment is less advanced than ours. The trailer's olive-drab has mercifully disappeared under battleship gray. On the main deck forward of the bridge structure certain Army gear has been secured, housed in wooden cases, to see what happens to it when the bomb goes off.

The engineering equipment aboard the Eugen, although it was super-modern when it was installed in Kiel back in the early days of the war, has been outstripped by U. S. equipment during the course of the war. "The thing that is especially irritating to us," comments Comdr. W. L. Handley, USNR, chief engineer, "is that all of the equipment is jammed together so closely. It's complicated and hard to get at."

The optical gear installed is, as usual, of excellent quality. Germany, with its great optical companies, Leitz and Zeiss, has long been a world leader in visual aids.

The cruiser proves an axiom once again that American sailors live cleaner, better, and more ventilated lives on U. S. naval vessels than men in other navies.

"Enlisted men's quarters on U. S. naval vessels," says Capt. Graubart,
“are far superior to those aboard this ship. Where we put 15 men, the Germans expect to sleep 40.”
Any man aboard can answer “aye, aye” to this statement. Furthermore, Germany being a beer-drinking nation, with a beer-drinking navy not given to sailing in hot latitudes, there aren’t enough scuttlebutts on the Eugen to even mention. Over a dozen American ones were put aboard the ship at Philadelphia. Heads and galleys, generally speaking, are less commodious and efficient than on American ships.
The Prinz Eugen (pronounced o-ingen) was launched on 20 August 1938 at Kiel, Germany, with Adolf Hitler officiating. The Krupp Germania Werft built her, and she was commissioned 1 Aug 1940.
In contrast to surface vessels in the Kaiser’s fleet, which had little opportunity to come out of their harbors at all, the Prinz Eugen had an active wartime career. Her most notable war venture was the participation in the engagement between HMS Hood and the Bismarck. German gunnery officers on the Eugen claim that she got off the first salvo of the clash.
In June, 1941, the Eugen entered the drydock at Brest, France, for repairs. There she underwent 60 air attacks, one of which left her severely damaged amidships, and cost her 52 dead.
When the Gneisenau and Scharnhorst made their famous dash through the English Channel, the Prinz Eugen accompanied them. She claimed five British planes shot down and damage to two destroyers.
At another juncture in her career, the Prinz Eugen lost 40 feet off her stern as a result of a torpedo attack launched by the British submarine HMS Trident. Two emergency rudders were placed on her transom stern and hand operated by winches from the after deck. She made the passage from Trondheim, Norway, to Kiel in this condition, under constant air attack, but German officers report she was good for 30 knots.
Her last duty, before surrendering to the British in Copenhagen, was as flagship of the German Baltic fleet engaged in harassing Russian land units during the withdrawal of the German armies in the east. She lay at Wilhelmshafen after her surrender from May until December, when she sailed to Bremerhaven flying International code pennant “C.” She was put into U. S. service 5 Jan 1946.
The ship takes its name from an Austrian military hero, Prince Eugen, born in 1663, who won fame and glory in battles against the Turks in southeastern Europe. The appearance of a ship with such a name in the Kriegsmarine of the third Reich was a conscious effort on the part of the Nazis to incorporate some of the esprit de corps of the old Austro-Hungarian fleet in their new battle forces, as well as win the sympathies of the Austrian population.

ARMY RADAR gear is in wheelless Army trailer lashed to top of pilot house. Ship uses this gear instead of less advanced German gear during long cruise.

EQUIPMENT WHICH is to be tested in the forthcoming “Crossroads” operation is packed in large crates and secured to the foc’sle deck by crewmen.
More on Uniform Change

Sir: I spent three years in the Army before joining the Navy and I know from experience there is no comparison in comfort or become a solid new uniform and the present style. In spite of the claimed inconveniences, the overwhelming consensus among the 1,000 sailors stationed here is for keeping the facilities to keep such a rig in shape?—C. E., USN.

Sir: If the Navy intends to issue an ironing board and iron with every new uniform, it would be fine. But what about the men on small craft who don't have the facilities to keep such a rig in shape? The "monkey suit" runs circles around the uniform is no good.—Crew of an unidrm.

Sir: You have put your finger on something. I can't understand why the Navy, with so many years experience, has been taken in by the porkpie hat story. I would like to be able to buy my hat and have it shipped over to the mess for a fitting. I believe there is a law to that effect. If not, I think there should be.—W. G. E., FMIC, USN.

Sir: The new uniform is really silly-looking. Especially the other uniform was good enough for nearly 14 centuries! Not quite 200 years on. I don't know why the Navy should be so much harder on the sailors stationed here is for keeping the uniform we have, but I believe you can do better. I am sure that the Navy, with all the resources of a great power, can do better.—C. C. E., BM2c, USN.

Sir: If the Navy intends to issue an ironing board and iron with every new uniform, it would be fine. But what about the men on small craft who don't have the facilities to keep such a rig in shape? The "monkey suit" runs circles around the uniform is no good.—Crew of an unidrm.

Sir: We have seen pictures and samples of the new uniform. In our opinion, it is not worth the money and will do little to win the respect of our countrymen. The crew of this YO all agree that the Navy should keep the present uniform and the addition of ideas from recent trends toward sports type uniform has brought forth howls of protest. The new uniform is really silly-looking. Besides, the other uniform was more comfortable. If the Navy intends to issue an ironing board and iron with every new uniform, it would be fine. But what about the men on small craft who don't have the facilities to keep such a rig in shape? The "monkey suit" runs circles around the uniform is no good.—Crew of an unidrm.

Sir: I have worn the present uniform for over four years now and will continue to wear it, but I have yet to find a place or a way to store the gear I need when I go on leave. My suggestion is to keep the uniform in shape?—W. G. E., FMIC, USN.

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Surrender Ceremony

Sir: Protocol must have taken a beating, according to a story in ALL HANDS, December 1946, p. 35, detailing the great amount of perspiration expended to obtain the "Internationale" in the Japanese surrender ceremonies aboard the USS Missouri.

This was highly commendable, to be sure. But about a year ago didn't the Union of the National anthem, called something like "Soviet Motherland", I, L. G., Pic, UNR.

I ask one question, but many of the ceremony arrangements were dumped over the side, I am informed. Among these was the four farewell planes we have learned from officers serving aboard the Missouri on VJ Day. Since these planes did not arrive or those that arrived aboard in large groups without respect to nationality, plans to play national anthems, display ensigns and other pleasantries had to be changed.

You are right about the "Internationale". In 1911 "The New Hymn of the Soviet state was adopted as the Russian national anthem.—Ed.

Educational Benefits

Sir: None of the discussions I have seen on the educational features of the G. I. Bill of Rights cover the problems of men interested in studying theology or other special fields.

For instance, a high school graduate who has had no previous Latin or Greek record so I a year of prefreshman in a minor Catholic seminary is eligible to take the four-year major seminary course.

However, any a theological student can obtain more schooling than the one year for each year of service we understand the Regulations provides.—W. J. YC.

Veterans with 90 or more days service who complete their first year of schooling under the G. I. Bill are still eligible to take the four-year major seminary course.

Veterans, with 90 or more days service who complete a year, as the rating of Veterans' Administration can count their free education benefits on a month-for-month basis. Four years' service (the maximum) would provide 18 months of training. That is, nine months in high school, college, seminary or an equivalent type of education, or a combination of institutions. (See ALL HANDS, February 1946, for recent revisions in G. I. education benefits.—Ed.

Not Eligible for Advancement

Sir: Having been YLC for 18 months, I theoretically am entitled to go up for CT. However, I have been hospitalized for more than a year and eventually will be survived by the Navy with a service-connected disability. Is there any way in which I may be advanced in rating?—W. J. H., YLC, UNR.

No. Personnel on temporary duty (including hospitals) are not eligible for advancement even though they meet the specified proficiency, conduct and time in rating requirements.—Ed.

Souvenir Books

In this section ALL HANDS each month will print notices from ships and stations which are publishing souvenir books or "new records" and wish to advise personnel formerly attached. Distribution must be handled by our compassionate and generous Service Store (See ALL HANDS, November 1945, p. 37)." Publicity in this section should not be requested until production of publication actually is underway.

NOTE: Notices are to be directed through channels to the Chief of Naval Personnel (Afrm, ALL HANDS, March 1946, p. 6), addressed to Naval Publication data, address of ship or station, price per copy and whether money is required to be returned to“To the men of a four-month’s service who at present is receiving treatment at U.S. Navy Hospital, North Carolina, near whose command the trips was due to an eye infection. I would be willing to risk an eye providing.

Hass Mark's uniform were questioned.

Naval Aid Auxiliary Workers

Sir: Will you satisfy our curiosity as to the uniform worn by the young lady on the right in the picture in ALL HANDS, January 1946, p. 42?—NAS Army Crew.

Sir: . . . Some say she wears a white shirt and a red tie; to know for sure we have to ask her. But how come the three hashmarks?—W. H., SLC.

Sir: . . . The girl on the right appears to be wearing a first class Navy rating, but we don't have any other type, or combination of institutions. (See ALL HANDS, January 1946, for recent revisions in G.I. education benefits.—Ed.

Paid for Last Day

Sir: If a man was discharged on the first day of the month, what pay and allowances would he be entitled to?—S.W.A., SOMEC, USN.

Sir: Payment is figured by the day, he would receive pay to and including the day of discharge. However, if a man is discharged in the full month and the pay deduction made from the dischargee's account. Should it be the first day of the following month or the day of discharge. The full quarterly Clothing allowance would be credited to the emalee's account. If Officers receive full pay and allowances through last day of their term leave. (See ALL HANDS, January 1946, p. 42, the last paragraph.—Ed.

Indoctrinational Trips

Sir: With reference to BuPers CirC, LTR 116-45 (NDB, January-June 1945), are indoctrination trips $22 to $35 per man payable to Welfare Officer, USN, San Francisco (CACR), c/o BuPers, PO Box 15, New York, one dollar for each mile outside the three mile limit to be considered as qualifying for the $100 extra mustering out of pay service "outside the continental limits of the U. S. . "—H. W. E., EP(CQ), USN.

Indoctrination trips outside the three mile limit will qualify providing they are a regularly presented part of the indoctrination course. Personnel who voluntarily go on trips beyond the three mile limit for their own pleasure or benefit will not be eligible. When Sep/Pers disbursing officers find records available are not conclusive basis for payment, individual claims may be filed with BuPers. Each case is consid- ered on its own merits and statements not supported by records are checked with COs under whose command the trips are claimed to have been made.—Ed.

APRIL 1946

Pro-Natal Care

Sir: My wife, being pregnant, has been under the care of a Navy doctor at this station. However, the station is being inactivated. Since I am being left here as caretaker, it will be necessary to take over services of the civilian doctor and to use civilian facilities. Is there any way I may be reimbursed for the medical and hospital expenses?—B.L.G., SK3c, USN.

As a PO2y you are not entitled to Emergency Medical Care provided by the government for wives and infants of servicemen. Neither can the Navy assume the expense of medical or hospital care by civilian doctors for dependents of any branch of the government except the Navy. Location of the nearest Navy medical unit with facilities for dependents and procedure may be obtained from ALL HANDS (June 1946, p. 39) or by writing the commandant of your naval district.—Ed.

Home of Record Change

Sir: I enlisted in the Navy in New York when my father was serving there as a naval officer. He has since retired and my family now makes its home in California. Since I expect to become eligible for demobilization while on the east coast, should I change my home of record so that my identity be held confidential.—J. E. B., SLC, USN.

"Home of record" has no bearing on discharge travel allowance. (See ALL HANDS, January 1946, p. 42, the last paragraph). Personnel entering the service by induction are allowed mileage to the transportation center of theSelective Service board to which they reported for delivery to the induction station.—Ed.

Fifth Fleet Flagship

Sir: In the story on the McVay trial in ALL HANDS, January 1946, p. 42, the last paragraph lists the Indianapolis, traditional flagship of the Fifth Fleet. I believe you must have meant the Fifth Fleet. As a member of the Fifth Fleet staff for many months, I am sure the Third Fleet Flagship is the Indianapolis.—J.L.N., CN, USN.

Fifth Fleet is right. Although the two fleets were interrelated, even record, Admiral Spruance usually used the Indiana as his flagship, while Admiral Halsey, ComSDFl, preferred the New Jersey.—Ed.

Offers Eye to Shipmate

Sir: The case of W. P. Bingham, SCM, who at present is receiving treatment at Boston Navy Hospital for severe eye infection interests me. The article in ALL HANDS, January 1946, stated that this man might lose his sight completely.

My knowledge there have been many eyes saved by transplanting parts of another, non-diseased eye. I would be willing to risk an eye providing. I could be reasonably assured this man would be able to see in at least one eye.

This misfortune is not due to misconduct.

I could remain in naval service and hold my present rate.

As Bingham loses his sight completely, could a part of one of my eyes be used to restore it? (2) Could I remain in naval service if I lost an eye for which purpose?

I request that you investigate and advise me on this matter in the best interests of the continuance of my present position.—Ed.
THE QUEEN ARRIVES—Out of plane and into jeep (upper left) at San Diego goes Emma Lou Wood, Indiana U. coed, selected "Queen of the Cape" by men of the escort carrier Cape Gloucester. Top right: USS Saratoga leaves San Francisco after being readied for atom bomb test. Lower left: Jet propelled P-80 uses rocket-assist units to cut takeoff length. Lower right: Sgt. H. A. Psios, 3,000,000th returnee from Pacific, is congratulated on his return to U. S. by Capt. C. E. A. Spiegler, USNR, commanding officer of USS Olmsted.
LARGEST PEACETIME NAVY BUDGET IN HISTORY IS SENT TO CONGRESS

PERIOD 21 FEBRUARY THROUGH 20 MARCH

Original Estimates Cut

The largest peacetime Navy budget in U. S. history is in the hands of Congress. Sent to Capitol Hill last month by President Truman, the budget calls for naval appropriations for fiscal 1947 of $3½ billion dollars. The 1947 figure would be increased upon approval, by the transfer of 500 millions from the naval central procurement fund. New contract authority of 276 millions is provided for planes to be delivered in 1948.

Provision is included in the estimates for an expanded peacetime naval reserve, but the program for new ships and planes will be greatly curtailed. Construction at naval establishments is being reviewed, the White House said, to limit it to a minimum in order that manpower and materials can be applied toward relieving the national housing shortage.

Included in the recommendation is 227 millions for research and development work. This would allow the program to proceed at about its present level.

Fleet Admiral Chester W. Nimitz, Chief of Naval Operations, speaking before the House Naval Affairs Committee last month, said that the original estimates of the Navy Department as submitted to the Bureau of the Budget totaled $6,325,000,000 for the fiscal year 1947. This was prepared on the basis, he said, of Postwar Plan One-A.

"As a result of the reduced appropriations expected to be available," Admiral Nimitz said, "it became necessary to prepare a new postwar plan." This plan, designated Postwar Plan Two, provides for a reduction, from Plan One-A, in total ships of 114. Plan Two calls for 965 ships in the postwar fleet, compared to 1,079 in Plan One-A. Plan Two provides for 291 active ships, compared to 319 in Plan One-A, 42 reserve ships against 73, and 692 inactive vessels against 687. Plan Two would reduce battleships by two, heavy cruisers by eight, light cruisers by five, heavy aircraft carriers by one, destroyers by 18, DE's by 60, submarines by 13, in comparison with Plan One-A.

Admiral Nimitz said the Navy had asked $1,056,000,000 to complete ships under construction. "The budget submitted to the Congress includes only $300,000,000 for sharply curtailed ship construction," he said. He said that $2,285,000,000 had been asked for maintenance and operation, research, training, procurement of aircraft, and the "myriad of other items necessary to maintain an effective fighting force. The comparable figure submitted to the Congress is $2,139,000,000, a reduction of 25 percent."

Despite the record peacetime size of the budget, virtually every unit of the naval establishment would take a sizable reduction, a consequence to the conversion from war to peace. In the following, the estimate for fiscal 1946 is given first, the 1947 appropriations second:

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<thead>
<tr>
<th>Unit</th>
<th>1946</th>
<th>1947</th>
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<tr>
<td>BuShips</td>
<td>$440,000,000 and $2,790,000,000</td>
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<tr>
<td>BuPers</td>
<td>$106,700,000 and $199,071,057</td>
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<td>Office of the Secretary</td>
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<td>BuAv</td>
<td>$224,900,000 and $3,000,000,000</td>
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<td>BuSanA</td>
<td>$1,430,097,000 and $57,915,000</td>
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<td>BuMed</td>
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<td>BuDec</td>
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<tr>
<td>Increase and Replacement of Naval Vessels</td>
<td>$900,000,000 and $2,370,000,000</td>
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Hitler reported dead as Germany surrendered under Admiral Doenitz. Fighting still raged against Japs, troops as Marines entered Naha on Okinawa while suicide planes continued to harass our shipping. Rangoon and Fochou fall to the Allies.
New Assistant Secretary

W. John Kenney was sworn in as Assistant Secretary of the Navy last month, replacing H. Struve Hensel (see p. 65). The oath of office was administered by Rear Admiral O. S. Colelough, USN, Judge Advocate General, in a ceremony at the Navy Department attended by Secretary of the Navy James Forrestal, Fleet Admiral Chester W. Nimitz, USN, and Fleet Admiral Ernest J. King, USN.

A graduate of Stanford University and Harvard Law School, Mr. Kenney practiced law in California until 1938 when he was called to Washington to establish and organize the Oil and Gas Unit of the Securities and Exchange Commission.

Coming to the Navy in January 1941, Mr. Kenney originally served as special assistant to the Undersecretary of the Navy. His other offices have included assistant chief of the Procurement Legal Division of the Undersecretary's Office, chairman of the Price Adjustment Board, general counsel, vice chief of the Office of Procurement and Material and deputy to the Assistant Secretary of the Navy.

Earlier this year he represented the Secretary of the Navy at the International Air Conference in Bermuda.

German Ships Divided

The major part of Germany's merchant marine, which ranked fourth in prewar years, will be divided among the U. S., Great Britain and the Soviet Union through an agreement announced last month in Washington, London and Moscow.

The three shares comprising 1,189-600 gross registered tons, are worth more than $80,000,000. About 500 ships are included in the transfer.

New Hydrographer

Rear Admiral George Sloan Bryan, USN (Ret) stepped down as Navy Hydrographer in February, relieved by Rear Admiral Robert Ogden Glover, USN, as new chief of the Hydrographic Office.

Admiral Bryan had been chief hydrographer since 1938 and was charged with production of charts vital to the Navy's operations during the war years. He received the Legion of Merit for outstanding service upon the citation of President Truman.

Weakness Feared

Growing concern over the present efficiency status of the American and British armed forces, each in the throes of demobilization, was voiced by top-notch Allied spokesmen during the past month.

General of the Army Dwight D. Eisenhower reported that the Army is at an extremely low ebb and it would require at least one year to return it to the prewar efficiency level. Meanwhile, British Prime Minister Attlee told the House of Commons that while Great Britain hopes to see a steady reduction of armaments throughout the world it proposes to keep more than a million men in the armed forces for at least a year because: “One cannot afford to take risks.”

The prime minister’s message coincided with Admiralty reports announcing that units of the British Home Fleet were on their way to Gibraltar for six weeks of maneuvers which will include battle exercises.

General Eisenhower reported on a country-wide inspection tour in which he said he found the greatest Army deficiency to be a lack of trained personnel in numerous branches requiring technical skills. He pointed out there are no divisions in the country trained and prepared for combat. Because of a shortage of trained ground crews only “meager numbers” of planes can be flown, he added.

“I should say that another year will be required to establish a framework for organized efficiency comparable to what we had in 1940,” he said.

Withdraws Nomination

Almost two months after he was first nominated by President Truman to be Undersecretary of the Navy, Edwin W. Pauley himself requested the nomination be withdrawn. Mr. Pauley declared he had refuted “false charges” made against him but that in “the current hysteria” he did not feel he could serve either the Navy or the President as they deserved.

Thus ended the battle royal on Capitol Hill which had caused the resignation of Harold L. Ickes as Secretary of the Interior and drawn the nation’s attention to debates which marked hearings before the Senate Naval Affairs Committee.

President Truman nominated Mr. Pauley on 18 Jan.

Mr. Pauley is head of an independent oil company, the Petrol Corp., and former treasurer of the Democratic National Committee.

Julius A. Krug, ex-War Production Board chief and for a short time a Reserve lieutenant commander on active duty has been nominated by President Truman to fill the vacancy left by Mr. Ickes as Secretary of Interior.

Seeks to Regain Job

The U. S. Attorney's office in New York has offered to help a Navy veteran compel his former employer to reinstate him in the position he held when he entered service.

Earle N. Bishopp, assistant U. S. Attorney, was assigned to handle the prosecution in behalf of Robert Wendell, Massapequa, L. I., who prior to entering the Navy was employed by the General Machine Parts Company, Bronx, as a salesman and maintenance engineer. The veteran also asks $5,147 in wages lost since his discharge from the Navy on 7 Dec 1944.

New Observatory Head

Commodore J. Frederick Hellweg, USN (Ret), for the past 16 years superintendent of the U. S. Naval Observatory, Washington, D. C., has been relieved by Capt. Ralph S. Wentworth, USN.

Commodore Hellweg made numerous improvements in methods of time determination and dissemination and in nautical and air almanacs published by the observatory.

Commodore Hellweg, a native of Baltimore, was graduated from the Naval Academy in 1900. Capt. Wentworth, class of 1912, is a resident of Annapolis, Md. During the war he served as Com. NOB, Iceland, and as chief of staff to ComNavEur.
Proposed naval district quotas for training of the postwar Organized Reserve surface divisions were announced last month as the Navy prepared to go before Congress with its plans for a long-range Naval Reserve program.

This program includes 760 Organized Surface Reserve Divisions, with quotas assigned for each naval district determined by overall population, the number of former Navy men living in the district and training facilities available. Each division will be composed of approximately 19 officers and 200 enlisted men.

The proposed quotas are:

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<tr>
<th>NAVAL DISTRICT</th>
<th>HEADQUARTERS QUARTERS</th>
<th>NUMBER OF DIVISIONS</th>
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<tbody>
<tr>
<td>1 Boston</td>
<td>149</td>
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</tr>
<tr>
<td>2 New York</td>
<td>194</td>
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<tr>
<td>3 Philadelphia</td>
<td>106</td>
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<td>4 Norfolk</td>
<td>28</td>
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<tr>
<td>Potomac River Naval Command</td>
<td>Washington, D.C.</td>
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<td>6 Charleston, S.C.</td>
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<td>7 Miami</td>
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<td>8 New Orleans</td>
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<td>9 Great Lakes, Ill.</td>
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<td>10 San Diego</td>
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<td>11 San Francisco</td>
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<td>12 Seattle</td>
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<td>13 Poole Harbor</td>
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</tbody>
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District directors of Naval Reserve, under the commandants, will administer the activities of Reservists in their respective districts.

Proposals prepared for Congressional consideration envisioned:

- An Organized Reserve (sometimes called the Ready Reserve) of 200,000 highly-trained civilians, including an Organized Air Reserve of 6,100 Navy and Marine aviators, 2,800 ground officers and 18,800 enlisted Navy and Marine personnel.

- A Volunteer Reserve (or Standby Reserve) of about 800,000, including air personnel.

- Organized and Volunteer Reserve forces of the Marine Corps, the Organized Reserve to be composed of 1,108 officers, 68 warrant officers and 24,633 enlisted men, while the Volunteer Reserve will remain open until further notice to all Marines separated since the Japanese surrender.

- A Merchant Marine unit to be included on a voluntary basis in the Navy program.

Details of the Navy Reserve program were outlined in previous issues of ALL HANDS (November 1945, January, February and March 1946.) Marine Corps reserve plans were disclosed in ALL HANDS for March 1946.

Tugs for Rescue Work

Three ocean-going tugs to be manned by War Shipping Administration crews have been allocated to the Navy Department by WSA for rescue service in the North Atlantic. The tugs and crews will help relieve a Navy shortage of rescue equipment and personnel. Of the three 194-foot tugs, one will be operated in the Azores, one will be stationed at Halifax, Nova Scotia, and the third will be held in reserve in New York to be used as needed by CincLant.

APRIL 1946
Admiral Wilkinson Drowned

Vice Admiral Theodore S. Wilkinson, USN, was drowned 21 February when an automobile he was driving plunged from a ferry into the Elizabeth River at Norfolk, Va. The body of Admiral Wilkinson was interred in Arlington National Cemetery with full military honors.

In the accident the admiral succeeded in saving his wife. Mrs. Wilkinson recounted that the admiral had lost control of the automobile, with which he was unfamiliar, as he drove aboard the ferry. When he realized they were going over the bow of the ferry he jerked open the door and pushed her out. Mrs. Wilkinson was rescued by the ferry's crew.

Admiral Wilkinson, who won the Medal of Honor as an ensign commanding a landing party from the battleship Florida during the Vera Cruz, Mexico, campaign in April, 1914, later distinguished himself as an amphibious operations commander in the Pacific in World War II. His name was associated with operations at New Georgia, Vella Lavella, Treasury Island, Bougainville, Peleliu and Angaur in the Palaus, and Leyte and Lingayen Gulf in the Philippines. He held top-ranking posts during the war as deputy commander of the South Pacific Area and South Pacific Forces, commander of Amphibious Forces in the South Pacific and commander of the Third Amphibious Force, Third Fleet. He closed a 40-year Navy career as a member of the Joint Strategic Survey Committee of the Joint Chiefs of Staff, a job he had started only a month prior to his death.

The admiral, 57 when he died, was Chief of Naval Intelligence at the time of Pearl Harbor, and was one of the witnesses in the recent Congressional hearings on the disaster.

Rear Admiral James J. Fife, USN, a member of the General Board, has been assigned as Navy member of the Joint Strategic Survey Committee of the Joint Chiefs of Staff. He fills the vacancy left by the death of Admiral Wilkinson.

Nadao is 'LST Baby'

LST1012 wasn't designed to handle maternity cases on the high seas—but she can do that, too, if necessary.

Nadao Yo Shiyama (six pounds, four ounces dripping wet) and his Korean mother Kaneko turned the tank deck into a maternity ward.

Healthy and round-faced, Nadao was born at sea while the LST was en-route to Kunsan, Korea, from Japan with Korean repatriates aboard. While his anxious father, Kakugan Yo Shiyama, stood by, Nadao was born with the assistance of a Korean doctor and midwife, and two Navy pharmacists mates, E. P. Raccio, PhM3c of Derby, Conn., and F. C. Flowers, PhM3c of Lake City, Fla.

Things were made "legal-like," too. Pharmacists mates and Marine Pvt. William Sim of Buffalo, N. Y., drafted and signed a birth certificate for the seagoing infant and the 1012's commanding officer, Lt. Comdr. M. J. Flowers Jr. of Chattanooga, Tenn., signed on the last dotted line.

Most puzzled of ship's company was Storekeeper T. M. Dryden of LaGrange, Ill., who didn't know how to account for this new item. All he could say was, "It just isn't in the books."

WHITE HORSES draw the flag-draped caisson bearing the body of Vice Admiral Theodore S. Wilkinson to a burial plot in Arlington National Cemetery. The admiral was drowned when his automobile ran off a Norfolk ferry.
Navy Protests Russian Firing

A Navy Department protest has been filed with Moscow regarding the latest incident of Soviet aircraft firing bursts in the vicinity of a Navy seaplane. Late last month no reply had been received. Moscow had, however, replied to a protest on a similar incident occurring last fall.

On 20 February two Russian fighter planes overtook a Navy "Mariner" near Darien, Manchuria, and fired warning bursts for about 10 minutes. The American plane, which was not hit, replied and turned to Tsingtao, China. The incident took place after the pilot of the Mariner, contrary to orders, had gone inland from the coast. Darien was designated open to the commerce and shipping of all nations under the terms of the Chinese-Russian treaty of last 14 August.

The Navy informed the Soviet Government that action of the Russian planes was unjustifiable in view of the friendly relations existing between the two countries.

Last 15 October a Mariner carrying out a flight passed within a mile of Port Arthur and turned south. About 25 miles at sea from Darien it was overtaken by a Russian fighter plane which made several passes, on at least one of which it opened fire.

The Navy protested this act, which took place beyond the three-mile limit over the open sea. The Soviet Navy replied that the defense of Port Arthur is a Russian responsibility and that the U.S. planes may not enter the boundaries of the naval base at Port Arthur and Darien, or approach the coast within 12 miles of those places, without obtaining permission from the Soviet military command.

The Navy pointed out to the Russians that Moscow had not informed the U.S. previously of an intent to apply a 12-mile limit to Soviet-occupied territory, as distinguished from actual Soviet territory and that the Russian answer did not explain why an American plane had been fired upon when 25 miles at sea.

Missouri to Mediterranean

The battleship Missouri, upon whose deck the Japanese signed surrender terms last 2 September, sailed from New York last month on a cruise to the Mediterranean. Her announced mission is to bear to Istanbul the body of the late Turkish ambassador, Mehmet Munir Ertegun.

The big ship steamed unescorted on her first trip across the Atlantic. Due at Gibraltar 31 March, the Missouri was to be joined there by the destroyer Power and pick up Admiral Henry K. Hewitt, USN, ComNavEu, whose flag she will fly while she is in Mediterranean waters. Capt. R. H. Hillenhoieter, USN, is in command of the ship.

Threading the troubled Dardanelles, the Missouri was to tie up 5 April at Istanbul on the Bosporus. After a stay of three or four days, she will point her big bow south and westward, heading toward the Atlantic. She is scheduled to leave Tangier, Spanish Morocco, at the western entrance to the Strait of Gibraltar, about 1 May.

A CENTURY of sailing and adventure, the USS America, the yacht that first won the America's Cup Race, is soon to be scrapped.

AGE CONQUERS OLD NAVY YACHT

A CENTURY of yachting and naval history comes to an end with the scrapping of the USS America (IX41), now being dismantled at Annapolis Yacht Yard, Md. The old sailing ship, familiar to generations of midshipmen, had as colorful a career as many Navy hulls a hundred times her size.

The 87-feet, 146-ton America was built in New York in 1850 and the next year challenged all comers in an 80-mile race sponsored by the Royal Yacht Club of Cowes, England, in British waters. America led 18 contenders nearly the whole distance and came home with the club's silver cup, which later became known as the America's Cup. The cup, given to the New York Yacht Club on the agreement that it be a perpetual award, has become the most highly prized trophy in international yacht racing. The best efforts of Sir Thomas Lipton, among other contenders, have failed and the cup has remained in the U.S. since the America brought it home 95 years ago.

America's colorful career was just beginning when she won the Cowes race. In 1860 she was sold to a British gentleman who turned around and sold her to the Confederate Navy in 1861 for $30,000. Thirty years remained her Memphis and she was scrapped and refitted to serve as a cruiser. She was blockaded in the St. John's River, Fla., however, and fell into Federal hands after the South seceded her. In her first tour of duty with the U.S. Navy beginning in 1862 she was used in the Federal blockade of southern ports. Subsequently she became a school ship at the Naval Academy and was used to teach seamanship to prospective officers of the old Navy.

America retired to civilian life in 1873 and operated as a private yacht along the East coast until 1921 when she was offered as a gift to the Navy. The Navy, which cannot accept gifts, bought her for $1 and sent her up the Severn River to her old Annapolis berth.

The America was largely uncared for during the stress of the war years and when hauled out of the water recently was found unserviceable. Repairs would have so taxed the strained Navy budget it was decided to scrap her. On request of the superintendent of the Naval Academy a model will be built from parts of the old yacht to be retained on exhibit at the Academy.

Mysterious Ship Fires

A series of mysterious fires swept British ships during the past month, damaging both merchantile and naval vessels.

The world's largest ship, the liner Queen Elizabeth, was believed to be a victim of sabotage at Southampton and Cunard White-Star officials took extra precautions to guard her sister ship, Queen Mary. Other large liners also are being guarded while in port.

The nine fires which broke out in 10 days caused damage to the 28,000-ton aircraft carrier Victorious and the 1,000-ton minesweeper Steadfast. Admiralty spokesmen said there were no suspicious circumstances surrounding these fires. Dockyard firemen and the crew of the Victorious fought the blaze in its boiler room for more than an hour as she lay at Devonport.
Six Lose Stripes

Six Marine noncoms in the Pacific, who had circulated a petition protesting MarCorp discharge policy, were reduced to rank of private on recommendation of a board convened at Ewa, Oahu, T. T., it was announced in February. Disciplined were T/Sgt. Jason F. Scheffer, Harrisburg, Pa.; Sg t. George M. Darcy, New York City; Sg t. Harry H. Cooley, New Orleans; Corp. William A. Hamilton, Indianapolis; Corp. Dale L. Hill, Wichita, Kan., and Corp. Walter S. Mullarkey, St. Louis, Mo.

The board found the Marines acted "in violation of Navy Regulations and other pertinent orders; that such action was taken without the knowledge or consent of their commanding officer; and that no previous effort to obtain the information desired had been made through official channels."

The announcement said the six men "failed to display qualities of leadership, judgment, loyalty and fidelity."

Lieutenant General Roy S. Geiger, commander of the Pacific Fleet Marine Forces, announced the disciplinary action.

Report Nears Completion

By 1 June the Joint Congressional Committee investigating Pearl Harbor expects to complete its report on why the U. S. was caught by surprise on 7 Dec. 1941.

This major task—assembly over 13,000 pages of testimony in a comprehensive report—follows a long series of hearings which ended in February. Senator Alben W. Barkley (D., Ky.), chairman, and other members of the 10-men committee heard 26 persons and took 60 volumes of testimony. Supplementing this evidence are reports of the Roberts Commission and two major and three minor Army and Navy reports.

Strong political controversy centered about the inquiry from its inception.

Chairman Barkley has informed members of the committee that written questions might be submitted to him for further submission to former Secretary of State Cordell Hull and former Secretary of War Henry L. Stimson. Written answers would be returned by the former Cabinet members, both of whom have been ill for some time. Mr. Stimson did not appear during the hearings and Mr. Hull testified for only brief periods.

Vet's Employment Ruling

In the first such case to reach a Federal appellate court, the U. S. Circuit Court of Appeals last month in New York reversed a lower court's finding and ruled that portion of the Selective Service Act which protects a veteran's re-employment rights does not entitle the veteran to displace a non-veteran of greater seniority.

Provisions of the Act interpreted by the Circuit Court were subdivisions (b) and (c) of Paragraph 8 which provide that a veteran who was permanently employed before induction is entitled to re-employment for one year provided he applies for re-employment within 90 days of discharge.

In the case in point, Abraham Fishgold, a veteran and a welder, brought suit against a Brooklyn firm charging the company had laid him off twice, favoring other welders with greater seniority. Fishgold had been rehired temporarily before induction and ruled that portion of the Selective Service Act, Federal Judge Matthew T. Ab

Photograph from Press Association, Inc.

Winning Form is displayed by Constantine Lewis, ex-Seabee, after taking National YMCA handball title.

Photograph from Press Association, Inc.

PRIZED NYLON, under tests for use in "flak jackets" at Naval Research Laboratory, shown by Ruth Mulligan.
Air Force Reorganized

General Carl A. Spaatz announced reorganization of the Army Air Forces, and at the same time said that “the Army Air Forces can discharge its responsibilities to the people of the United States most effectively if and only if it is granted full parity and co-equal status with the ground and naval services.”

He stated that unless the Air Forces receives authority and funds with which to maintain a minimum establishment of 400,000 men it could not accomplish its mission of “insuring” the country against air attack.

The general held that “an adequate, alert air-force-in-being” was the best insurance against unannounced aerial attack. “It is extremely unlikely that the United States ever again will have time to prepare for war after war actually begins,” he said. “The initial attack of World War II came without warning and from the air. Any future such almost certainly will come from the air.”

General Spaatz was named commanding general of the Army Air Forces in an order signed by General of the Army Dwight D. Eisenhower 28 February. He succeeded General of the Army Henry H. Arnold, who had expressed a desire to be relieved of active duty.

The AAF commander said that post-war plans would divide the Air Forces into three major combat commands: a Strategic Air Command, a Tactical Air Command, and an Air Defense Command. Air Reserve and Air National Guard are also contemplated, capable of rapid expansion to war strength.

Five supporting commands are planned in addition to the combat organizations. They are (1) the Air Materiel Command, which will perform normal maintenance and supply functions as well as research and development; (2) the Training Command, which will provide all phases of individual training except the higher education carried on in the Air University and the unit training conducted in the three combat commands; (3) the Air Transport Command, which will provide the global service, including military air transport, air signal communications, flight service, weather, rescue, flying safety, and aeronautical chart service, and (4) and (5) the Air University and the Air Proving Ground Command, two agencies whose functions will be “to crystallize and to disseminate the latest Air Force doctrine through training programs and through tactical experimentation.”

Speed Removal of Japs

To speed evacuation of Japanese from China, Manchuria and Formosa the co-equal stated 100 vessels LSTs to Japan’s shipping control administrator, Rear Admiral C. B. Momsen, USN, for operation by Jap crews under strict U.S. control. The Army is co-operating in the plan by making available 100 Liberty ships. The War Department declared use of the ships would not hinder homeward-bound U.S. troop movements.

China to Get U. S. Ships

The House of Representatives last month approved legislation authorizing lease or donation to China of 271 small U.S. naval vessels. Its action has been interpreted as the first major extension by Congress of the defunct lend-lease program.

Chairman Vinson of the Naval Affairs Committee said that under the terms of the bill, the following ships would be available for transfer: 6 buoy and light tenders; 24 mine sweepers; 193 landing craft; 6 destroyer escorts; 6 motor gunboats; 28 submarine chasers; 8 oilers; 1 surveying ship; 2 repair ships and 2 floating drydocks.

Under the bill, which now goes to the Senate, the President may make an outright gift of these ships and

U.S.S. AUGUSTA, in pre-war photo, illustrates a properly "dressed" ship.

'DRESS SHIP' CEREMONY REVIVED

During the war our Navy was a fighting fleet and many of its customs and courtesies temporarily were given the deep six. However, Washington’s birthday 1946 was celebrated in true Navy style when by direction of AINav 86 the age old ceremony of "dressing ship" was revived.

Origin of dressing ship is lost in the obscurity of history. However, it is considered by many to be a survival of the multi-colored streamers and pennants with which Henry VIII decked out his ships.

On special occasions, such as national holidays or as a compliment to a foreign nation or distinguished personage, ships of the Navy at anchor are dressed or full dressed from morning to evening colors. Washington’s birthday, Navy Day, and foreign holidays when ships are in foreign waters are examples of such times. When these days occur on Sundays, the ceremony is postponed until the following day.

When dressing ship national ensigns are hoisted at each masthead. If the dressing is complimentary to another nation, its standard is hoisted at the mainmast and the U. S. flag is hoisted at the foremast. The exception to the rule is in the case of a flagship with more than one mast when the personal flag flying at the main is shifted to the fore. However, in the case of a single masted flagship the personal flag is displayed at the mainmast, alongside and to port of the ensign.

Special flags such as guard flags are dipped clear of an ensign or personal flag flown at the fore. If the masts are of the same height, the national ensigns are the same size.

In addition to dressing of the mastheads, when the masting of a ship permits, a rainbow of flags is arranged reaching from the foot of the jackstaff to the foot of the flagstaff by way of the mastheads. Particularly masted vessels try to make the most artistic display and to modify as little as possible the rainbow effect. Flags are stopped on the line 12 inches apart. The order of flags and pennants is as prescribed in the appendix to "Flags of the United States and other Countries" (H. O. 89).
With 5,000 other service men stationed at Guam, Abubums turned up at the movie theater to see the world premiere of "Sailor in Heart," starring George Sanders and Carole Landis.

"My mission has been accomplished," said Abubums. "I've been doing the rounds of GI hospitals, sketching for the Army's Camp Newspaper Service. Since the war's end, my sketches have been auctioned off at military hospitals, selling for tremendous prices. Now that the war is over, I think I'll go back to my old job in the publishing business."

Caniff refused to accept payment for "Male Call." He also refused all royalties accruing from an entire book that the book's proceeds to the Army Emergency Relief Fund. "Male Call" was distributed by the Army's Camp Newspaper Service.

The 39-year-old artist was kept from military service by a childhood leg injury but determined to make his war contribution in some other way. In addition to "Male Call," Caniff drew training aids for the Army, and illustrated the War Department's "Pocket Guide to China." His sketches were auctioned off at war bond rallies, and brought tremendous prices. Since the war's end, he has been doing the rounds of military hospitals, sketching for wounded veterans.

First Honorary Member

President Truman became the first honorary member of Reserve Officers of the Naval Service at a ceremony in the White House last month. He received his membership from George S. Piiper of New York, president of RONS, who served during World War II as a Navy captain, aide to Ralph A. Bard, then UnderSecNav.

RONS announced last month that a former Navy Reserve lieutenant commander, Minor Hudson, Washington attorney, has been named executive director. Mr. Hudson succeeds Comdr. R. J. Darnelle, USNR, of Washington, who served as interim executive director. Commander Darnelle was one of the founders of RONS, and has seen the organization grow from 20 members to about 6,000 at present.

RONS is an organization of Navy Reserve officers on active or inactive duty.

Marines to be UNO Guards

Marines in dress blues—something you seldom saw during the war—will serve as guards for the Security Council meetings during UNO sessions at Hunter College, N.Y., this month.

The 75-man detail, commanded by Maj. Jonas M. Platt, has been selected from the complement at Camp LeJeune. The detail, which has been established by the British Government at UNO's London sessions when 140 Royal Marines were assigned as guards.
ICEBERG CARRIER PROJECT

We may have been short on a lot of things during the early days of World War II, but not on ideas.

Now comes revelation via headquarters of the Combined Chiefs of Staff that British, American and Canadian governments in 1942 and 1943 seriously toyed with plans for constructing a 2,000,000-ton aircraft carrier made from, of all things, ice.

This gigantic floating icebox was to have been our answer to the German U-boat menace. Termed the "Habbakuk Project" it was to be 2,000 feet long, 300 feet wide and 200 feet deep with four-pipe hull, not equipped for the four-pipe hull, the iceberg carrier was expected to make 5 knots. The cost: approximately $70,000,000. Its only armament would have been batteries of antiaircraft guns.

Chief advantage of the ss Habbakuk was its predicted ability to withstand torpedo attack. A fish exploding against its huge walls would have dug only a three-foot crater, it was estimated.

The project proceeded to the model building stage in the winter of 1943. A 1,000-ton model 60 feet long, 30 feet wide and 20 feet deep was built at Patricia Lake, Jasper, Canada. But the technical headaches were many and the easing of enemy submarine activities led the Allies to give up the idea in December 1943.

The idea was originated by the British in September 1942, who visualized the carrier as an invulnerable floating air base to combat enemy submarines and afford air cover for landings on the European coast.

The carrier was designed for the cold waters of the North Atlantic but was to have been provided with self-contained refrigeration machinery to keep from melting away should warm water duty become necessary.

Engineers realized that ordinary ice was too brittle so they invented a substance called "pykrete." It was simply ice reinforced by wood pulp. An ordinary small-arms bullet bounced off the ice-wood mixture. Pykrete also slowed down the melting process. As for the Habbakuk's seaworthiness, it was estimated capable of resisting waves 1000 feet long and 50 feet high.

Refrigerating engines were to be installed, in a central hold which was to circulate cold air through sheet iron pipes placed within an insulating skin.

At a Demonstration of the new ice and wood-pulp mixture a scientist fired two shots at sample slabs of ice to pykrete. One of the bullets grazed the knee of Fleet Admiral Ernest J. King, USN. The former CNO was present as a spectator. Admiral King commented: "It was the closest I ever came to being shot... This long-haired scientist— it wasn't on the schedule—just pulled a gun and fired twice at these samples."

APRIL 1946

RENEWED FOOD PLEDGE

Secretary Forrestal has renewed the Navy's pledge to conserve food and eliminate waste as its contribution to the newly organized Famine Emergency Committee. "The U. S. Navy," he said, "gladly joins in the vitally important work... and will do all in its power to increase the supply of food for the relief of starving populations abroad."

"Throughout the war," Mr. Forrestal noted, "the Navy has been conscious of the necessity of food conservation measures." He also called attention to Alnav 71-46 (NDB, 15 February) which directed activities to conserve flour and reduce waste to the minimum, and asked each individual in the Navy to renew his personal effort.

Alnav 121-46 (NDB, 15 March) re-emphasized the Navy's part in preservation of foodstuffs, particularly wheat supplies, and directed: "All ships and stations will institute such conservation measures as are necessary to the end that waste is reduced to the minimum and the most effective use is made of available foodstuffs."
Says Vets Not Idle

The veteran has not been loafing on his readjustment allowance, according to Ray R. Adams, director of the Veterans' Administration Readjustment Service. Although about one in every four of the 10,610,000 servicemen discharged by the middle of last month had enrolled for what amounts to unemployment compensation, each individual has drawn his allowance for only five to six weeks. Of 2,500,000 who drew benefits, less than half are currently enrolled. About a million who enrolled withdrew their claims before getting their first checks.

Of a total of 1,131,394 veterans claiming compensation at the end of February, only about 10,000 had exhausted their benefits, Mr. Adams said. In addition to refuting the charges that veterans are deliberately remaining idle in order to “ride the rolls,” Mr. Adams predicted that by mid-April a “leveling off” of claims would be reached.

Through 23 February, $288,004,687 was paid to unemployed veterans in the GI Bill of Rights. An additional $4,484,597 was paid to self-employed veterans during January.

Compasses, Sextants on Sale

Marine compasses and Navy sextants valued at $341,000 have been declared surplus by the Navy and now are for sale, the United States Maritime Commission announced. Further information is available from the Materials Disposal Section, Contract Settlement and Surplus Materials Division, U.S. Maritime Commission, Washington 25, D.C.

Training Groups to Aid Vets

Veterans may receive continuous on-the-job training under the GI Bill of Rights through state-approved labor-management committees, the Veterans’ Administration announced. Local committees representing labor and management, when approved by the states, will be recognized by VA as educational and training agencies and will be responsible for placing veterans in approved courses of apprentice training.

Further responsibilities of the committee include:
- Acceptance of the applicant for apprenticeship training;
- Determination of establishments in which training is to be provided;
- Arranging for the applicant in the chosen establishment;
- Assurance that the establishment is providing a standard course of training.

Periodic checks will be made by VA training officers to see that the veteran is pursuing a prescribed course and that adequate progress is made. Monthly reports will be made by the trainer-employer of wages paid to the veteran and this amount will be adjusted by VA so that the veteran will receive the full payment for which he is eligible under the GI Bill, as long as it does not exceed the maximum wage prescribed by the union for an apprentice in that trade.

THE MONTH'S NEWS


Radar vs V-2 Bomb

Use of radar to combat atomic bombardment may become possible in the future. Experiments will begin this summer when the Army Air Forces employs radar techniques to detect and later interfere with German V-2 rockets.

Captured de-activated rockets will be fired at the White Sands Proving Grounds in New Mexico. Efforts will be made to test the 3,000-mile-per-hour missiles by radar. If tracking is successful, it will then be possible to devise some means of intercepting the V-2's in mid-air, probably by "counterattack" rockets, AA experts pointed out.

Since enemy rockets of the future might carry atomic warheads, importance of such counterattack rockets in reducing the atom threat is plainly evident.

"A must be found to defend our country against a sudden enemy rocket attack and this must be done as quickly as possible," according to Brigadier General William L. Richardson, USA, chief of the Guided Missiles Division, Air Staff.

"The Air Force has been working on rocket defense, since the first German V-2 landed accidentally in Sweden back in the autumn of 1944," he explained.

Oil Shortage Studied

Problems of a Navy facing a fuel oil shortage were placed before the oil industry in a conference in the Navy Department last month. No final solution of the shortage was found but industry spokesmen indicated some relief might be obtained by an easing of price ceilings.

Chester Bowles, director of economic stabilization, said later that petroleum price ceilings might be lifted within six months, and that the oil industry with its plentiful production did not need price ceilings as do industries which cannot produce enough to supply demand.

The Navy fuel oil (and diesel oil) shortage developed when postwar military requirements turned out unexpectedly high, due primarily to extensive Magic Carpet operations. The oil industry had cut deliveries of Navy special fuel $3 per cent below the wartime level, to concentrate on production of gasoline and other more highly refined fuels for the postwar civilian market.

The Navy’s problem was stated to the industry by John L. Sullivan, assistant secretary of the Navy for air, who declared Navy fuel oil reserves near exhaustion as the Navy was forced to draw upon them to make up the deficit in supply from the industry. Mr. Sullivan pointed out that in January when Navy operations required 276,000 barrels per day, the Navy received from the oil industry only delivery of about 87,000 which had to be made up by Navy stocks on hand. A similar situation in February reduced Navy inventory further to a point where, Mr. Sullivan said, "Unless remedial action is forthcoming within 30 days, our stocks will not merely be below the minimum safety level for national security—they will be approaching exhaustion."

Heads Academy

Commodore Richard R. McNulty, USN, has been appointed superintendent of the U.S. Merchant Marine Academy, Kings Point, N.Y., the War Shipping Administration announced.

Commodore McNulty succeeds Rear Admiral Giles C. Stedman, USN, who resigned at his own request to re-enter private industry after four years as superintendent. The change in command became effective 31 March.
General Smith to Retire

The Marine Corps loses one of its most colorful fighting men 1 May when Lieutenant General Holland M. Smith retires upon his own application after 40 years of service. He will be 64 on 20 April.

Dubbed "Howlin' Mad" Smith by men of the Corps in tribute to his gallant combatant spirit, the general earned his reputation for truculence and effectiveness from the time he was first assigned to the central Pacific combat corps command. From Kwajalein all the hard-fought way to Iwo Jima he told his Marines, "Don't ever forget you are the best fighting man in the world." He saw these words in action.

He had to train his men in the taking of the most highly fortified beaches. To accomplish this he also had to get them the best equipment builders could design and money buy. With boat builder Andrew Jackson Higgins, General Smith collaborated on plans for landing craft which could surmount the coral obstacles of the atolls. It was his original faith in the Roebling arch (truss) tower which resulted in the eventual development of our present amphibious tank.

But it was in training the 5,000 men of the 1st Marine Brigade that General Smith first became known to a nation still not at war. Back in 1939, Marine Commandant Thomas Holcomb selected him to begin an amphibious training program for the brigade.

He took the brigade down to the Caribbean late in 1940 for over half a year of training in beachhead landings. When he went to war he assumed command of training green Army divisions. It was not long before he saw his pupils in action on Attu. He saw the 2d Marine and 27th Army Divisions prove their toughness in the Gilbert Islands, the 4th Marine and 7th Army Divisions in the Marshalls, and, as the war drew to its end, Marines at Okinawa and Iwo Jima also attested the worth of their training.

The general's career in the Corps began in 1905, when he was a young lawyer of 23 just two years out of the University of Alabama. He decided to give up law and try the military life. Army commissions were closed at that time and he was induced to try the Marine Corps. He saw duty at most of the old Pacific bases—Cavite, Manila, Shanghai—and by 1917 he was with the Marine contingents in France.

The late Secretary of the Navy Frank Knox presented the Distinguished Service Medal to General Smith. The official citation said: "By his capable performance of duty on both coasts of the United States, he laid the groundwork for amphibious training of practically all American units."

DON'T BOUNCE THAT SHELL, MAC

One night in July 1944 two ammunition ships, the Quinault Victory and the E. A. Bryan, exploded at the Navy ammunition depot at Port Chicago, Calif., not far from San Francisco. The blast left 290 men dead or missing, injured 350 and caused damage in excess of 12 million dollars.

On the morning of 10 Nov 1944, a party of 18 men left the ammunition ship Mt. Hood in Seeadler Harbor, Admiralty Islands, to go ashore. A few minutes later the Mt. Hood exploded. The 18 men were the only members of the ship's complement to escape; 300 lives were lost.

Handle with care. Don't—repeat don't—be careless with live ammunition.

Primary cause of explosions is considered to be carelessness. The old saw, "Familiarity breeds contempt," bears application to ammunition handling.

Safety instructions issued to the Navy are compiled from the cumulative experience of years of research into properties of explosives and the safest procedures in handling them, plus long study of the causes and effects of explosions.

CNO has expressed concern over the increasing tendency on the part of naval personnel to use non-standard and improvised methods of disposing of unserviceable and deteriorated explosives and ammunition.

BuOrd has issued these instructions for the dumping of explosives, ammunition and chemicals:

- For disposal of bulk explosives, ammunition and pyrotechnics—dump overboard in deep water over 500 fathoms deep and at least 10 miles from shore.
- For disposal of chemicals, exclusive of pyrotechnics—dump overboard in deep water over 1000 fathoms deep and at least 10 miles from shore.

The Navy urges care in ammunition handling as follows:

- If you are engaged in such disposal work, exercise constant care and vigilance to insure safety. More comprehensively, no matter what the job may be, whether it be some small detail of disposing of a few pounds of dynamite or loading a full ammunition cargo on board ship, stick to the established procedures for the job. Be alert at all times. Don't take unnecessary chances just in order to load an extra ton an hour.
- If a certain aspect of the job cannot be overcome by following the instructions, don't hesitate to ask for help or advice. Plan out your particular job carefully and try to anticipate problems which may arise.
- Above all, no matter the operation, BE CAREFUL. Don't introduce additional risks into an already risky business. You can't be careless with explosives twice.

DESTRUCTION of the Pacific Fleet ammunition ship USS Mount Hood by an explosion added 300 lives to nation's war toll. Eighteen men escaped.
THE MONTH’S NEWS

A NAVY PLANE flying over the Pacific witnessed the birth of this volcanic island 200 miles south of Tokyo. Flying nearly to the edge of the smoking and steaming rock, navy photographers made these pictures of the new island.

It’s Back to Work

Results of a survey conducted last fall indicate that personal postwar plans considered by reserve enlisted men—other than staying in the Navy—are as follows:

- 74 percent are planning to go to work.
- 17 percent are planning to return to school.
- 9 percent are undecided or gave no answer.

These percentages represent views of a cross section of all male reserve enlisted men on a basis of 2,400,000 in the first six pay grades. The percentages can be construed only as a broad gauge of the intentions of the group as a whole. Actually, 9,325 men were interviewed; these represented personnel of all ages, educational levels, rates, races, marital and parental statuses and types of active duty. The sample was selected from men at U. S. shore establishments, men afloat in U. S. continental waters, and men ashore and afloat in the Atlantic and Pacific theaters.

About half the enlisted reserves, the survey shows, plan to work for someone other than themselves, while roughly one-fourth intend to run their own business or farms.

A partial breakdown shows that the 48 percent planning to take jobs upon discharge look to the following fields for work: farming, 9 percent; construction and contracting, 7.1 percent; sales work, 5.4 percent; professional and clerical occupations, 4.7 percent each; truck and bus driving, 4.5 percent; civil service, 3.4 percent. A percentage of 9.1 are going into “other skilled and semiskilled occupations,” and 4.4 percent are going to “anything I can get.” Nearly 90 percent of these men were employed full time before entering the Navy.

Men who intend to establish their own enterprises—26 percent—plan to operate about as follows: farm or ranch, 25.7 percent; retailing, including eating places, 12.7; service establishments (other than automotive repair and services), 11.1; automotive retailing (car and parts sales, filling stations), 4.8; transportation, 4.6; service establishments (automotive repair and services), 4.3; construction and contracting, 4.1; food retailing, 4.1. Only about 40 percent of those planning to operate their own farms or ranches indicated previous experience in agriculture.

More than four-fifths of the 17 percent planning to return to school intend to enroll in: technical colleges, 21 percent; general academic colleges, 22 percent; general course high schools, 16 percent; professional schools, 15 percent. The remainder will attend business or trade school, junior college, or vocational high school. Another 23 percent of the total plan to do part time work at technical and academic colleges, trade, business, vocational, professional and high schools.

Some limitations should be considered. For instance, many who plan to start their own business or go to school will go to work for somebody. Many who expect to take a job will, instead, go back to school. The figures presented here should be regarded as indications, not as a picture of actual circumstances.

Europa to be Returned

The former German liner Europa, used by the Navy to transport troops from Europe, will not be kept by the U. S., the Navy Department announced. The ship will be sailed to Bremerhaven, Germany, and placed in a caretaker status pending final disposition by the Inter-Allied Reparations Agency.

The Europa’s design and construction make her unsuitable for use in the Pacific or for peacetime operation as a passenger vessel, it was explained. Lack of fuel and fresh water capacity for long distances required in the Pacific prevent her use there. Weight-saving measures of her German builders place her below standard of U. S. safety rules.

While operated as an emergency troop carrier by the Navy, elaborate safety precautions were taken to guard against inadequacy of her design.

NAVY SURVEY indicates 91 percent of personnel have postwar plans, 9 percent are undecided about future.
Sentence Remitted

The Navy remitted the court-martial sentence of Capt. Charles B. McVay III, USN, found guilty of negligence in the sinking last 30 July of the heavy cruiser Indianapolis. Captain McVay has been released from arrest and restored to duty.

At the same time the Navy announced four other officers had been censured for delay in searching for the ship after she was known to be overdue. These officers and the officers they then held are Commo. N. C. Gillette, USN, acting ComPhilSeaFron; Capt. A. M. Granum, USN, his operations officer; Lt. Comdr. Jules C. Sancho, USNR, acting port director at Tacloban, Leyte; and Lt. Stuart B. Gibson, USNR, port operations officer at Leyte.

The trial of Capt. McVay was based upon two charges: (1) inefficiency in failing to issue and insure the execution of orders for the abandonment of the Indianapolis, and (2) negligence in "suffering a vessel of the Navy to be hazarded" by neglecting and failing to cause a zig-zag course to be steered when visibility conditions and information concerning enemy submarines required him, under current U.S. Fleet Tactical Orders, to zig-zag in order to minimize the danger from submarine attack.

He was acquitted of the first charge and therefore cleared of responsibility for the loss of life incident to abandonment of the ship. He was convicted of the second charge. Capt. McVay was neither charged nor tried for losing the Indianapolis. The sentence imposed by the court decreed that 100 numbers in his temporary rank of captain and 100 numbers in his permanent rank of commander. In view of his outstanding previous record the court unanimously recommended clemency.

The Chief of Naval Personnel, approving the proceedings, findings and sentence recommended that in view of Capt. McVay's excellent record the sentence be remitted. This recommendation was concurred in by Fleet Admiral Ernest J. King, Commander in Chief and CNO at the time of the disaster. Secretary of the Navy James Forrestal approved these recommendations and remitted the sentence.

The Indianapolis was torpedoed at 0015 20 July 1945 while steaming unescorted from Guam to Leyte. The ship sank 12 minutes after the torpedoes struck, with the eventual loss of 877 of her complement of 1193. Testimony at the court martial indicated that approximately 700 got safely off the ship.

The Navy said that 16 hours after the disaster, the enemy claimed a Japanese submarine had "sunk something" in a position approximately that of the Indianapolis at the time. "Had this information been evaluated as authentic," the Navy said, "it is possible that the survivors of the Indianapolis might have been located within 24 hours of the time of the sinking of the ship and many additional lives might have been saved." Survivors of the ship first were sighted about 1025 on 2 August, nearly three and a half days after the sinking. The enemy claim was not properly evaluated, the Navy said, because of "exaggerated claims and false intelligence" which had characterized many Japanese reports.

The Indianapolis was scheduled to arrive at Leyte at 1100 31 July. Lt. Comdr. Sancho, acting port director at Tacloban, was not aware that she had not arrived as scheduled and that she should be considered overdue. However, the Navy said, it was his duty, in his capacity as acting port director, "to keep himself informed of such matters." Lt. Gibson, operations officer under the port director, was the officer immediately concerned with the movements of the Indianapolis. Non-arrival of that vessel on schedule was known at once to Lt. Gibson "who not only failed to investigate the matter but made no immediate report of the fact to his superiors." This dereliction, the Navy said, "may be related to the difficulties of an organization which had been brought on by the exceedingly rapid expansion of the Navy to meet its wartime requirements."

Lt. Comdr. Sancho and Lt. Gibson were members of the PhilSeaFron organization. "Bearing in mind the lack of experience of these officers in naval matters," the Navy said, "it was incumbent upon their superior officers to exercise closer personal supervision over the manner in which their duties were performed than was actually the case. ... For this demonstrated weakness in the organization under their control, brought on largely through their failure to give closer personal attention to the work of these inexperienced juniors, Commodore Gillette and Captain Granum have been held responsible.

Disciplinary action was taken as follows with regard to the four PhilSeaFron officers:

Letters of reprimand were addressed from SecNav to Commodore Gillette and Captain Granum. A letter of admonition was addressed from CincPac to Lt. Comdr. Sancho. A letter of reprimand was addressed to Lt. Gibson from CincPac.

All letters will become a part of the permanent official records of the officers concerned.
USS JUNEAU shown here is one of three combat ships commissioned recently at East coast shipyards. She is name-ship of a new Class AA cruiser.

Three New Fighting Ships

Three major combatant ships were added to the Navy's striking power during the past few weeks—two of them new JUNEAU class AA cruisers and one a 27,000-ton Essex class carrier.

USS Kearny (CV 33) was commissioned at New York Naval Shipyard, Brooklyn, before 6,000 guests in a ceremony replete with Navy tradition. As the commission pennant was run up, her CO, Capt. Francis J. McKenna, veteran Navy airman, ordered the first watch set and the ship broke the four-starred flag of Admiral Thomas C. Kinkaid, USN, who presided.

The two 6,000-ton JUNEAUS were USS Fresno (CL 121) and USS Juneau (CL 119). Fresno was launched at the Kearny, N. J., shipyards of the Federal Shipbuilding and Dry Dock Co., sponsored by Mrs. Ruth Martin of Fresno, Calif., whose son, John T. Martin Jr., Ysc, was lost in the Pacific in 1942. USS Juneau was commissioned at the New York Naval Shipyard.

Actors to Stay on AFRS

Members of the Screen Actors' Guild will continue to be available for Armed Forces Radio Service overseas broadcasts during the occupation period. The actors also will continue entertainment tours and bedside visits to veterans in military hospitals.

George Murphy, Guild president, has announced that the actors will continue their entertainment tours and their bedside visits to veterans in military hospitals.

Admiral Nimitz had wired Mr. Murphy: "To the members of the Screen Actor's Guild who have so generously contributed to the Navy and Marine Corps personnel during the war on programs of the Armed Forces Radio Service—hearty well done. Will you please convey to guild members the vital importance at this time of their staying on the job with the Armed Forces Radio Service on behalf of our forces still finishing the job overseas."

Flag Promotions

The following nominations to flag rank have been confirmed by the Senate:

To be rear admiral:
Frank E. Bartty, USN, for temporary service to rank from 31 Jan 1943 in lieu of date of rank as previously nominated and confirmed.
Joseph P. Felley, CEC, USN, for temporary service while serving as deputy chief of the Civil Engineers Corps and assistant to the Chief of Engineers.

To be commodore:
James E. Maker, USN, to continue while serving as chief of base maintenance, Office of CNO, and until reporting for other permanent duty.
Arthur Gavvin, USN, to continue while serving as ComAircraft, PhillisFron and ComFairWing 10 and until reporting for other permanent duty.

Arleigh A. Burke, USN, to continue while serving as Director of War Plans, Joint Staff, Joint Task Force 1, and until reporting for other permanent duty.

Robert F. Batheimer, SC, USN, to continue while serving as pay director, material division, Office of the Assistant Seaman of the Continental Reserve, and until reporting for other permanent duty.

To be lieutenant general in the Marine Corps:
Harry Schmidt, USMC, for temporary service.

Russell R. Waesche, USCG.

The following nomination was designated by the President with the rank of vice admiral:
Lynde D. McCormick, USN, as deputy CinC Pac and Poa.

Way Back When

Who Did It First—At First

Noah may have been the first sailor and Jonah the first submariner, but the "firsts" of the United States Navy are of more recent vintage.

The first commission to an officer afloat was issued to Capt. Hopley Yeaton, master of a revenue cutter. The Continental Navy had been disbanded and the sole maritime defense was revenue cutters (now Coast Guard). This historic document dated 21 Mar 1791 bears the signatures of both Washington and Jefferson. John Paul Jones was the first to raise the Grand Union or American Flag on a ship of war. Esek Hopkins was the first commander under a commission of Congress to carry the Grand Union flag in naval operations and to make a capture under it. John Barry was the first commander under a commission of the Congress and under the Grand Union flag to fight a battle with a British warship and make her strike her colors.

Other "firsts" of interest to Navy salts with aspirations to attain flag rank are: the first naval officer to become an admiral was David Glasgow Farragut, so appointed on 25 July 1866 and John Barry was the first man to be appointed a Commodore.

Portsmouth Navy Yard, N. H., is well known throughout the Navy and is famous generally because of its "brig," but its real fame should be attributed to the fact that it was the first yard acquired by the Navy Department after its establishment, 30 Apr 1798. The property embraced 58.16 acres and the price was $5,500.

Despite all these beginnings there is one "first" that was never made and of this our Navy can be proud. No U. S. ship of war has ever been in the hands of mutineers, while in other navies entire squadrons and fleets have mutinied.
For reasons of security, the deed for which a man receives a decoration sometimes cannot be fully described either in this section or in the actual citation which he receives. There may accordingly be reports here which do not tell the whole story.

### WARTIME NAVY OFFICIALS RECEIVE DSM

**Gates, Bard, Hensel**

**Honored for Services**

In recognition of their services for the Navy during the national emergency, Artemus L. Gates, Ralph A. Bard and H. Struve Hensel recently were awarded the Distinguished Service Medal by Secretary of the Navy James Forrestal.

Mr. Gates of Washington, D.C., received a gold star in lieu of his second DSM for his services as Assistant Secretary of the Navy (Air) from 5 Sept 1941 to 3 July 1945 and as Undersecretary of the Navy from 3 July 1945 to 31 Dec 1945. Foreseeing the necessity of a strong air arm for support of fleet operations, Mr. Gates directed the establishment of facilities for the maintenance and training programs necessary to affect the combination of air-sea power which ultimately eliminated the submarine menace in the Atlantic, and which, spearheading the Allied offensive across the Pacific, blasted and destroyed enemy coastal defenses in advance of every amphibious landing and provided decisive support during major naval engagements with the Japanese fleet.

As Undersecretary Mr. Gates handled the general administration of the Navy Department and rendered assistance to the Secretary in formulating plans and policies for the demobilization of wartime naval personnel and civilian employees of the Navy, accomplishing this monumental task well in advance of scheduled plans.

For service as Assistant Secretary of the Navy from 24 Feb 1941 to 24 June 1944 and as Undersecretary from 24 June 1944 to 1 July 1945, Ralph A. Bard of Highland Park, Ill., was awarded the Distinguished Service Medal. Responsible for the administration of the Navy’s industrial shore establishments and civilian manpower, he directed and supervised expansion of activities under his cognizance to a point where the Navy had become the largest single direct employer of industrial labor in the world. Advised by a battery of experts, he examined every phase of modern industrial relations, subsequently aiding the Secretary in formulating Navy plans and policies with regard to labor and management and in launching a tremendous industrial relations program which resulted in an unparalleled record of production unmarred by labor strife.

Top Navy liaison man with the WMC, the Selective Service System and the WPB, Mr. Bard effected a sound coordination with the other branches of the armed forces and with other agencies of the government.

Mr. Hensel of Tenafly, N.J., was cited for his service as Assistant Secretary from 30 Jan 1945 to 1 Mar 1946, following more than five years as chief of the Naval Procurement Division and later as general counsel for the Navy. In the latter capacity he organized and established an efficient central legal office in the Navy, staffed by the finest legal talent available, to handle all procurement legal matters.

Taking office during the peak period of the Allied offensive in the Pacific, Mr. Hensel supervised all Navy procurement necessary to support the world-wide operations. His vision and judgment in the field of material research and development and in the vastly complicated matter of integrating requirements for naval munitions with Navy procurement were decisive factors in the Navy’s achievements during the later months of the war. Following the surrender of Japan, Mr. Hensel aided the Secretary in resolving the complex problems connected with the termination of Navy contracts and the disposition of surplus property.

**THREE CIVILIANS** were honored by SecNav for their Navy wartime service.

**Medal of Honor Is Posthumously Awarded Skipper**

As skipper of the USS Johnston, a destroyer that fought to the end to protect carriers she was screening during the battle off Samar on 25 Oct 1944, Comdr. Ernest E. Evans, USN, Long Beach, Calif., has been awarded, posthumously, the Medal of Honor.

The first ship to lay a smoke screen and open fire as a superior enemy task force approached, the Johnston diverted powerful blasts of hostile guns from the carriers and launched a torpedo attack.

Despite ship damage sustained under fire, Comdr. Evans unhesitatingly joined others of his group to provide fire support during subsequent torpedo attacks against the enemy and interposed his vessel between the hostile fleet units and our carriers.

A crippling loss of engine power and communications forced Comdr. Evans to shift command to the fantail where he shouted steering orders through an open hatch to men turning the rudder by hand and battled furiously until the burning Johnston lay dead in the water after three hours of fierce combat.
**HEROES CITED**

Capt. Brodie, Lt. David

**Picture of Comdr. Evans not available.**

**f) are, were highly successful and resulted in extensive damage to four enemy coastal towns. Gun bombardments subjected three towns to fire and an enemy train was destroyed by commandos set ashore from Comdr. Fluckey’s vessel.**

**First award:**

- **AVERTE, John E., Enr., USN, Kingston, Pa. (posthumously):** While pilot in Air Group 15 in action against major Jap fleet off Cape Engano in the Philippines, 25 Oct 1944 Ensign Avery selected an aircraft carrier of the Shokaku class as his target, maneuvered through the rain of bursting antiaircraft fire, and scored a direct hit.

- **Behrend, Carl W., Mach., USN, Princeton, N. J. (posthumously):** While serving aboard the uss Houston off Formosa, 14 Nov 1944, in the after fireroom when a torpedpedo struck the adjoining adjoining engine room, flooding the area and extinguishing all lights, Behrend observed men of his crew below struggling in the darkness and the rapidly rising waters to enter an escape exit. He proceeded below to provide light from his flashlight and to direct an orderly exit.

- **Brodie, Bradford M., Lt. Comdr., (then Lt.) USN, Pacific, Calif. (posthumously):** During action in the Pacific while commander of a FB-11, Lt. Comdr Brad- ford is credited with having encountered four enemy planes on 10 Dec 1944, shooting the first three down and although damaged by the fourth continued to fight on until damaged to the plane and casualties to his crew. Brodie forced him to make an emergency landing.

- **Brown, Burton J., Enr., USN, Conneautville, Pa.** As machine gun control officer aboard aB-24 off the coast of Japan on 26 Feb 1945, hie rack external fire and despite the heavy seas breasting over the guns, and the enemy raking his side of the director for plume with intense light he continued to close. Seizing his 45-cal. automatic, he kept up a stream of fire against his target until he was cut down by hostile guns.

- **Dozark, Charles L., Lt. Enr., Cedar Rapids, Ia. (posthumously):** While his ship was blazing furiously after receiving a direct aerial hit near Okinawa on 6 Apr 1945,Lt. Dozark, first lieutenant and damage control officer aboard the uss Hyman, promptly organized his crew and directed fire-fighting measures to control the spreading flames. He effected the rescue of several shipmates lying helpless in an undamaged passageway, bravely the dan- ger of explosion from torpedo warheads exposed to the fire, and carried a man with his clothes ablaze to a place of safety. Lt. Dozark then rushed into the burning area to extricate another victim shortly before a terrific explosion demol- ished the area.

- **Ethereage, Walker, Comdr., USN, Washington, D.C. While CO of Flako, 47 and ComAirGrp 47, attached to uss Batavo, he led a flight on combat air patrol off Kyushu on 20 Mar 1945. When he observed the kindling of the ships of his task force, Comdr. Ethereage directed the enemy and pre- vented damaging the smoke vessels, pressing home his attack in the face of intense and deadly fire and con- tinuing his efforts until his machine burst into flames and glided into the sea.

- **Fay, Leo D., Enr., USN, Philadelphia (posthumously):** While in a heavy antiaircraft fire, Fay directed his party in repair activities, refusing aid until he had to be carried to medical atten- tion.

- **Gisham, William W., Lt. (jg) USN, Glendale, Calif.:** For taking an active part inísimo against enemy shipping from 18 Mar-14 May 1945. Subsequently, while subject to heavy enemy antiaircraft fire, Lt. (jg) Gisham, having scored a direct hit on a Jap battle- ship on 18 July 1945 at Yokosuka in Tokyo Bay.

- **Hanlon, Byron H., Capt., USN, Honolulu, T. H.:** As commander of the underwater demolition team group during the preinvasion assault operations against the beaches of Iwo Jima. During beach reconnaiss- ance and clearance operations on 17 Feb 1945, the underwater demolition team and their supporting gunboats, operating within 1,000 yards of the enemy shore, were subjected to heavy artillery and mortar fire which caused the loss of one gunboat and seriously damaged 10 of the 13 gunboats engaged. Despite numerous casualties which forced temporary with- drawals of gunboats out of action, re- pairs were quickly effected and the boats “returned to the line.”

- **Hunts, Richard Jr., Lt.(jg), USN, Kansas City, Mo.:** After the enemy cruiser and her escort were subjected to heavy fire and destruction from the uss Hancock off Panay, 26 Oct 1944 and defending fire from a cruiser and her escort, Lt.(jg) Hunt returned to the line and his target launched his projectile with dead accuracy, scoring a devastating hit on the cruiser which left her dead and ablaze in the water with her forward tur- rets awash.

- **King, Frank L., CTM, USN, Savannah, Ga.:** While aboard the USS Stacks while that vessel and an aircraft carrier collided 17 Mar 1945. As aircraft carrier No. 1 fireroom of the Stacks was flooded, the lighting circuits out and the ship headed stern first directly toward the cap- tain's bridge. Lt. (jg) King made his way aft in the darkened control room and, wading waist deep, saw all the depth chargers until a second time.

- **Markham, Jeffrey N., CMM, USN, Jack- sonville, Ill.:** As member of a naval combat demolition unit during the assault on Oaxaca, 6 June 1944, Markham assumed command when OmC was killed on land- ing and his unit was the first to enter enemy beach obstacles. After landing in- jured members of his crew to safety, he as- sisted other units in demolition, saving three men buried in the cave-in, and for 48 hours directed the men in the clearance of beach obstacles with commandeered equipment after explosives for the purpose had been expended.

- **Marzorati, John, PhM2c, USN, Los Angeles (posthumously):** While serving with Company H, 4th Bat, 26th Marines, 5th Marine Div at Iwo Jima, 17 March 1945. When Shattering hostile mortar, artillery and small arms fire pinned down this company during its advance, Lt. Marzorati directed the barracks of wounded comrades administering first aid and carrying many to safety, although he himself was injured in the process, he proceeded to work with his good hand until a second shellburst struck him down.

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**NAVY CROSS**

**Gold star in lieu of fourth award:**

- **Fluckey, Eugene B., Comdr., USN, Arling- ton, Va.:** Wreaking havoc upon the enemy with rocket and saboteur attacks in addition to usual sub weapons, Comdr. Fluckey brought his submarine uss Barb into shallow waters, at times in less than two fathoms water, the keel to stop three enemy ships, including a valuable com- bantant unit and 59 small craft for a total of 11,800 tons, during the 12th war patrol of his vessel. The rocket attacks, first employment of this weapon in subwar-
**TEN HEROES WIN THE NAVY CROSS**

Lt. Comdr. Shattuck

Admiral Sprague

Ensign Avery

Ensign Brown

Lt. Dozark

Comdr. Ethridge

Comdr. Fluckey

Chief Markham

Lt. Comdr. Shattuck led an aerial flight of nine torpedo planes against an enemy heavy cruiser in Philippine waters on 25 Nov 1944. Amid very heavy antiaircraft fire, he maneuvered his group into position and attacked. He scored the first torpedo hit on the vessel which sank in about five minutes after subsequent damage.

**SPRAUGE, CLIFTON A., Rear Admiral, USN, Havre, Mont.** As CTU 77.4 and 77.5, consisting of six escort carriers, Admiral Sprague furnished air support to amphibious assault groups landing troops on the shores of Leyte Gulf from 18 to 25 Oct 1944. On 25 Oct this force was taken under fire by a strong enemy force consisting of battleships, cruisers, destroyers and suicide dive bombers. Despite overwhelming speed and fire-power by the enemy, Admiral Sprague repeatedly launched aircraft against the enemy fleet, directed torpedo attacks by the screen, and maneuvered his force so that only two of his carriers were lost.

**STERNBERG, Frederick M., Comdr., USN, Long Beach, Calif.** CO of USS Illustrious Jones while supporting Allied ground forces off the French-Italian Riviera. During Sept 1944 his ship destroyed two enemy torpedo boats, two human torpedoes, an antiaircraft battery, a fuel dump, an ammunition dump and about 12 enemy vessels.

**SWINBURNE, EDWIN R., Capt., USN, Newport, R. I.:** Commander of a coordinated attack group of subs operating off the Luzon Straits and Philippine Seas from 4 Aug to 3 Oct 1944. The subs under his command sank 10 enemy ships—including a 22,000-ton auxiliary aircraft carrier and a total of 90,860 tons, and damaged an additional ship of 5,000 tons. In addition his group effected the rescue of 32 British and Australian prisoners of war who were survivors of a torpedoed enemy transport.

**TOMLINSON, William G., Rear Admiral, (then Capt.) USN, Washington, D. C.:** CO of USS Belleau Wood, 10 Feb to May 1945. Admiral Tomlinson brought the guns of his ship and air group to bear upon enemy aircraft, accounting for 112 enemy planes destroyed, 125 damaged and 67 damaged upon important units of the enemy fleet, shore installations and enemy shipping.

**WILSON, Lloyd J., Rear Admiral, USN, Coronado, Calif.:** From 14-24 Oct 1944 Admiral Wilson acted as commander of support unit of, and later in command of, the task group which carried out the difficult operation of towing two damaged cruisers from a position deep in enemy waters to the safety of our own possessions. During the 18 days of this operation enemy air attacks always were threatened and twice were driven home. These attacks were met, and in large part defeated, thereby saving from destruction two valuable units of the fleet.

**WOOD, Chester C., Capt., USN, Stonington, Conn.:** While OTC of a radar picket station and sector commander in antisubmarine area off Okinawa 3 May to 21 June 1945 he effectively fought off frequent and determined enemy attacks. Capt. Wood conducted these missions in such a manner that eight enemy planes were destroyed by his ship’s guns and the fighters assigned to his unit.

**PHOTOS were not available for Mach. Behrend; Lt. Comdr. Brooks; Ens. Fay; Lt. (jg) Gorham; Capt. Hanlon; Lt. (jg) Hunt; CTM Knight; PHM2c Martorano; Comdr. Stiesberg; Capt. Swinburne and Capt. Wood.**

**DISTINGUISHED SERVICE MEDAL**

**Gold star in lieu of fourth award:**

**KINKAID, Thomas C., Admiral, USN, Philadelphia:** While Com7thFlt and ComAllied NavFor, SoWesPac area, during Leyte operation, from Oct through Dec 1944, Admiral Kinkaid planned and carried out naval phases of this operation which made possible the liberation of the Philippines. He welded the diverse and limited forces available to him and directed the offensive, annihilating powerful Jap fleet units in the battle of Surigao Straits phase of the battle for Leyte Gulf. Admiral Kinkaid’s forces then decisively defeated two major task groups of the enemy fleet, which had seriously threatened the operation for the capture of Leyte and the entire Philippine campaign.

**Gold star in lieu of third award:**

**FIFE, James Jr., Rear Admiral, USN, Reno, Nev.:** As ComSub7thFlt and ComNavFor, Western Australia, from 19 Dec 1944 to 1 Sept 1945 Admiral Fife planned and coordinated Dutch and Australian sub units with those of his own forces to press home vigorous, unrelenting attacks against the enemy during a period of difficult operations in restricted areas of Philippines and Borneo. Under his direction his command established a brilliant combat record as well as carrying on an effective blockade, life-saving rescue patrols, urgent supply missions and daring landings parties. Admiral Fife voluntarily participated in a devastating offensive strike carried out by one of his submarines in April 1945, obtaining valuable first hand information on various sub problems.

**Gold star in lieu of second award:**

**ROGAN, Gerald F., Rear Admiral, USN, Norfolk, Va.:** While serving as a ComCarTaskGp, 1 Sept 1944 to 25 Jan 1945 he successfully carried out all missions assigned to his group including the support of our assault landings on Peleliu and Angaur and the conduct of damaging air strikes against enemy bases on Mindanao, the Visayas, Luzon and Luzonchow. Under Admiral Rogn’s direction highly successful operations were completed against enemy aircraft, shipping and land installations in the Philippines, Formosa, Nansel Shohe and the Indo-China coast.

**LEYH, William D., Fleet Admiral, USN, Washington, D. C.:** Recalled to active duty 18 July 1942, Admiral Leyh brought to his task as Chief of Staff to the Commander in Chief and commander of the Jao Chiefs of Staff and the Combined Chiefs of Staff, a wealth of experience in evaluating conflicting world events. Uniquely qualified by his previous service both in the Navy and in international affairs, Admiral Leyh fully justified the reliance placed in him by his counsel in the concept of long range strategy against the axis and his appraisal of over-all plans for the complete coordination of U. S. and Allied military forces.

**First award:**

**BROWN, John H. Jr., Rear Admiral, USN, Middletown, Del.:** As ComTACComm, SubFor, PacFlt, from 12 Nov 1944 to 29 Apr 1945, Admiral Brown was charged with the command and supervision of training of submarines for the Pacific fleet. He undertook the planning and organization of a complex program for the advanced training of all officers and enlisted personnel of the expanding sub force. Engaging in exhaustive study of enemy tactics and anti-sub measures he expedited the development of necessary attack doctrines, evasive tactics and coun-
AWARDED NAVY’S DSM

ADMIRAL BOGAN
ADMIRAL BROWN
ADMIRAL FIFE
ADMIRAL GLOVER
ADMIRAL KINKAID
CAPT. MOORE
ADMIRAL LEECHY
ADMIRAL LOCKWOOD
ADMIRAL SPRAGUE
ADMIRAL VAN HOOK

Photograph of Capt. Voge was not available.

Formulation of the first course, he laid the foundation upon which the curriculum and administration of the college were developed and was responsible for successfully inculcating doctrine which revealed the most effective unified employment of the military and naval services.

SILVER STAR MEDAL

Gold star in lieu of second award:

★ DOWING, Richard L., Lt., Comdr., USN, St. Paul, Minn.: Assistant approach officer, USS Haddo on war patrol, 8 August to 3 October 1944.

★ DUNNING, Max C., Lt. Comdr., USN, Forrest City, N. C.: Torpedo data computer operator, USS Barb, north of Hokkaido and east of Karafuto, 8 June to 2 August 1945.

★ HALL, Madison Jr., Comdr., USN, Colorado Springs, Colo.: CO, USS Little off Okinawa, 2 May 1945.

★ McCREA, Victor B., Comdr., USN, New London, Conn.: CO, USS Howe during fourth war patrol, 4 April to 2 June 1944.

★ MCCONNELL, Bernard F., Comdr., USN, Raleigh, N. C.: CO, USS Drus, seventh war patrol, 16 August to 6 October 1943.

★ NABON, John H. Jr., Lt. Comdr., USN, Pelham, N. Y.: Torpedo data computer operator, USS Haddo, seventh war patrol, 8 August to 3 October 1944.

★ RAY, Herbert J., Capt., USN, Piedmont, Calif.: CO, USS Maryland, Surigo Straits, 15 October 1944.

★ SENN, Elliot M., Capt., USN, Greenville,

All Hands
First award:
- CLAPP, Frederick S., Lt. (jg) (then Ensign), Gunner officer, USN; LSM(R)/188, Okinawa operations, 29 Mar 1945.
- DAVIES, Byron A., PhM3c, USNR, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- DE LA MARE, Byron A., PhM3c, USNR, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- DUNN, Maynard W., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- ENSIGN, Thomas E., Slc, USCGR, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- HYNES, Edward J., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- McBRIDE, Charles G., Capt., USN, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- McKELLAR, John F., Slc, USNR, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- MILLS, Richard M., Slc, USN, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- HINES, Charles J., SIC, USMC, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- JOHNSON, Thomas J., Slc, USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- KINNE, John W., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- LANG, John W., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- MACKINNON, John, Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- McINTYRE, Walter L., Jr., EM2c, USNR, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- OWENS, Thomas E., Slc, USCGR, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- SULLIVAN, John W., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- TAYLOR, Albert J., Capt., USN, Philadelphia, Miss.; Torpedo man in charge, USS Bonefish, fourth war patrol, 15 Apr to 30 May 1944.
- TAYLOR, William W., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- WRIGHT, Frederick, C., Jr., Lt., Comdr., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.
- YOUNG, William J., Lt., USN (posthumously); Gun crew member, USS Callaway, Pacific, 8 Jan 1945.

Gold star in lieu of third award:
- BEST, Fred J., Capt., USN, Philadelphia, Miss.; Staff of CINCPAC/Foa, 13 Jan to 1 Sept 1945.
- BESTON, Arthur D., Rear Admiral, USN; Captain Chase, MD, ComPhipGm9, 6 Dec 1944 to 5 Jan 1945, Mindoro, Philippines.

Gold star in lieu of second award:
- BEETON, Henry C., Capt., USN, Arlington, Va.; Chief of Staff, ComTRAComm SubFleet, 1942.
- BEYER, Arthur D., Rear Admiral, USN; Captain Chase, MD, ComPhipGm9, 6 Dec 1944 to 5 Jan 1945, Mindoro, Philippines.
- BIRCH, Frederick L., Capt., USN, Peabody, Mass.; Duty with the atomic bomb project.
- BOSAN, Gerald F., Vice Admiral (then Rear-Adm.) USN, Norfolk, Va.; CO of Carrier Air Group 11, Philippine Islands, 14 June 1944 to 1 Aug 1945.
- BRADLEY, Norris E., Capt., USN, Berkeley, Calif.; Duty with the atomic bomb project.
- BRATTON, Clinton E., Jr., Rear Admiral (then Commodore) USN, New York, N. Y.; CO of the Pre-Commissioning Training Center, Atlantic Fleet, Mar 1945 to Jan 1946.
- BUCH, Charles A., Capt., USN, Baltimore; Gunnery officer of USNS Pensacola, action at Peleliu, Leyte Gulf, 12 Sept 1944 to 10 Feb 1945.
- CALHOUN, William L., Vice Admiral, USN, Miami, Fla.; Staff of CINCPac, 1 Oct 1942 to 7 Dec 1942.
- CARLSON, David E., Capt., USN, Chicago, Ill.; Chief of the War Department, Administration and Classification Branch of the Office of Industrial Relations, Jan 1944 to Oct 1945.
- CHARLTON, Alexander M., Rear Admiral, USN, Omaha; Deputy Chief of Office of Procurement and Material, Office of Production, 3 Feb 1943 to 1945.
- CLARK, Robin W., Capt., USN, Honolulu; Gunnery officer of USS Pensacola, action at Peleliu, Leyte Gulf, 12 Sept 1944 to 10 Feb 1945.
- DANIS, Anthony L., Capt., USN, Washington, D. C.; Aeronautical Section, Operations Division, staff of CINCPac/Doo, Mar to 1 Sept 1945.
- EGGERTON, Gardner B., Rear Admiral, USA; Chief of Special Rating Section, Chief of Products Division, in Office of Procurement and Material, 1 Aug 1942 to 1 Oct 1945.
- FORAY, William W., Lt., Comdr., USN, Port Chester, N. Y.; Assistant adjutant and counsellor for BuShips, Dec 1942 to Oct 1945.
- FUGA, Samuel O., Capt., USN, Los Angeles; Peace operations officer, SerForTheIt, 9 Jan to 15 Aug 1945.
- GOODWIN, Howard E., Rear Admiral, USN, Seattle; Director base maintenance division, CNO, 2 June 1945 to 31 Aug 1945.
- GRASER, H. J., Capt., USN, Cohasset, Mass.; OmC of Progress Section of Office of Assistant CNO for Material, 19 Nov 1942 to 14 June 1944.
- HULL, Wilfred J., Capt., USN (ret.), Honolulu; OmC Combat Intelligence at Joint Intelligence, Pacific, 7 Sept 1943 to 1 Sept 1945.
- KIRCH, Ralph A., Capt., USN (ret.), Fairbury, Neb.; Special assistant to Assistant Chief of BuShips, 13 Sept 1941 to Jan 1946.
Legion of Merit (Cont.)

Ind.: Duty with OpDiv, Staff, CincPac/Pac, 25 July 1944 to 1 Sept 1945.


Lee, Fitzhugh, Capt., USN, Owings Mills, Md.: Public information officer, staff, CincPac/Pac, April 1 Sept 1943 to 1944.

Lindley, Elwood, Capt., USN, Richmond, Calif.: Head of tanker operations in marine transportation service, assistant director of tanker and petroleum division in office of CNO.

Lowe, Clarence E., Lt. Comdr., USN, Riversdale, Conn.: Counsel for Industrial readjustment branch of Office of Procurement and material, July to 19 Dec 1944.

Mayer, John H., Lt. Comdr., USN, New Haven, Conn.: Aide and chief of staff to ComAirPac, Aide and chief of staff to ComAirPac/Fleet, July 1941 to 23 June 1942.

Moreell, Ben; Vice Admiral, USN, Westfield, N. J.: Head of accounting division, Executive assistant to chairman of Navy price adjustment board, Navy representative on various joint committees, 22 July 1945 to 27 Sept 1945.


Nebbott, Thomas B., Capt. (then USCG, July 1942 to 26 Aug 1945.


Pine, James, Rear Admiral, USN, Concord, N. Y.: Superintendent, USN Academy, July 1943 to 1945.


Reed-Hill, Ellis, Commodore, USCG, Brooklyn, N. Y.: Chief of public information division, 1 Aug 1940 to 11 Oct 1945.

Rohr, Morton L., Rear Admiral, USN, Chicago, Ill.: Chief of supply section, Logistics division on staff, CincPac/Pac, Western Carolinas, Iwo Jima, Ryukyu Islands, 7 Aug 1944 to 1 Sept 1945.

Rivino, Hornig, Capt., USN, Puerto Rico: Excec officer, USS Pittsburgh, Naval base operations on 5 June 1943.


Schlesinger, George C., Comdr. (then Lt. Comdr.), (MO), USN, New York, N. Y.: Medical officer during landings on Luzon.

Shoales, Dudley P., Comdr., USN, Seashore-on-Hudson, N. Y.: Principal assistant in logistic procurement and material, 2 Oct 1942 to Oct 1945.


Sheldon, Luther, Jr., Rear Admiral, USN, Washington, D. C.: Assistant to chief of staff, 26 June 1944 to 25 Nov 1944.

Small, John D., Commodore, USN, Chicago, Ill.: Executive officer and chief of staff to chairman of war production board, 22 Sept 1944 to Oct 1945.

Small, William, Rear Admiral, (MO), USN, Scarsdale, N. Y.: Logistics division, staff of CincPac/Pac, 19 Dec 1943 to 1 Sept 1945.

Spears, William O., Rear Admiral, USN (Ret.), Chattanooga, Tenn.: Director of pan-American division of Office of naval personnel, 1 April 1943 to 1 July 1945.

Stewart, Frederick W., Rear Admiral, USN, New Haven, Conn.: DepComAirFor-PacFleet, 1944 to 1945.

McMahon, Frederick, Capt., USN, New Haven, Conn.: DepComAirFor-PacFleet, chief of staff to CincPac-PacFleet, Oct 1944 to Sept 1945.

Maas, Edwin J., Col., USN, Saint Paul, Minn.: Staff officer to CincNawpo, Komodora, Okinawa, 25 May 1945 and at awase on Okinawa, 11 July 1945.


Meehling, Harry L., Rear Admiral, USN (Ret.), Chicago, Ill.: Chief of industrial readjustment branch of office of procurement and material, 2 Aug 1944 to 12 Oct 1945.

Michel, Carl, Rear Admiral, USN, Chicago, Ill.: Chief medical officer USCG since July 1940.


Nebbott, Thomas B., Capt. (then Comdr.) USN, Potomac, Md.: Excec officer, USS Randolph, Atlantic and western Pacific, 11 Aug 1944 to 23 June 1945.

Parrish, Maurice E., Comdr., USN, Chicago: OINC, Naval Training Center, Harvard University, 3 Oct 1942 to 7 Aug 1945.


Pardee, C. C., Capt., USN, Berkeley, Calif.: Analytical section, operations division, staff of CincPac/Pac, 25 May 1943 to 1 Sept 1945.


Pink, James, Rear Admiral, USN, Concord, N. Y.: Superintendent, USN Academy, July 1943 to 1945.


Reed-Hill, Ellis, Commodore, USCG, New Haven, Conn.: Senior salvage officer, Manila, Mar 1945.

Wiley, Tova P., Comdr., USN, Alameda, Calif.: Assistant director of CMC, CincPac/Pac, 5 Apr 1942 to 26 Aug 1943.

Waller, Lloyd L., Rear Admiral, USN, Coronado, Calif.: Assistant chief of staff, subs and J-2, CincPac/Pac, 5 Apr 1942 to 26 Aug 1943.

Wood, Robert W., Capt., USN, Arling- ton, Va.: Special assistant to chief of naval personnel, 1 Apr 1945 to July 1945 and 1 Sept to 27 Dec 1945.


Gold star in lieu of fourth award:

Smith, Kenneth D., Lt., USN, Fort Arthur, Tex.: Night fighter pilot, USN Enterprise, Pacific.

Gold star in lieu of third award:


Gold star in lieu of second award:


First award:


Morris, Alfred L., Ens., USN, St. Louis, Mo. (MIA): Pilot and sector leader, DomPitRon5, USS Lexington, Nagoya area, 30 July 1945.

James, Joseph J., CEM, USNR, Cleve- land, Ohio: Crew member, USS Hull, Philippine Sea, 30 Aug 1944.

Martin, Wilber R., Jr., EDMC, USNR, Sheridan, Wyo.: For rescue of a shipmate, SoWestPac area.

Mattin, Wallace A., St., USN, Lex- ington, Ky.: For rescuing a man in Sabine Bay, 9 Aug 1943, while attached to USS Howard W. Gilmore.

Miller, Calvin P., Blc, USN, Miles City, Mont. (posthumously) Bollighter, USS Hull, Philippine Sea, 31 Dec 1944.

Pain, Rodney H., Lt. (jg), USN, N. Horn, Calif.: For rescuing a man, 4 Oct 1944, territorial waters of the U. S.

**Gold star in lieu of third award:**
- **Caverness, Robert W., Capt., USN, New Philadelphia, Ohio:** Commanding Officer, Destroyer Div. Seventh Fleet.
- **E DES, 1st Lt., Capt., USN, New London, Conn.: CO, USS Pargo.
- **Eubanks, Leon S., Cmdr., USN, New London, Conn.: Assistant officer, CINCPAC.
- **Goering, Floyd W. Jr., Lt. Cmdr., USN, West Newton, Mass.:** Officer of the deck, USS Spearfish.
- **Hempstead, Long Island, N.Y.: CO, USS Bonefish.
- **Kehl, Elmer, Capt., USN, Cheyney Chase, Md.: Executive assistant to Assistant Chief of Staff for Administration, CINCPAC.
- **Kotz, Thomas R., Lt. Comdr., USN, Lakewood Village, Long Beach, Calif.: Assistant fleet comm officer for fleet and amphibious operations, CINCPAC.
- **Kirby, John L., Capt., USN, San Francisco: Staff of CINCPAC.
- **Fisher, Guy L., Capt., (MC), USN, Indian Creek, Wyo. (posthumously): Assistant air officer, uss Scaphandre.
- **Connelly, Clifford S., Capt., USN, Salt Lake City: Staff of CINCPAC.
- **Buckley, Nathan A., Lt., USN, Abilene, Tex.: On board uss New Jersey.
- **Bisson, Robert A. Jr., Cmdr., USN, Owego, N.Y.:** Screen commander of a destroyer division.
- **Cecil, Charles P., Rear Adm. (then Capt.), USN, Charleston, S.C. (posthumously): CO, USS Hoco.
- **Coffin, Philip R., Capt., USN, Merced, Tex.: Staff of CINCPAC.
- **Crenshaw, Thomas C., Capt., USN, Salt Lake City: Staff of CINCPAC.
- **Moore, Michael U., Lt. USN, Takoma, Wash.: On board uss Raleigh.
- **Morgan, Gail, Capt., USN, Porter's Falls, W. Va.: CO of U.S. NAS, Midway.
- **Nuss, Albert M., Capt., USN, Mobile, Ala.: CO, USS Roca.
- **Opend, John P., PhM2c, USN, Lawrence, Mass. (posthumously):** Attach to CINCPAC.
- **Ortiz, James W., Cmdr., USN, Washington, D.C.:** Air officer on uss Wake Island.
- **Pettasinos, Joseph, GMc, USN, Sacramento, Calif.: On uss Barb.
- **Phillips, Neil, Capt., USN, Newport, Ark.:** Commander of radar picket ships, Okinawa.
- **Fogg, Edward J. Jr., Lt., USN, Arlington, Va.: Exec. and First Captain of PT 189.
- **Sanford, Wayne H., Jr., CTET, USN, Chickasha, Okla.: Radar operator uss Croaker.
- **Schumm, Brooke, Capt., (then Cmdr.), USN, Berkeley, Calif.: On uss San Diego.
- **Stephlin, Leroi C. Cmdr., USN, Lewes, Del.: Served on board a U.S. carrier.
- **Soleta, Manuel Jr., Slt. USN, Bridgeport, Mass.: Action on Okinawa, Shima.
- **Sowell, Ingram C., Rear Admiral, USN, Lawrenceburg, Tenn.:** CO of battleship division, Pacific.
- **Stewart, James R., Lt., USN, Boston, Mass.: Action on Okinawa Shima.
- **Stewart, Robert C. Jr., Lt. Cmdr., USN, 30 Apr 1944.
- **Thorne, Mercer M., Lt. Cmdr., USN, Atlanta (posthumously): Assistant air officer and OIC of night deck, uss Bismarck Sea.
- **Webster, James T., Cmdr., USN, Portland, Ore.: For action at Funafuti, Ellice Is., 4 Dec 1944.
- **Winters, Lloyd J., Rear Admiral, USN, Coronado, Calif.: CO of cruiser division.

**FOREIGN AWARDS**

**George Medal (by New Zealand):**
- **Knox, Thorne W., VMc, USN, Portland, Ore.: For action at Funafuti, Ellice Is., 4 Dec 1944.

**Croix De Guerre (by France):**
- **Senn, Elliott, Capt., USN, Greenville, Miss.: For service during operations for liberation of France.**

**The Missouri (USN Missouri)**

"This is your new make-up artist—he used to be a camouflage expert in the Navy."

**Tadten Topics (TadCen, Camp Elliott)**

"And this is one of our prize findings. He was frozen back in the 20th century."
Mr. Maki, whose "Japanese Militarism, Its Cause and Cure," was published shortly before the war ended, has made the study of Japan his life work and at one time was on the faculty of the University of Washington. His thesis is that the ideas upon which Japanese militarism is based must be crushed before a peaceful Japan can be created. This requires the stamping out of the oligarchic structure of Japanese politics and economics and the conception of emperor worship, "roots from which the evil weeds of aggression have grown."

Revolution Advocated

He points out that the vacuum resulting from this pruning process must be filled and advocates the introduction of ideas of democracy, liberalism, and socialism. Such a revolution will have to be fashioned by the occupying forces, because there is little chance that the impetus for such a change will come from within Japan itself.

Japan's history lacks an equivalent of the French and Russian revolutions, the Reformation and the Renaissance, a fact which Mr. Maki contends explains the evils so apparent in Japanese society. He argues that if in the past there had been a bona fide uprising of the people, instead of conflicts between rival oligarchies, Japan would not have launched her recent aggression.

The inside story of the Burma road told from the Chinese viewpoint is the theme of another book recently distributed, "The Building of the Burma Road," by Tan Pei-Ying. Many aspects of this engineering achievement have previously been covered in books and magazine articles but this is the first time a Chinese official has told the story.

It is an informal and undramatic account but it has a hero—the Chinese coolie. Proper credit is given to the occidental and Chinese engineers who directed the building of the vital highway but ranking all in heroism are the thousands of coolies, men, women, and children who hewed out the road by hand labor through some of the most difficult terrain in the world.

Stone by Stone

Mr. Tan was managing director of the Yunnan-Burma Highway administration from 1938 to 1942, when Japanese occupation of Burma forced abandonment of the project and caused its partial destruction.

He recounts the construction obstacles overcome, the difficulties of administration, the disease and accident toll among the laborers and gives a graphic description of coolies chipping stone by hand for the road bed, and "planting" the chips as if they were sowing rice.

As the author says:

"The picture of these millions upon millions of stones all put in place individually conveys more clearly than anything I can think of the tremendous mass effort on the part of hundreds of thousands of obscure toilers that went into the construction. Only their endless patience and devotion, their magnificent endurance of hardships and dangers of all kinds, fatigue, illness, accidents and death, made it possible for China to have her life line."

Key to Strength

However, there is one similarity between the development of the U. S. and Japan which Mr. Embree points out—the transformation of both countries during the last century from predominantly agricultural to industrial nations.

Their school system is the key to the much of the strength of the Japanese before the war, he finds. Within the educational framework lay the seeds of the intense supernationalism which sent the Jap to war.

In concluding his book Mr. Embree asserts that the Japanese were "far and away in the lead of all Eastern Asia so far as education and literacy, public health and industrialization are concerned." He predicts a coming of age of China and Malaya and warns that Europe and America must withdraw economic and colonial control of those areas or a second war in East Asia will result.
SKILLS which the Navy found valuable during wartime will be emphasized in training of reserves. Aim will be to keep reserves abreast of latest techniques. At left is shown a gun crew, at right Navy aerographers plot a wind sounding.

THE ENLISTED RESERVE

Opportunity to Climb Up Through the Ranks Is Assured Navy Men

ENLISTED NAVAL Reservists during the postwar years will have the opportunity to advance through the ranks from apprentice seamen to CPO and possibly attain warrant or commissioned status under a training program planned by BuPers. The program includes classroom work with modern training devices, shop work for all artificer rates, shipboard instruction the year round and resumption of the popular prewar summer training cruises to foreign ports. The plan includes officer training as well.

Speed of advance through the rates will be comparable to that of men on active duty with the fleet, dependent upon merit and interest shown in the reserve program. The training plan is tailored to keep reservists abreast of rapid technical advances in material and the resulting changes in naval tactics. BuPers pointed out vast quantities of Navy gear already have been assigned to reserve training and the most modern new equipment will be available as soon as it is obtained by the active fleets.

Training devices will include BuOrd's latest gunnery and fire control installations, including projection machines similar to dome trainers to teach actual shooting. Working models of steam and mechanical machinery, piping and fittings will be available for engineering study, as will a new damage control trainer now being worked out by the Navy's special devices experts. Electronics will be a large part of the program. Frequently already have been assigned on which various reserve units at naval armories throughout the nation may talk with each other while training with new Navy transmitters and receivers. Courses in electricity will carry students from fundamental circuits through advanced electronics, using Navy radio and radar gear.

Armories will be an integral part of the program, housing training facilities and providing space for classrooms, lectures and motion pictures.

Complete workshops will be available in which men of the artificer branches may perfect Navy skills, and incidentally, in most cases, increase their civilian trades and hobbies.

Boats and ships will be assigned to training divisions operating near navigable water. In conjunction with the Marine Corps Reserve and National Guard, training will emphasize amphibious operations. Combatant types will be available at such localities to provide station ship facilities and realistic training.

Organized reservists and some inactive volunteer reservists will go to sea on summer cruises, training aboard ship and enjoying the privilege of liberty in foreign ports.

BuPers emphasized the training and recreational gear in armories will be available for use of any reservist when not being used by an organized class. Quantities of new sports equipment have been turned over by the Navy to the training program.

Divisions already are being organized on a voluntary basis, and will go on a pay basis after 1 July.

Any former Navy man is eligible for the activity. If he does not know where the nearest division is located he may write the commandant of his naval district or write direct to BuPers.

The program will be open to enlistment of men who are not Navy veterans. Enlistment requirements will approximate those of the regular Navy and enlistment is being carried out at Navy recruiting stations and SepCens. Enlistment in the naval reserve will, in effect however, be confined to veterans so long as a selective service act remains in effect.
The Navy in California, some 1800 in Rhode Island, and lesser numbers in 10 other states.

But concerning service personnel, the Navy carries against raising any hopes of large scale transporting of dependents to Pacific areas. Housing must come first. CINCPOA has said he will not authorize any dependent to go to any base until quarters are available. Specifically, no dependent will be allowed to go to Okinawa until and unless housing facilities are provided. A similar decision has been taken with regard to the Japanese Empire. CNO will sponsor no permanent housing on Okinawa "until its status has been more clearly determined on an international level."

Temporary advancements as an inducement for enlisted men to remain on duty until 1 Sept 1946 are not included in present BuPers policy. The reasons are as follows:

It's the Navy's postwar rating structure. Naturally, the Navy must arrive at its eventual peacetime condition with as logical as possible a distribution of personnel in rates. But already the number of CPOs and POs first class, with obligated service—that is, regular Navy men who will remain in the postwar Navy—far exceeds requirements. Spot promotions would aggravate this situation. And since all enlisted promotions are made on a permanent basis, future reversion to lower rates would not be practicable.

To the argument that advancement of a petty officer soon to be released would have no detrimental effect on the postwar Navy rating structure, BuPers points out it would be "manifestly unfair to advance such men over their shipmates of the regular Navy." Moreover, BuPers feels such men would gain an unjust seniority if they later desired to remain in the regular Navy.

Wartime promotion policies during the Navy's period of great expansion were liberal, and gave personnel ample opportunity for advancement. It was, for example, possible for an apprentice seaman to make chief in 18 months as compared to a peacetime minimum of 76 months. The reverse situation is equally true. BuPers points out that in a time of personnel contraction, promotions "must be administered in a manner which will maintain a proper balance of rank and rating."

Advancement of one pay grade was proffered to Waves who agreed to remain on active duty until 1 Sept. 1946. The same inducement was extended to certain others. BuPers emphasized that retention of personnel in higher grades will have no effect on the postwar structure of the regular Navy. And the Navy secured the extended services of personnel by offering to demobilize and the transition of personnel assignments.

The Navy is fully aware of the critical nature of the housing situation and is doing everything it can to meet it. Civilian as well as service needs must be considered. Approval has been given for the use of naval facilities in the Pearl Harbor area for emergency civilian housing. Preference will be given to veterans and civilians employed of the Navy. Within the U.S., more than 4700 housing units excess to the needs of the Navy have been released for the housing of veterans. These include Quonset huts, barracks, officers' quarters and miscellaneous buildings. Nearly 2300 such units have been transferred by the Navy to civilians for use in the regular Navy.
• **MOST ENLISTED MEN** are interested in working up in their profession. Many want to know frankly they are getting a commission in the postwar Navy.

Reduced to simple terms, enlisted men desiring commissions as ensigns or lieutenants should enter one of the various officer candidate programs before they reach the age of 23. Several channels leading to commissions will be open to warrant officers as warrant or commissioned warrant ranks but will have relatively few chances for direct commissions in higher grades.

The Navy's program for procurement and training of officer candidates (see **ALL HANDS**, December 1945, pp. 30) awaits necessary legislation. Final details of the postwar plan have not been fully determined, but every avenue to commissioned rank which is now open to civilians is open to enlisted men with the same standards of age and aptitude applying.

In addition, the Secretary of the Navy annually appoints to the Naval Academy 100 men from the USN and 100 from the USMC highest on entrance exams given on the third Wednesday in April each year.

The candidates must not have reached their 17th birthday on 1 April of the year in which their midshipman training begins. They must have been in the service as enlisted men at least nine months by 1 July of that year.

The age limit, however, has been raised to 23 years for any candidate who (1) has served honorably in the armed forces for one year or more during the present emergency and (2) possesses all other qualifications required by law (Alnav 7-46; NDB, 17 Jan) (see **ALL HANDS**, Feb 1946, p. 73).

This month BuPers is publishing a circular letter requesting commanding officers to recommend to the Naval Academy Preparatory School which convenes 1 Oct 1946 men whom they consider suitable for ultimate commissioning in the Navy. Men nominated by the commanding officers of those enlisted grades which are designated by BuPers to admit the school by BuPers will be given until April 1947 to prepare for the Academy examination.

The present aviation training program is open to any high school graduate 17 to 19 or to any man with two years of college 17 through 22 who can pass the qualifying tests. The proposed Naval reserve program, if enacted in its present form, will be open to nationwide competition with men in service eligible on the same basis as civilians.

All of these channels lead to regular Navy commissions and no man with a high school education is arbitrarily barred. If the present program he has a GCT score of 60 or above.

Outstanding petty officers may advance to officer status as warrant or commissioned warrant officers. Pay and allowances of warrant officers roughly equal those of a lieutenant (jg), and with longer service amount to considerably more. Retirement benefits are liberal. Since warrant grades are not open to civilian procurement, every warrant officer in the regular Navy will normally be a former enlisted man.

At present a procedure for appointment of enlisted men and warrant officers to commissioned rank is being studied which will be designated and approved as soon as possible. The present supply of more than 40,000 officers who were appointed from enlisted grades is more than the Navy's immediate needs in a peacetime operation. The conception of this policy might be quite different if the Navy's only need for officers in peacetime was to fill each billet with a qualified man.

For example, an officer of limited education and aptitude might reach his level as first lieutenant of a destroyer at the rank of lieutenant (jg) and remain in such an assignment for the rest of his active duty. This would fill the destroyer billet adequately and would suffice for the needs of a static Navy.

But here is where the Navy's problem: its peacetime mission is development, research, training and maintenance in readiness for war. When war is imminent the Navy must prepare quickly to expand its organization and must be able to fill the need for officers in large numbers. Since the Navy cannot afford to train any officer to the rank of a captain and another highly responsible command duties, the Navy must rely upon its Reserve forces to fill the comparatively limited number of command billets that will be vacant when war is declared. The Reserve officer must be capable of being used as one step in the training of officers who will command units of the Fleet at the outbreak of war. With fewer qualified officers available with men not capable of advancing to higher levels of responsibility, merely to fill the first lieutenant billet on the destroyers will be insufficient. The Navy must be prepared to expand and with the necessity of training as many officers as possible for command, officers must be rotated through many different assignments in peacetime to prepare them for war and more responsible positions in time of national emergency.

Using the destroyer as an example again, Navy experience proves that commanding officers of this type of ship should be well under 40. A wide range of training and experience is necessary to qualify an officer for this duty. A destroyer skipper must start young and acquire intensive training and service education early in his naval career.

It is almost impossible for him to work his way up in peacetime through the ranks of enlisted ratings, then spend a reasonable length of time as a warrant officer before getting the necessary experience to arrive at command rank at the proper age. In the EDO branch of the line an officer must have academic instruction through calculus to be able even to take further required studies. There is no substitute for knowledge of calculus in the form of long service or excellent performance.

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### LEGISLATIVE ROUNDUP

#### RETIREMENT—(Public Law 305)

- Act provides for readjustment of the officer personnel considered essential to the growth and development of the Navy.
- Provides for retirement of those officers who have served a minimum of 20 years on active duty.
- In lieu of accumulated leave, and to be eligible for retirement benefits, officers must serve an additional 10 years on active duty.

#### FLEET RESERVE—(S 1438)

- Bill reauthorizes the "16-Year" Fleet Reserve for personnel now serving in the Navy.
- Expands eligibility for reserve service to include those who enlist within 120 days after bill's enactment; bill liberalizes retirement and retirement pay provisions applicable to Fleet Reserve; also would provide reenlistment allowances and bonuses during war; passed Senate; still pending in Senate committee.

#### ATOMIC TESTS—(House Joint Resolution 307)

- To authorize use of atomic weapons, to determine effect of atomic weapons thereon; passed House 12 March.

#### LONGEVITY CREDIT—(Public Law 309)

- Credits certain service by members of the armed forces, including those on active duty, for purpose of computing longevity pay; signed by President 6 March 1946.

#### AID TO CHINA—(HR 5356)

- To provide assistance to the Republic of China by augmenting and maintaining a naval establishment; passed House 12 March.

#### CODE INFORMATION—(S 805 and HR 2711)

- Prohibits the disclosure of information secured through official sources by government employees on any code, cipher or cryptographic system except on lawful demand by Congress or a congressional committee; passed Senate, under consideration in House.

#### OTHER MEASURES

Various bills have been introduced which pertain to the voting by members of the service, to grant enlisted men certain benefits in lieu of accumulative leave, and to extend the Selective Service Act. No action has been taken on these measures. When and if such action is taken, **ALL HANDS** will report it. See also legislation reported on pages 8, 74 and 76.
Discharge Scores for Specialty Rates Reduced to General Level by 2 June

All high-point specialty rates are reduced to the general critical discharge score level for enlisted personnel, effective 2 June, according to Alnav 131-46 (NDB, 15 March).

All male specialists on the "restricted" list will receive a four-point cut in their required scores on 15 May to a 28-point total. At the same time the level for all other male enlisted personnel and remaining specialists will be lowered to two points to 26. On 2 June restricted specialist scores will be dropped to 24, catching up with the general list at that point.

Total scores for all restricted female rates will equal the general level for enlisted female personnel on 15 May.

The reduction of points for all naval personnel is shown in the box on this page.

On 1 April, discharge credits for all men in the Marine Corps dropped two points to 38 while those for women slipped from 16 to 13 points. Subsequent changes follow: 1 May, 35 points for men, 28 for women; 1 June, 28 points for men, 24 women; 1 July, 25 points for men, 20 women. After 1 July, 30-months' service will also make a Marine eligible.

After 1 July, length of service in the Marine Corps will be the chief factor in determining eligibility for discharge, although the point system will be retained in consideration of parenthood and of the few personnel who have combat credit but less than 25 points. It is now anticipated that practically all Selective Service and Reserve personnel will be separated from the Marine Corps by September. Present estimates indicate that under the projected demobilization program approximately all personnel with combat service who are not regulars will be mustered out by mid-summer.

A lowering in points required for discharge from the Coast Guard was announced last month and the following point level is effective:

15 April—male officers, 36; male yeoman, storekeepers and pharmacist's mates, 34; other male enlisted, 29; Spar yeomen, storekeepers and pharmacist's mates, 25; 2 May—male officers, 35; male enlisted, 28; male yeoman, storekeepers and pharmacist's mates, 32; Spar yeomen, storekeepers and pharmacist's mates, 21, and other Spar enlisted, 19.

The Navy demobilized 67,267 of its personnel during the week ended 9 March to bring its overall total to 1,868,799. During the week ended 8 March, the Marine Corps released 8,897, boosting its total to 269,956, and the Coast Guard separated 3,520 to make a total of 97,956.

Waves Desiring to Join Husbands Overseas May Ask Discharge

Waves desiring to join their husbands overseas in areas to which dependents may travel may request separation regardless of date of marriage, length of service, number of demobilization points or military necessity, by AlStaCon 131345 March.

Waves not eligible for discharge under this policy are enlisted Waves who waived their discharge privileges and agreed to remain on duty until Sept, 1946, and all Waves whose husbands are in areas not open to travel by dependents (see p. 70).

In addition to this new policy, a Wave may be separated under the following conditions: If her husband is a veteran of World War II, a former member of the Merchant Marine who was disabled, a World War II serviceman who has been medically surveyed for limited duty or hospitalized awaiting limited duty or separation or if she is married and has had one year of active duty.

CRITICAL SCORES AGAIN LOWERED

Reduction in discharge points for Navy personnel from 15 April to 15 June is shown in the chart below. Scores for all high-point specialty rates will be reduced to the general discharge score for enlisted personnel by 2 June.

<table>
<thead>
<tr>
<th>NEW CRITICAL SCORES</th>
<th>15 April</th>
<th>2 May</th>
<th>15 May</th>
<th>2 June</th>
<th>15 June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male commissioned and warrant officers (except MC)</td>
<td>36</td>
<td>35</td>
<td>34</td>
<td>33</td>
<td>32</td>
</tr>
<tr>
<td>Male officers classified MC—doctors</td>
<td>45</td>
<td>44</td>
<td>43</td>
<td>42</td>
<td>41</td>
</tr>
<tr>
<td>Male medical corpsman, hospital corpsman</td>
<td>36</td>
<td>35</td>
<td>34</td>
<td>33</td>
<td>32</td>
</tr>
<tr>
<td>Male nurses (except WAVES)</td>
<td>29</td>
<td>28</td>
<td>27</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Male enlisted personnel (except those listed above)</td>
<td>29</td>
<td>28</td>
<td>27</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Male watermen (CB), machinist's mates (except MM [CB] and MM6); chief, civilian stations, ship's cooks, bakers, electrician's mates (except CM [CB])</td>
<td>33</td>
<td>32</td>
<td>31</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Male yeomen and storekeepers and pharmacist's mates</td>
<td>34</td>
<td>33</td>
<td>32</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>Female commissioned and warrant officers (except WAVES)</td>
<td>44</td>
<td>43</td>
<td>42</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>Female medical corpsman, hospital corpsman</td>
<td>35</td>
<td>34</td>
<td>33</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>Female nurses (except WAVES)</td>
<td>27</td>
<td>26</td>
<td>25</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Female enlisted personnel (except those listed above)</td>
<td>27</td>
<td>26</td>
<td>25</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Female watermen (CB), machinist's mates (except MM [CB] and MM6); chief, civilian stations, ship's cooks, bakers, electrician's mates (except CM [CB])</td>
<td>33</td>
<td>32</td>
<td>31</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Female yeomen and storekeepers and pharmacist's mates</td>
<td>34</td>
<td>33</td>
<td>32</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td>Female nurses (except WAVES)</td>
<td>26</td>
<td>25</td>
<td>24</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Female hospital corpsmen in same categories as male enlisted listed above</td>
<td>21</td>
<td>19</td>
<td>19</td>
<td>18</td>
<td>17</td>
</tr>
</tbody>
</table>
Navy Announces List
Of Enlisted Ratings
Open to USN Transfers

Changeover of enlisted USNR and
USN-Is to the regular Navy, except
for CB and specialist ratings, has
been limited to the ratings specified
in AlNav 112-46 (NDB, 15 March)
and listed below. New budget restric-
tions for the fiscal year 1947 ne-
cessitate a reduction in the previously
established limits for the postwar Navy. Regular Navy per-
sonnel in many ratings already exceed
the reduced requirements.

The AlNav specifies that re-exser-
visists and ex-inductees may enlist (or reenlist) in USN at recruiting stations
rates held at discharge provided such
ratings are open to enlistment and reen-
listment. All other eligibility require-
ments also must be fulfilled.

Voluntary reductions in rate will not
be authorized for the purpose of dis-
charge and immediate changeover to
USN.

Except as modified in AlNav 112-46,
BuPers Cir. Ltr. 41-46 applies with
respect to requirements for changing
career paths in CB. Notifications contained in Alnavs 374-46 and 51-46 for change-
over of CB and specialist ratings re-
main in effect.

The ratings for which changeovers
will be authorized:

**Seaman Branch:** FC3c, SS2c and AS.

**Artificer Branch:** RM3c, CETM,
ETM1c, ETM2c, ETM3c, CRDM,
RdM1c, RdM2c, RdM3c, CM3c, SF5c,
M3c, MI3c, PM3c, CSAIL, SAIIc,
SAIIc, SB3c, SA02c, SA03c, CSAD,
SA1c, SA2c, SA3c, PTr2c, PTr3c,
MM2c, MM3c, MMR3c, MM3c,
MMS3c, MMS2c, MMW3c, MMS3c,
EM2c, EM3c, WT3c, F1c and F2c.

**Aviation Branch:** ACMB(AG),
ABM(AG)1c, ABM(AG)2c, ABM-
(AG)3c, ACHM(CP), ABM(CP)1c,
ABM(CP)2c, ABM(CP)3c, ACHM-
(GA), ABM(GA)1c, ABM(GA)2c,
ABM(GA)3c, ACHM(PH), ABM-
(PH)1c, ABM(PH)2c, ABM(PH)3c,
AEM2c, AEM3c, ACETM, AETM1c,
AETM2c, AETM3c, AM3c, AOM3c,
AF3c, AOMT3c, AB3c, AerM3c, Aer-
M3c, PhoM2c, PhoM3c, PTrV2c, PTr-
V3c, SKV1c, SKV2c and SKV3c.

**Special Branch:** Y2c, Y3c, SK2c,
SK5c, SKD2c, SKD5c, PTr2c, PTr1c,
PTr1lc, PTrL2c, PTrL3c, PTrM2c,
PTrM3c, SSMB3c, SSMB3c, SSMB1c,
SSM3c, SSMM1c, SSMTL1c, SMTM2c,
Smutc, SM3c, SMO1c, SMO2c, SMO3c,
PhM3c, HAI1c, HAI2c, Buglc, Bug3c,
CMAM, MaMa1c, MaMa2c and MaMa3c.

**Commissary Branch:** SB3c, Bkr-
3c.

**Steward's Branch:** StM1c, StM-
2c and StM3c.

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**Advancement in Rating**

<table>
<thead>
<tr>
<th>Pay Grade</th>
<th>Service Requirement</th>
<th>Service Requirement</th>
<th>Mark Requirement</th>
<th>Conduct</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>no specified time</td>
<td>none</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3 months</td>
<td>none</td>
<td>none</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4 months</td>
<td>no mark less than 3.5 for 3 months preceding advancement</td>
<td>no mark less than 3.5 for 3 months and an average not less than 3.5 for 6 months</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3 months</td>
<td>no mark less than 3.0 and an average not less than 3.5 for 5 months</td>
<td>no mark less than 3.0 and an average not less than 3.0 for one year</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>12 months and 36 months total active service with sea duty of at least 6 months in pay grade 3 and/or 4</td>
<td>no mark less than 3.0 and an average not less than 3.0 for 2 years preceding advancement</td>
<td>no mark less than 3.0 and an average not less than 3.5 for 3 years for one year</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>36 months with sea duty of at least 12 months in pay grade 2</td>
<td>no mark less than 3.0 and an average not less than 3.0 for 2 years preceding advancement</td>
<td>no mark less than 3.0 and an average not less than 3.5 for one year</td>
<td></td>
</tr>
</tbody>
</table>

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**Requirements Raised**

Navy 113-46 (NDB, 15 March). This
modification is effective 28 February
(AlNav 118-46). The revised chart of requirements

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**Men Holding Engineering Rates Can Now Request Duty in Navy Recruiting**

Men holding engineering rates again may apply if otherwise eligible, for recruiting duty and will be placed
on the waiting list for that assignment, but only at the discretion of the
District Engineer. Such applications have been automatically re-
turned not approved recently due to shortage of trained engineering per-
sonnel in the fleet.

Briefly, to qualify for recruiting assignment men must meet requirements for transfer to shore billets established in BuPers Cir. Ltr. 327-
45 (NDB, 31 March 1946), which states applicants must have served two years service remaining in current enlistment or enlistment extension or agree to reenlist, and that they must have served at sea or on foreign duty four years.

Specific requirements for recruiting duty include, in addition: (1) CPOs and POs first class in rates other than
aviation, radio, bandsmen or bugle-
master only may apply; (2) CO en-
dorsement of the application must be given; (3) character, personality and neatness,
good conduct, Navy knowledge and
general knowledge, fitness to meet
custodian or beneficiary for tax
purposes to the beneficiary for the
year in which received.

**Nonrated USN Personnel Can Now Advance in CBs**

Nonrated USN personnel may ad-
vance when qualified to most construct
battalion ratings to fill vacancies in allowance, under AlNav 97-46
(NDB, 28 February).

CB rates are now open to fully
certified regulars, with exception of
coxswain (stevedore), bountswain's
mate (stevedore), gunner's mate (ar-
moror) and storekeeper (stevedore)
ratings. Heretofore, only USNR (ex-
cept Fleet Reservists) and USN (1)
personnel were eligible for advance-
cement in CB rates.

**Discharged Personnel Can Repay Loans Direct**

Naval personnel receiving loans from the Navy Relief and the American Red Cross on an allotment pay-back plan will be informed of the unpaid balances of these loans if they are dis-
charged without having met their obli-
gations. Thereafter, any unpaid loan payments directly to the organization concerned. Under AlNav 118-46
(NDB, 15 March, 1946) the Navy is not responsible for determining that
after discharge borrowers pay the re-
marying installments on their loans.

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**Beneficiary Payments Up to $1,500 Tax-Exempt**

Lump sum payments made to the
widow or beneficiary of an AV(N) officer under section 12 of the
Naval Aviation Cadet Act of 1942 may
be excluded up to $1,500 from federal
income tax reports. Commissioner of Internal Revenue has announced. The
widow or beneficiary only reports as
gross income for Federal tax pur-
purposes amount of the lump sum pay-
ment in excess of $1,500.

This modifies information in All-
HANDS (August 1945, p. 74) which
stated that lump sum payments made to a widow or beneficiary of an AV(N)
officer constitute gross income for tax
purposes to the beneficiary for the
year in which received.
Biggest Headaches for Fast Mail Service Are Demobilization, Fewer Plane Flights

Where's my mail?

After the why-can't-we-go-home question, this is the No. 1 inquiry among Navy men. Sailor writes home, wants to know why no letter. Parent writes to congressman, says letters have been dispatched with usual regularity, why no delivery? Congressman writes to Navy Department: Why?

Well, there is a problem. The Navy recognizes it and is doing all it can to get the mail through. The biggest reason for delay in the delivery of mail is demobilization. Here are some of the difficulties:

- Men are leaving their stations, heading for home or for new posts.
- Men just entering the service are in transit to new permanent stations. This may take a considerable time.
- Demobilization has cut into the numbers of personnel who handle mail despite the fact that large numbers of mail ratings were frozen in the service for more than six months after V-J day.
- The number of aircraft flights available for transport of mail has been reduced 77 percent, while the mail to be carried has decreased only 47 percent (January figures). During the war the rapid development of air transport made it possible to deliver air mail letters from the U. S. east coast to far Pacific bases in five to eight days. Fast surface transportation was readily available. Fleet units were held together in operating groups and operations were planned in advance. This made it possible to key mail to designated points and insure prompt delivery.

With the end of the war the mail service was faced with a new set of problems. Return of large numbers of men to the U. S. and changes in fleet organizations and ship movements made very difficult rapid delivery of mail. Air flights to and within the Pacific area were curtailed due to release of flight personnel.

Men just heading out for assignment have the most trouble receiving mail. Say you are just entering the Navy and are sent to boot camp. While at camp you receive your mail in good shape. Then you are assigned to "draft No. 1". This means a group of men sent out in a body and you travel to San Francisco. You have told your parents your draft number and while at San Francisco you are assigned service jobs. Then your draft is assigned to a station in the Philippines area and you go aboard ship for transportation. At Pearl Harbor the draft is broken up and, instead of the Philippines station, you are assigned to a DE. Your mail still goes to the draft number.

Mail service is that of personnel to personnel. You have now told your correspondent to send no more mail to draft No. 1, 1111, to send it to your ship instead. In the interim, however, your mail is going to the draft number in the Philippines. Arriving there, your mail is sent to your ship, last heard of at Pearl. When it arrives back at Pearl, you and your ship have shoved off for Manila or more remote points.

Delivering "draft" mail is like trying to get mail to a person traveling by auto from East to West coast when the delivering party does not know what route the traveler is taking.

Men sent home for discharge are instructed to leave with their ships or stations a permanent forwarding address. Any mail addressed to them will be sent directly to that address. If no such address is left, mail will be returned to sender.

Not the smallest problem of the mail service is the fact that large numbers of personnel who handle mail despite the fact that large numbers of mail ratings were frozen in the service for more than six months after V-J day.

Awards After Discharge Formally Presented If Desired by Recipient

Personnel on terminal leave, inactive duty or separated may be formally presented any awards approved for them since they left active service, according to Alnav 67-46 (NDB, 15 February).

The Alnav provides that such awards, above the Commendation Ribbon, shall be forwarded to home naval districts of recipients, and district commandants will communicate with individuals concerned to find out whether formal presentation is desired.

Presents will be arranged by the commandants, if desired by recipients, or awards will be delivered direct by mail.

The Commendation Ribbon and awards of lesser rank will be mailed direct to recipients.
Tentative Final Dates For U.S. Campaign Medal Eligibility Announced

Tentative final dates upon which personnel may become eligible to wear the three area campaign medals were stated in Alnav 108 (NDB, 15 March). Closing date for the European-African-Middle Eastern Campaign Medal was 1 Nov 1944, and for the American Area and Asiatic-Pacific Campaign Medals was 2 March 1946.

These dates are still tentative, BuPers pointed out, inasmuch as the Executive Order in which they are stated has not been signed by the President. The Navy and War Departments recommended the Order to the President.

No authorizations to wear these medals will be granted for service extending beyond the dates given. Service records of enlisted personnel will be reviewed and corrected accordingly and authorizations for officers in conflict with Alnav 103 will be cancelled.

Service qualifications for wearing of all three medals included 30 days service in the prescribed areas or combat duty in the areas, one year’s service in CLUSA in the case of the American Theater Medal, service in all cases to have been completed prior to the dates given above.

Here’s How To Start That New Hobby Program; Job Sheets, Plans Ready

Does your CO want to start a hobby shop for naval personnel? BuPers is preparing detailed instructions for about 30 hobby activities, about 10 of which will be ready for distribution by 15 April (see All Hands, March 1946, p. 30), illustrated instruction pamphlets, hobby craft job sheets, construction plans and bulletins will be mailed, with shop work furnishings and machines and hand tool equipment furnished to naval activities on request. BuPers will supply materials in procuring materials for the various hobbies.

Among the hobbies for which plans are available are leatherscraft, pottery, metal craft, photography, machine shop, art, fly tying, book binding, art metal, stone cutting, weaving, model airplanes and ship models.

Success of the hobby programs will depend on the initiative of the men of the individual activities in using materials at hand to construct work shops and machines BuPers said. Quotations can be obtained for work shops and materials for hobby work can be obtained by the Navy, for base price sale to naval personnel.

Activities desiring hobby programs may submit to BuPers information on type of hobbies desired, space available for work shops, complement of ship or station personnel and personnel available with experience in hobby craft programs.

Included in the hobby craft activities are: machine shop, cabinet shop, foundry, welding (acetylene and electric), forging, ornamental iron, sheet metal, art metal jewelry, electroplating chemistry, ceramics (pottery), clay modeling, glass blowing, stone cutting, wood and soap carving, plastics, wood turning, wood finishing, archery, weaving, photography, engraving, railroad equipment, model automobiles, model ships and boats, model railroads, leather work, printing (hand press) linoleum block cutting, silk screen printing, graphic arts, gardening and fly tying (fishermen).

Legion Of Merit Not Depreciated By New Citation Directive

Alnav 93-46 (NDB, 28 February) affirmed that the Legion of Merit was in no way depreciated by the recent directive which placed it next after the Silver Star in precedence on the uniform. Alnav 49-46 (NDB, 31 January) had stated new order of precedence under the uniform for the three medals concerned as Distinguished Service Medal, Silver Star, Legion of Merit.

BuPers pointed out last month that a SecNav all ship and station letter dated 13 Feb 1946 (NDB, 15 February, art. 45-319) stated rules to distinguish combat-awarded Legion of Merit and Bronze Star decorations from those awarded for service. A quarter-inch bronze block letter “V” is worn in the center of the ribbon if the award was made for performance of duty in actual combat. No more than one “V” shall be worn. Subsequent decorations are indicated by gold stars for each additional award of the medal, except doing indicates five awards of the same decoration.

BuPers will publish a list in a future NDB of personnel authorized to wear the “V”. COs may authorize wearing of the “V” for awards previously made where the citation clearly shows the award is for combat, subject to approval by BuPers. Such authorization is to take the form of a letter addressed to the officer concerned with copy to BuPers, or appropriate entry in the service record in the case of enlisted men. Future citations for these decorations will indicate whether the award involves combat.

Gold Shoulder Marks, Gilt Buttons May Now Be Worn With Grays

Gold shoulder marks and gilt buttons again may be worn with officers’ gray working uniform, according to Alnav 123-46 (NDB, 15 March). Gray shoulder marks and blue-black buttons are optional.

This cancelled Alnav 53-44 and SecNav Ltr 44-254 (NDB, Jan-June 1944) and added the following to note 4 Enc. A SecNav Ltr 43-1199 (NDB, cum ed 1945): “When the gray working uniform is worn, gold shoulder marks and gilt buttons or gray shoulder marks and blue-black buttons are optional.”

BARBED WIRE DUTY NOT TOTAL LOSS

Anyone who was a prisoner of war knows it was tough duty. But lots of liberated personnel, known as “Ex-POWs” by the Navy is out to give them a square deal. That time spent behind the barbed wire wasn’t for nothing.

Enlisted Ex-POWs except CPOs and petty officers at time of report to new duty stations following medical processing and rehabilitation leave, may be promoted by their new commanding officers without regard to the directives which previously qualified, until they reach the rating they presumably would have had if they had not been captured.

Under these advancements these advancements are made retroactive for seniority purposes only as far back as possible. Pay for new ratings does not begin until the date the rating is actually effected.

When medical treatment is over, bringing an ex-POW back to full strength, he is entitled to rehabilitation leave up to 90 days, depending upon his length of detention by the enemy and his physical condition.

Enlisted men who were former prisoners will not be sent to sea duty for their first assignment unless they specifically indicated as “liberated” or formerly classified as a prisoner of war. They will be allowed to name the naval district or river command where they wish to serve.

Liberated personnel generally speaking will be given “special consideration” on requests for navy training courses.

Officers who have been liberated from enemy prison camps are being offered refresher courses in gunnery, radar, firefighting and damage control to bring them up to date on all developments since their capture.

The policy closing officer procurement of enlisted men recommended for promotion to warrant and commission officers does not apply to enlisted men who have been prisoners of war. This will allow capable men who were CPOs or petty officers at time of capture to receive consideration for appointment to warrant or commissioned ranks upon recommendation of present commanding officer.

Detailed information for ex-POWs is contained in BuPers Ltr. 39-46 (NDB, 15 February).
Transportation Regulations Are Relaxed For Navy Dependents Traveling To U. S.

The government will provide transportation under certain conditions for dependents of naval personnel traveling from overseas to a point of their selection within the continental limits of the U. S. under Alnav 119-46 (NDB, 15 March). Formerly dependents were provided transportation only to point of duty, or to a point of selection that would not exceed the travel cost to point of duty.

Alnav 119 replaces subheadings (a), (b), (c), and (d) of paragraph 3, SecNav Ltr. 46-66 (NDB, 15 Jan 1946), and provides the following:

- Except as specified below, transportation for dependents arriving in the U. S. from overseas is authorized from port of entry in the U. S. to any point of selection by personnel or their dependents within the U. S.
- For personnel assigned to permanent shore duty in the U. S. or discharged, no further transportation of dependents is authorized except that personnel above 4th pay grade are entitled to transportation of dependents on subsequent permanent change of station as hereinafter.
- For personnel assigned permanent shore duty in U. S. subsequently to travel of dependents to points of selection, dependents are allowed transportation from point of selection to point of duty.
- If personnel are presently assigned duty overseas or have been discharged or released with home address overseas and dependents have not performed any travel the transportation authorized is from dependents location overseas to duty station or home address overseas.

Dependents Can Travel To United Kingdom Now

Dependents of naval personnel on active duty in the United Kingdom (England, Ireland, Scotland and Wales) may travel there beginning 1 April if housing is available and if the applicant requesting their transportation will be on duty at least six months according to Alnav 89-46 (NDB, 29 March). For transportation purposes naval personnel are divided into categories A and B. (see art. 2506 USN Travel Instructions). Personnel in category A, in pay grade above three and on permanent duty in the United Kingdom or attached to ships having home port or home yard there, are given priority over personnel in category B, who are in pay grades below three and on permanent duty in the United Kingdom or attached to ships having home port or home yard there.

Personnel in category A may submit applications for transportation of dependents to their commanding officers on BuSandA Form 33 in quadruplicate accompanied by three sets of certified copies of all orders incident to their being assigned to present duty. Applications will be forwarded to BuPers via ComNavEu and dependents will be notified after arrangements are made for transportation.

Travel for personnel in category A is authorized under the regulations otherwise outlined for the following localities: Norway, Sweden, Denmark, Greece, Turkey, Russia, Egypt, Lebanon, Tangiers and Finland.

Personnel in category B may submit applications in letter form via the same chain of command, but need not enclose copies of orders. Dependents of personnel in this category will be furnished transportation by government transport only, and must travel at their own expense from their home to the point of embarkation and from the point of embarkation to their future residence overseas. In addition, a charge for meals in transit will be made: about $1.25 per day for adults, 62 cents for children between 4 and 12, and 25 cents for children under 4.

Dependents of personnel in category A will have all expenses paid by the government. Travel at personal expense is discouraged as no assurance can be given that reimbursement will be made.

Dependents can expedite their transportation by submitting applications usually takes about two months—by having their immunization shots at the time application is made.

Commercial Air Travel Available to Dependents

Dependents of Navy and Marine Corps personnel legally entitled to transportation may now be furnished commercial air transportation provided it does not exceed the cost to the government for rail transportation between the same points. This ruling was provided by Alnav 96-46 (NDB 28 February).

The Alnav modifies Art. 2509-9 (B) (5) Travel Instructions which had, during the war years, prohibited furnishing of air transport to dependents because airlines were crowded with priority passengers and freight.

Alnav 96 applies to transportation requests issued before travel is performed. As in the past when travel already has been performed by dependents legally entitled to it, reimbursement will continue to be made in authorized amounts allowed between given points regardless of means of travel.

Restrictions against issuing any transportation to dependents involving excess costs remain in effect.

Navy Men on Leave Now Can Visit Outside U. S. If CO Authorizes

Navy personnel on leave may make unofficial visits to Alaska, the Canal Zone, Hawaii, Puerto Rico, Virgin Island, Bermuda, Canada, Cuba and Mexico without obtaining specific permission from BuPers if leave is authorized by the CO, according to AllStaCon of 2 March 1946, (022235).

Unofficial visits may be made to the interior of Mexico if a tourist pass is obtained from a Mexican consul and if civilian clothes are worn (see BuPers CirC Ltr. 178-45 and 276-46). No tourist passes are needed for visits other than to Mexico if there are properly filled out designating the locality to be visited but civilian clothes cannot be worn except when authorized in an off duty status.

No government transportation will be available for leave outside of the U. S.

New and Handier Edition Of Regs Being Prepared

A new and handier edition of Navy Regulations is being written and will be published this year. The revised edition will be of a standard 8-by-10½ inches page size and will be enclosed in a thin binder to permit ready insertion of changes.

Navy Regs is being revised to reflect war experiences and recent changes in administration and organization. New regulations dealing with amphibious operations, aircraft commands, sea frontiers and other recent developments of warfare will be included. In the 1862 general revision of Navy Regs was made in 1920, although 26 printed changes have been made since that time.


The Navy has asked Congress to repeal a law, passed in 1862, requiring that all naval officers be issued Navy Regulations as a proof that a sufficient number of the regulations be made available to those concerned at shore activities and on naval vessels.
Foreign Service Posts
Open to U. S. Veterans, Armed Forces Members

Naval personnel and Navy veterans will have an opportunity to qualify as foreign service officers this fall under a Department of State program designed to expand an important branch of its activities.

A written examination restricted to honorably discharged vets and qualified active service personnel will be held 30 Sept and 1 Oct 1946. It will consist of two sessions, each day. Candidates with an average grade of 70 or higher on the written test will be eligible for an oral examination.

Those whose combined average covering both examinations is 80 or above and who are found to be physically fit will be placed on the eligibility list and recommended to the President for appointment as foreign service officers in one of the unclassified grades.

Veterans may obtain applications for designation to take the written examination from Civil Service regional offices, colleges and universities, offices of the Veterans Administration or directly from the Department of State. Members of the armed forces can get applications from commanding officers.

If State Department application forms are not available locally by 1 May 1946, interested personnel may write to the Board of Examiners for the Foreign Service, P.O. Box 592, Princeton, N. J., submitting biographical information required by paragraph 3 of BfPers Circ Ltr 40-46 (NDN, 15 Feb 1946), a letter which describes in detail the examination procedure.

Candidates who have been designated to take the written examination will be informed of the center to which they should report to take the test. Arrangements will be made to hold the examination overseas wherever necessary. Rank or length of service will not be considered in designating applicants.

A candidate can be eligible only if he has the following prerequisites:
(1) A member of the armed forces or an honorably discharged veteran;
(2) born between 1 July 1915 and 1 July 1925 (3) an American citizen and has been such for at least 15 years; (4) if married, his wife (husband) must be an American citizen; (5) has a bachelor's or other equivalent degree from a college or university accredited by recognized national or regional accrediting agencies or, if his college course was interrupted by war service, he must have at the time he submits his application completed approximately three-fourths of the studies required for a bachelor's or equivalent degree; (6) able to read with reasonable facility either French, German, or Spanish.

Deadline for receipt of applications is 17 June 1946.

Medical Corps USN Sets
Entrance Exams for May

Medical Corps USN will conduct its first professional and physical entrance examinations since October 1944 at 29 naval hospitals from 6 to 10 May, according to the Bureau of Medicine and Surgery. (See AlStaCon date/time 142320 February).

Successful candidates will be appointed as assistant surgeons and acting assistant surgeons with the rank of lieutenant(jg). Applicants for the above vacancies must be graduates of approved medical schools. They must be more than 21 years old and less than 32 at the time of appointment.

USN medical officers who desire to join USN but lack six-month's active duty as commissioned officers are eligible to take the examinations, according to AlStaCon date/time 211445 February. These reserve medical officers with six months or more active duty can apply for transfer to USN without taking examinations. (BuPers Circ Ltr 288-45 revised).

Third and fourth year medical students may take tests for appointments as acting assistant surgeons. Successful completion of tests will qualify them for internships in naval hospitals. Third-year students must have completed three years' medical training to be eligible for the examinations.

Candidates for assistant surgeon must be graduates of approved medical schools who have completed intern training in a civilian or naval hospital or who will complete such training within four months of the date of examination.

Tests will be given at the following naval hospitals, where supervisory naval examining boards will convene the first Monday in each month in May: Annapolis, Md.; Astoria, Ore.; Bainbridge, Md.; Bethesda, Md.; Brooklyn, N.Y.; Camp LeJuene, N.C.; Charleston, S.C.; Chelsea, Mass.; Corpus Christi, Tex.; Dublin, Ga.; Great Lakes, Ill.; Jacksonville, Fla.; Key West, Fla.; Long Beach, Calif.; Mare Island, Calif.; Memphis, Tenn.; New Orleans, La.; Newport, R. I.; Norman, Okla.; Oakland, Calif.; Parris Island, S.C.; Pensacola, Fla.; Philadelphia, Pa.; Portsmouth, N. H.; Portsmouth, Va.; Quantico, Va.; Sampson, N. Y.; San Diego, Calif.; and Seattle, Wash.

WHAT'S THE ANSWER?
Test on Navy Orders

"Orders are orders" is a phrase habitually used by Navy personnel. But would you know the meaning of and be able to carry out the following orders?

1. The command "toss oars" means:
(a) to begin pulling
(b) to raise the oars from the rowlocks to a perpendicular position, blades fore and aft, with the handles resting on the bottom
(c) toss the oars overboard
2. "Belay that" means:
(a) ignore that last order
(b) put aside what you are holding in your hand
(c) obey immediately that last order
3. "Heave short" means:
(a) to heave on the windlass until the anchor chain is horizontal
(b) to heave on the windlass until the anchor chain is perpendicular at which time it is said to be at short stay
(c) to heave the bow line in on the windlass until stern line is taut
4. "Hit the deck" means:
(a) all hands in the engine room lay up to the main deck
(b) dive for the deck to escape shell fragments
(c) retrieve
5. "Turn to" means:
(a) right or left standard rudder until the ship is turned 90 degrees
(b) keep silent about the deck
(c) commence ship's work
6. In the sketch at right the seaman has just carried out which of the following orders?
(a) "Break the five flag"
(b) "Run up the captain's laundry"
(c) "Make colors"
7. "Two-block it" means:
(a) shift the line so as to take the wear in another place
(b) run the signal up to the yardarm, signal understood
(c) run the signal up to the yardarm, signal not understood
8. "Take a strain" means:
(a) put the line under tension
(b) hold the line until it breaks
(c) put more effort into the job at hand
9. "Mind your helm" means:
(a) polish the helm
(b) steer the course
(c) mind your own business
10. "Shore up" means:
(a) steer the ship into port
(b) end of liberty
(c) to prop up

ANSWERS TO QUIZ ON PAGE 74
New Boards Are Set Up To Recommend Senior USN Officers For Retirement

The retirement act not only authorized establishment of boards to recommend for retirement "surplus" officers but also lowered the retirement age from 64 years to 62, except for fleet admirals.

However, the law provides that retirement under the lowered age limit may not take place prior to 1 Aug 1946, except for officers who attain the old retirement age of 64 years prior to that date. Further, the President may retain certain officers below the rank of fleet admiral until they are 64 but not more than 10 such officers may be on the active list at any one time.

In addition to providing for involuntary retirement of regular officers as part of the process of adjusting naval personnel to peacetime needs, the new law provides for voluntary retirement of both regular and reserve officers after 20 years of active service, at least 10 years of which shall have been active commissioned service.

Previously, voluntary retirement with retired pay after 20 years service could be effected only in the case of line officers who had spent the entire 20 years in active commissioned service. The new law, which cuts the required period of active commissioned service in half, benefits officers of the staff corps and all officers temporarily commissioned from the ranks of enlisted men and warrants—"a group which, in general, previously had to wait 30 years to retire."

The new law provides that, except in the case of officers retired for age, retired pay will be based upon the highest rank, whether temporary or permanent, in which the officer was satisfied, as determined by SecNav, or on or prior to 30 June 1946, unless he was a prisoner of war during World War II.

The stipulation that service in the highest rank must be satisfactory does not apply to retirement for age.

Any officer who was a prisoner of war at any time during World War II will have his retirement rank based upon the highest rank to which he was appointed temporarily under the Act of 24 July 1941, which set up the wartime program of temporary appointments. In most cases, officers who missed temporary promotions while prisoners of the enemy are getting them now, over a period of time, to bring them back to their contemporaries in the service.

The law provides that any officer except those retired for age who did not serve satisfactorily in the highest rank to which he was named shall be retired at the next lower rank in which he served satisfactorily but in no case lower than his permanent rank. Retirement in highest rank is mandatory for those retired for age.

The pay percentage for retirement purposes is computed at the rate of two and one-half percent per year for each year of service for which any individual officer is entitled to credit in computation of his pay while on active duty. A fractional year of six or more months shall be considered a full year in computing the number of years of service by which the rate of two and one-half percent is multiplied. This percentage then is multiplied by his active duty base pay and multiplied by three, to determine his retired pay. For example, a lieutenant or lieutenant commander with 20 years service may receive 50 percent (24% times 20) of his active duty base pay ($325 monthly) or $162.50 a month.

The ceiling for retired pay, however, is 75 percent of active duty base pay. Rear admirals, who receive no longevity credit, will be paid a flat 75 percent of their base pay.

Enlisted men and warrant officers who received temporary commissions during the war will now be in a position to retire as officers sooner than under the above provisions. Under a previous law temporary promotions were authorized until 30 June of the fiscal year following the date in which the war is officially terminated and may be further retained by individuals so promoted for an additional six months.

This means that if Congress or the President declares the war officially terminated at any time prior to or including 30 June 1948, temporary promotions could still be made until
30 June 1947, and personnel continued in their temporary ranks until 31 Dec 1947. The termination of the war is declared after 30 June 1946 and before 30 June 1947, temporary promotions could be made until 30 June 1948. The personnel continued in that status until 31 Dec 1948.

Personnel on the active list are assured by the new law that when they retire they will be advanced to the highest rank in which they served satisfactorily under temporary appointments and that their retired pay will be based upon that higher rank. However, the office of JAG has been authorized to determine the application of the combat citation law which provides for one-rank advancement upon retirement of certain officers.

All reservists including Fleet Reservists and Fleet Marine Corps Reservists, and personnel of the retired list, upon returning to inactive duty, will be based upon the highest rank in which they served satisfactorily during the war. This means that, in the case of retired personnel, their retired pay will be based upon such higher rank. Fleet and Fleet Marine Corps reservists will, when they are ultimately retired, also have their retired pay based on the highest rank in which they served satisfactorily during the war.

These benefits for personnel of the active list, retired list and the reserve component will be retroactive to the date any given individual was retired or placed upon inactive duty upon completion of his service in World War II. This will cover the cases of persons retired or released to inactive duty prior to enactment of the new law.

In general, recall to active duty would be at the higher ranks or grades, and the law specifies that no officer will be deprived by this law of any advancement to which he is entitled by other laws.

Alnav 120-46, notifying Regular Navy captains that their records were submitted to the retirement board this month, declared in part:

“Complete records including medical records will be submitted to the board. In making its recommendations the board will be instructed to take into consideration not only the relative professional qualifications of the officers concerned, with particular reference to their demonstrated or apparent potentialities to perform all duties of their rank, but also their ages and physical fitness for all duties.

“As any officer in the above-described categories (all Regular Navy captains) may be determined forward at any time direct to BuPers for delivery to the President of the board so as to be received not later than the convening date of the board a written communication authorized to act as a center of record in the Navy Department or to any other official matter concerning himself which he deems to be important and of consideration to the board. The communication shall contain any reflection upon the character, conduct, or motives of or criticism of any officer and shall be forwarded via air mail.”

BuPers Action Reduces Number of Promotions Of Active Duty Officers

Two moves designed to reduce sharply the number of officer promotions were made by BuPers during the past month.

The regular monthly en bloc promotion Alnav for lieutenants (junior grade), ensigns and warrant officers with 18 months active service and full lieutenants with 24 months service were discontinued, and Alnav 325-45 (NDB, 15 Oct 1945) authorizing spot promotions was cancelled effective 1 March.

Hereafter, en bloc promotions will be based “on needs of the service,” according to Alnav 91-46 (NDB, 28 February).

Alnav 91 modifies provisions of Alnav 346-45 (NDB, 31 October) relating to active service in rank necessary for promotions with the stipulation that the minimum active service prerequisites now will be minimum requirements for promotion. Alnav 91 further states that new promotion authorities “will be issued at intervals required by existing conditions.”

Alnav 100-46 (NDB, 28 February) cancels Alnav 325-45 which permitted commanding officers to recommend any officer not above the rank of lieutenant commander for spot promotion to next higher rank if he agreed to remain on active duty for a period of 180 days after the date he became eligible for release. Those recommendations under Alnav 325-45 submitted prior to 1 March 1946 will be acted upon. However, those originated on or after 1 March will not be considered.

Promotions which have been effected in the past under authority of Alnav 825-45 and agreements submitted thereunder are in no way effected by the cancellation message. Alnav 100-46 further points out that in future recommendations for spot promotions commanding officers will be guided by applicable provisions of BuPers’ Circl Ltr 95-44 (NDB, January-June, 1944).

Under BuPers Circl Ltr 95-44 spot promotions are required by three provisions. No such promotions will be given except to (1) those of flag rank (2) personnel attached to fleet or force units afloat, where it is definitely indicated that the officer has not below the rank of captain to be appointed by SecNav. Unanimous recommendation of this board will be required.

Prisoner Rehabilitation Officers Needed By Navy

BuPers reports an immediate need for officers qualified for duties in prisoner rehabilitation as a result of the establishment of convicts, disciplinary barracks and retraining commands in Navact 22 (NDB, 28 February).

USNR officers with backgrounds in personnel counselling, education, or aptitude for prisoner rehabilitation work are particularly desired for administrative billets. Billets are open to officers of all grades, USN and USNR. All applicants should be willing to remain on active duty a minimum of six months after assignment.

Requests will be acknowledged. Officer applicants who do not receive their orders within a month should consider they were not required or relief cannot be effected.

Applications Requested For One-Year Advanced Communications Course

Applications from officers are desired for a one-year postgraduate course in communications. Applications are invited for the course to convene in July 1946 according to Alnav 105-46 (NDB, 15 March), Alnavs 401-45 (NDB, 30 November) and 48-46 (NDB, 31 January) refer.

Eligible for this advanced training are USN officers of classes 1937-1944 inclusive, and USNR and USN (T) officers of corresponding dates of previous service who request and are acceptable for transfer to USN in accordance with BuPers Circl Ltr 288-45 revised (NDB, 15 November). Reserve and temporary transfers should have successfully completed courses in mathematics through quadratics and should have had at least one year of sea duty as of 1 Apr 1946. Sufficient communications training duty to demonstrate suitability for further communications training also is required.

On completion of the course assignments will be made to both ship and shore billets. Applicants must submit a signed statement agreeing not to resign during the course and must agree to serve three years after completion of the course.

The former age limit of 27 was cancelled by Alnav 401-45. Deadline date for receipt of applications via official channels on BuPers is extended to 1 May 1946.
New Legislation and Directives Affecting Officers Take Shape

Congress worked swiftly last month on legislation which would authorize the Navy to increase its regular officer strength. The increase would make the Navy's total strength, as projected, come closer to an interim officer strength as a stopgap until the Navy's ultimate size can be determined at a later date.

The interim measure passed the Senate and went to the House and would, if finally approved, allow the Navy to expand immediately 18,500 additional regular Navy and Marine Corps officers. The largest source of new regulars would, of course, be the 15,000 applications on hand in BuPers for naval reserve and temporary USN officers who wish to transfer to the regular Navy.

In general, legislation and policy directly affecting careers of regular Navy officers and officers who wish to transfer to the regular Navy developed last month as follows:

- Pay—A flat 20 percent pay increase for the armed forces was recommended to Congress by the Navy and War Departments and Congressional hearings were scheduled before the end of last month (see p. 8).
- Retirement—This bill became law late in February. It provides for boards to recommend officers for permanent duty, at least 10 of which have been commissioned rank (see pp. 72-73).
- Transfer—Knotiest questions dealt with legislation fixing the postwar size of the regular Navy, to be transferred in temporary ranks now held; authorizes those transferred to carry over their accumulated leave into the regular Navy; states policy of Congress that there shall be no discrimination against any officer regardless of the source from which he received his regular Navy commission; authorizes the Secretary of the Navy to adjust the lineal list of the Navy line and staff; and provides that commissions of transferees will be subject to revocation as long as commissions of officers senior to them are subject to revocation.

BuPers said it had received more than 16,000 applications for transfer in all ranks, line and staff, and emphasized the lists are still open. About 6,500 have failed to meet age, physical, or educational requirements. The President's proposed bill fixing the postwar size of the Navy as follows: “The House passed a bill fixing the size of the Navy as 500,000 enlisted men and 40,000 line officers. The President desired time to study the budget requirements for the armed forces and felt that the House bill should not be enacted at this time.... The committee directed Secretary Eatman to issue present ad interim bill favorably, as the enactment of this bill will bridge the requirements of the Navy until legislation is enacted fixing (from 255 to 525) the size of postwar naval personnel.”

**ANSWERS TO QUIZ ON PAGE 71**

| 1. (b) | 2. (a) | 3. (c) | 4. (d) | 5. (c) |
| 6. (e) | 7. (a) | 8. (b) | 9. (b) | 10. (b) |

**Extended Duty Asked Of Reserve Officers As Interim Measure**

Two directives last month sought to provide the Navy with adequate officer strength during Fiscal 1947 (1 July 1946 to 30 June 1947), a period in which the Navy expects to continue reduction of its huge wartime establishment to peacetime size.

Alnav 126-46 (NDB, 15 March) requested Reserve officers, line and staff including aviation and specialist classifications, who desire to remain on active duty beyond date of their eligibility for release to submit specific request for active duty until 1 July 1947. Requests were to be forwarded to BuPers prior to the first of this month.

The Alnav said retention for lesser periods may be approved in certain cases where the officer concerned is completing specific assignment, such as contract termination or surplus property disposal. However, officers now serving in such programs need not renew requests unless further extension is desired.

It was pointed out that lineal readjustment in rank of all USN officers will still become necessary and may entail corresponding reduction in rank of officers retained by this Alnav, but existing relative precedence will be maintained. Effective in cases of specialists and staff officers, budgetary restrictions will affect approval of requests of Reserve officers above the rank of ensign. Applicants were reminded that assignment of personnel must be governed by needs of the service and not by desires of individuals.

Alnav 126 does not apply to warrant and commissioned warrant officers, the Nurse Corps, or Waves. Nor does it replace, cancel, or modify any previous directive. Temporary USN officers, line and staff, not applying for transfer to Fleet Reserve, retirement, reversion to permanent status, or separation under NavAct 18-46 will be restricted to have and retain active duty in commissioned status to 1 July 1947, and will be retained on active duty in maximum possible numbers.

In terms similar to Alnav 126, Alstocon dated 141455 March requested Wave officers to volunteer and make written application for retention on active duty until 1 July 1947, applications to be forwarded to BuPers prior to the first of this month. Retention for lesser periods will be considered, and Alnav 126 allows the same provisions regarding possible reduction in rank and assignment on the basis of needs of the service apply, with the addition that an officer may be retained on active duty beyond 1 July 1947, and that applications will be subject to review by BuPers.

The Alstocon commended...
ized by Congress. It is hoped that a determination of the place of women in the Navy can be made prior to 1 July 1947." Present legislation authorizes existence of a Women's Reserve "... for the duration of the war and for six months thereafter." Neither Congress nor the President has declared the end of the war as yet.

National Roster Assists Veterans With Technical Training To Obtain Jobs

Navy veterans who have had professional or technical training on a high level are being assisted in their search for desirable jobs by the National Roster of Scientific and Specialized Personnel (see also following article which explains how Navy rates have been translated into civilian skills to help job finding). The National Roster, Division of the U. S. Employment Service, lists more than a half-million professional persons in its files, and its purpose, besides acting as a vast reservoir of talent, is to place persons on its rolls in jobs which will be of greatest advantage to the individual and to the organizations which need them. Thousands of highly trained persons were placed by the Roster in essential wartime occupations.

Navy separatees may, if they wish and are qualified, be considered for listing by the National Roster at the time of discharge. The Roster, when it learns of professional-level job openings, makes the files of qualified personnel available to the prospective employer. The employer then makes his own arrangements with candidates for the position.

Desirable qualifications for persons who wish to be listed with the Roster include professional training or experience in the biological and agricultural sciences, physical sciences, engineering, management and administration, architecture and planning, social sciences and languages. Navy discharges, officers or enlisted, who wish to be considered for listing by the Roster, may consult the educational services officers at SepCens, who are responsible for distributing information about the Roster.

In addition, the educational services officers at all SepCens have a bulletin of the National Roster, "Sample of Job Openings on File," which indicates the types of jobs available through the Roster.

Many important industrial groups make active use of Roster files in securing top-notch personnel—for example, the Navy Industrial Association. This association is an organization of nearly 500 businesses. It was founded with approval of the Secretary of the Navy in June 1944 to serve as a liaison between the Navy and industry. Top jobs open in member firms of the Navy Industrial Association from time to time have been filled through the Roster listings.

The Navy Industrial Association is interested in facilitating the hiring of Navy veterans because their skills are enhanced by actual naval experience. This aids them in carrying out cooperation between industry and the Navy in the interests of national security. The association is interested in filling positions with Navy men from the engineer's desk to the back shop. The upper level jobs are listed with the National Roster and those involving lower levels of training are referred to the U. S. E. S.

New Catalogue Shows How Navy Training Fits Civilian Jobs

What good's a chief bos'n mate out in civilian life? You might be surprised. Just a partial list of civilian jobs in which his Navy skills would be useful includes ship rigger, airplane rigger, sail finisher, awning maker, parachute rep, captain, pilot, crane operator, hoistman and skip operator. If he had been a boatswain with specialty as master-at-arms he might become a ground attendant, gateman, railroad freight conductor, baggage agent, athletic trainer, claim agent, customs collector, fish inspector. Sound far-fetched? Not at all.

The Navy and the occupational analysis division of the U. S. Employment Service have catalogued skill of the CBM's and found they relate definitely to the civilian jobs listed above. And that was just a partial list. A 441-page catalogue, "Special Aids for Placing Naval in Civilian Jobs," which compares Navy enlisted ratings with related civilian jobs, is being distributed by the Navy to 2,400 large industries and business groups to stimulate greater employment of Navy veterans. In addition, the U.S.E.S. is using 10,000 copies of the book.

"Special Aids" helps the employer place Navy men where they can most effectively serve by carefully cataloguing skills which Navy men develop to a high degree during their enlistments and which are in considerable demand in the business world. The catalogue also assists employers in setting up training programs by indicating how much further training may be needed to convert Navy skill to civilian job. To aid in placement of disabled men, and also useful in placement of others the jobs are further described in terms of working conditions, activities and physical requirements.

The catalogue supplements the Rating Description Pamphlets which are given to all Navy separatees. These pamphlets certify as to rate held at discharge, describe work performed in the rating, list knowledge and skills required and suggest their relationship to civilian jobs. The pamphlets tabulated skills in the Navy's then-226 ratings and were designed to be carried by the former Navy man on his interview, with prospective employers. As the pamphlets began to die out with the cost of a highly technical organization had to be built from a random group of civilians. The Navy Department surveyed the problem to the end that civilian skills might be used effectively as civilians were incorporated in the Navy rating structure. Later studies reversed the procedure to find how Navy men might best use Navy skills when they returned to civilian life.

Results of the studies which were used in the production of rating description pamphlets were turned over to USES which collected and arranged the information in the catalogue.

BuPers plans to follow up the catalogue distribution with queries to industry associations to find out how their veteran guidance and placement programs operate, with a view to furnishing additional information which will be of assistance to them in their work among Naval veterans.

WHAT'S IN A NAME?

S.O.S.—Distress

S.O.S. the universal wireless signal for ships in distress does not stand for "Save Our Souls". That idea may have been the dream-child of some romantic publicity man, but wireless operators promptly jettisoned the idea into oblivion. As a matter of fact, they explained that the letters S.O.S. were just a quick and convincing combination to command instant attention. The letters themselves have no hidden meaning.

In addition to the wireless our ships use the "union down" signal. This refers to the practice of flying a ship's ensign upside down by day, and showing rockets and blue lights at night in situations of radio silence.

APRIL 1946
Family Allowance Information Outlined For USN (T) Officers Re-Enlisting

Some temporary USN officers who plan to revert to their enlisted status may find a review of the current family allowance provisions helpful in making certain decisions concerning their course of action in the near future.

As it stands now, for those enlisting after 1 July the family allowance law extends only for six months after official termination of the war, which is in itself, of course, an indefinite date. However, under the present law USN (T) personnel re-enlisting after the 1 July date might not receive the benefits of the law for the entire period of their new enlistment because of the above provision. On the other hand those enlisting or re-enlisting before 1 July of this year are authorized to be paid the allowance for their full enlistment period, as provided by Public Law 190–79th Congress.

Among those left out under the present setup will be that group of temporary officers who will be unable to re-enlist before 1 July because their enlistments will not terminate until after that date.

However, there is an optimistic note. The discrepancy has been recognized and the 30 June deadline for family allowance benefits can be disregarded if Congress changes the present law to provide all of the benefits of the family allowance provisions to all eligible enlisted Navy personnel through June 1952. This problem has already been referred to the Joint Army Navy Personnel Board for consideration and action.

For those USN (T) officers who have applied for permanent appointment in the regular Navy, it is fully expected that legislation (see p. 74) governing this matter will be included in the current Congress. It is recognized that the great majority of USN (T) officers requesting transfer will know of their selection or non-selection before 1 July.

At present, a few whose enlistments run to 1 October 1946 may re-enlist on or before 30 June by virtue of an early discharge under a provision of BuPers Manual, D-9104 (4). This directive provides that discharges can be made as much as three months ahead of normal date if it can be shown they are “for the benefit of the government.” Generally individual cases must be referred to BuPers for final decision after being passed upon by CO's. In the following instances, however, CO's may discharge personnel early without reference to BuPers.

(a) When a ship is about to sail with the probability of not returning to the United States before the expiration of the man's enlistment.

(b) When a ship is about to sail and travel allowance then payable in the case of a man is materially less than would be due if he were discharged in the port where the ship is scheduled to sail on an extended cruise, in order to allow him to receive re-enlistment leave prior to such sailing.

(c) When a man signifies intention of re-enlisting in the Navy, and the ship is scheduled to sail on an extended cruise, in order to allow him to receive re-enlistment leave prior to such sailing.

(d) When a man's enlistment expires on a Saturday, Sunday, holiday or day preceding a holiday, in order to permit his discharge and re-enlistment on consecutive days other than those indicated.

(e) Ordinarily when a man is on general detail at a receiving ship.

USN (T) officer whose enlistment has terminated and who wishes to re-enlist to enlisted status and receive family allowance benefits must first submit a request to BuPers in accordance with Alnav 117-46 (NDB, 31 March 1946) to have his temporary appointment to officer status revoked. Next he goes on terminal leave as an officer and at the end of this period his temporary appointment is revoked and he is discharged. Lastly, he re-enlists at the most convenient recruiting station the day after discharge or in any event not later than 30 June 1946. Alnav 117-46 permits any permanent enlisted man holding a temporary rank to be returned to his permanent enlisted status upon BuPers request.

Temporary officers who miss out on family allowance will be compensated in part for the loss by payment of money allowance for quarters for dependents (MAQ), a provision in effect long before the family allowance but not payable in combination with it.

MAQ, which is paid only to petty officers second class and above, amounts to a flat rate of $1.25 per day or $75.75 a month within the U. S. and is graduated depending upon differences in living costs to a top of $60 per month for a station outside of the continental limit. The amount of the payment is the same, however, regardless of the number of dependents.

By comparison, under the family allowance law the government pays up to $85 per month for bluejackets with a wife and one child, $78 for two children, $68 for three children, and so on.

At present a USN (T) officer who reverts to enlisted status and then is discharged receives: (1) mustering out pay (2) travel allowance from his point of discharge to his place of acceptance for enlistment or re-enlisting on board, and the ship is charged in the port where the ship is expected to be on the normal date of expiration of enlistment.

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Permanent Navy Billets For Enlisted Newspaper Writers Are Considered

Proposals to provide a permanent group of Enlisted Naval Correspondents in the postwar Navy are being considered by BuPers and the Office of Public Information.

ENCs first appeared in the Pacific Fleet about a year ago, assigned to ships and other units which normally would not have been covered by a regular war correspondent, in the interest of extending public information to units which had not been adequately reported.

The proposals would make them a permanent part of the Navy. A study probably will indicate necessity of including them in the regular yeoman rating structure, with a number code designating their specialty as correspondents. It was explained that as yeomen they would have a more secure future in the Navy than they would have as a very small group with specific ENC rate and that more billets could be opened to them in which they could perform ENC duties in addition to regular duties.

At present ENCs are primarily regular personnel and may hold any of a large variety of rates. When the need for correspondents was felt, the program was opened to include nearly all enlisted men with previous experience in journalism.

Additional plans call for training of future ENC from the first Home Town News Center in Chicago—the Naval activity which routes news from the fleet to the home towns of the personnel who appear in the news stories. A correspondence course for enlisted correspondents also is included in the proposals.

Preliminary qualifications for USN personnel interested in ENC training will include high school diploma and high scores on GCT, reading and spelling tests.

Athletic Conference Is Organized by 11 Navy Air Activities

The Naval Air Training Athletic Conference has been organized by 11 air activities and will begin competition next month. Baseball is first on the schedule, but future league sports will include football, basketball, swimming, wrestling and boxing.

Initial conference members are: Naval Air Training Bases, Pensacola and Corpus Christi; Navy Pre-Flight School, Ottumwa, Iowa; Naval Air Stations, Jacksonville, Miami, Hutchinson, Kansas, Fort Lispenrd, Banana River, Fla.; and Naval Air Technical Training Commands, Jacksonville, Memphis, and Ward Island at Corpus Christi.

Coaches and instructors will be naval pilots and ground crew officers. Officers interested in such duty may submit requests and give their qualifications to CNO, attention Op-6134, Navy Department, Washington, D. C.
Lapel Buttons Issued To Navy Officers, Men Of Organized Reserve

Naval reserve lapel buttons are being issued for officers and men of the reserve, BuPers announced. The insignia, consisting of an eagle with outspread wings on a fouled anchor with USNR at the top, may be worn by officers on inactive duty retaining their commissions and enlisted men who have reenlisted in the reserve.

Distribution of the buttons, designed at the beginning of the war for men joining the reserve but remaining on inactive duty, will be made through SepCens and district commandants. Men eligible for the insignia who have not received one may submit requests to the district director of naval reserve in the district in which they live.

The USNR button signifies membership in the naval reserve whereas the USNR honorable discharge button (see ALNAV 122-46; NDB, 15 March 1946) designates honorable discharge from USNR. Both buttons are to be worn only with civilian clothes.

COs Can Now Recommend Ex-POWS for Temporary Advancement in Rank

Former POW's who were warrants, chief warrants, CPO's, and first class petty officers at time of capture and who were deprived of the opportunity for possible recommendation for temporary appointment to warrant grade or commissioned rank may now be recommended by current CO's provided the candidates are now on full active duty. (Alnav 122-46; NDB, 15 March 1946)

Recommendations for personnel in the above group should be submitted in accordance with provisions of BuPers Ctr. Ltr. 126-46 (NDB, Jan-June 1946) as modified by BuPers Ctr. Ltr. 304-45 (NDB, 15 Oct 1945). In addition they should be submitted within two months of the date of receipt of Alnav 122 or within two months of the individual's return to active duty after hospitalization and rehabilitation leave.

Directors of Training Supervise NROTC Units

In listing the elements of the postwar Navy's reserve forces, ALL HANDS (January 1946) inadvertently implied that directors of naval reserves in the respective naval districts would be responsible for NROTC units.

It is emphasized that the NROTC units have been under the cognizance of district directors of training for many years and the plan for the postwar naval reserve proposes that they will continue to be so operated.

ALNAVS, NAVACTS IN BRIEF

Alnavs apply to the Navy and Marine Corps; NavActs apply to the Navy.

Alnavs

No. 80—Directs continued submission of personnel casualty reports in accordance Alnav 120-45 (NDB, Jan-June 1945).

No. 81—Calls attention to Circ. Ltr. 45-1866 (NDB, 15 Dec 1946) requiring depth of 1,000 fathoms for dumping chemical ammunition other than pyrotechnics and 500 fathoms for other explosives.

No. 82—Cancels lend-lease instructions effective 2 March except in certain instances.

No. 83—Authorizes promotion 15 February to rank of first lieutenant for temporary service second lieutenants of the Marine Corps regular and reserve including women's reserve whose number in grade on the combined lineal list of 1 July 1945 is less than 4444, except such officer whose promotion has been previously withheld by competent authority.

No. 84—Cancels Alnavs 231-44 (NDB, July-Dec 1944), 231-45 (NDB, 15 Sept 1945) and 281-45 (NDB, 30 Sept 1945), and reestablishes allowances for blood plasma.

No. 85—Authorizes disbursing officers and agents ashore outside CLUSA to carry cash up to two months requirements.

No. 86—Directs all vessels in commission not under way to dress ship 22 February.

No. 87—10th weekly report of regular Navy enlisted strength.

No. 88—Urges medical officers considering transfer to USN to submit applications early for review (see p. 71).

No. 89—States eligibility and procedure for transfer of dependents to United Kingdom (see p. 70).

No. 90—Lists additional commands available for testing and interviewing MarCorps reserve officers who wish to transfer to regular MarCorps (see p. 77).

No. 91—Announces in bloc promotions henceforth to be dictated by needs of the service (see p. 78).

No. 92—Lists additional commands available for testing and interviewing MarCorps reserve officers who wish to transfer to regular MarCorps (see p. 77).

No. 93—Establishes principle that combat awards precede service awards of the same level (see p. 69).

No. 94—Announces Navy, MarCorps, Coast Guard civilian and military personnel have bought more than $1,500,000,000 in U. S. Savings Bonds since 1 Aug 1941.

No. 95—Rules old issue five-pound Bank of England notes not accepted for exchange after 28 Feb, when notes ceased to be legal tender.

No. 96—Modifies Art. 2509-3 (B) (5) Travel Instructions to extent that commercial air transport for travel within U. S. may be furnished qualified dependents when cost of air travel does not exceed cost to government for rail travel between same points.

No. 97—Announces certain CB rates remain under naval jurisdiction.

No. 98—Announces new law and amendments to old law governing retirement of officers (see p. 72).

No. 99—Requests applications from qualified officers for duty in BuPers in connection with Navy hobby craft program; application deadline was 15 March (see p. 69 for hobby story).

No. 100—Cancels Alnav 325-45 (NDB, 15 Oct 1945) which allowed spot promotions for certain officers who agreed to remain on active duty 180 days beyond scheduled date of release (see p. 73).

No. 101—ApPOINTS on 1 March for temporary service to next higher rank officers of regular and reserve Nurse Corps on active duty whose temporary promotions previously were authorized but withheld by reason of physical disqualification.

No. 102—11th weekly report on USN enlisted strength.

No. 103—States SecNav authorized by act of 20 May 1946 to accept as gifts silver service or other articles presented to vessels by certain civilian agencies and that such gifts may not be turned back to any such agencies without SecNav approval.

No. 104—Declares provisions of Alnav 285-45 (NDB, 30 Sept 1945) which stated terms of transfer of USN officers to USN applies to officers of the Nurse Corps.

No. 105—Requests additional applications from qualified officers for 1-yr course in communications (see p. 78).

No. 106—Announces sale of blue flannel shirts in Clothing and Small Stores will be limited to needs of permanent personnel.

No. 107—Urges that because of fluctuation of foreign currency such monies in official and quasi-official accounts and in hands of naval personnel be kept at a minimum.

No. 108—Suspends, tentatively, eligibility for wearing the three Area Camphagn Medal if accrued after the following dates: European-African-Middle Eastern Campaign Medal, 8 Nov 1945; American Area Campaign Medal and Asiatic-Pacific Campaign Medal 2 Mar 1946 (see p. 69).

No. 109—States in view of Lend-Lease termination, the services which may as acts of comity and for time being be rendered navies and air forces of countries formerly entitled to defense aid.

No. 110—Twelfth weekly report of USN enlisted strength.

No. 111—Promotes for temporary service those lieutenants of the Nurse Corps in USN and with dates of rank 1 Sept 1945 or earlier provided they reported for active duty as signs 31 May 1942 or earlier. Exempted are officers described in BuPers Ctr. Ltr. 222-45 (NDB, cum.) para.
No. 112—Limits transfer of enlisted USNR and USN-I personnel other than construction battalion and specialist ratings, to certain rates (see p. 67).

No. 113—Revises service and mark requirements for advancement in rates, pay grades 1 through 5 (see p. 67).

No. 114—Authorizes district legal officers and legal officers of other commands named in AlNav 32-46 (NDB 31 Jan) to handle cash reimbursement claims of naval personnel to some extent as commandant or commander of said commands (see ALL HANDS, March 1946, p. 68).

No. 115—Promotes, for temporary service, to first lieutenant, following USMC and USMCR officers including Women's Reserve and officers on terminal leave: Second lieutenants whose number in grade on 1 July 1945 combined lineal list is between 444'5 and 4982 inclusive.

No. 116—Directs exchange of old issue Bank of Japan notes for new issue, or for type B military yen notes; authorizes exchange for naval personnel away from Japan 2 to 7 March 1946.

No. 117—Changes paras. 5 and 7 of AlNav 299-45 (NDB 30 Sept) pertaining to retirement or transfer to Fleet Reserve of USN(T) officers whose permanent status is enlisted (see p. 72).

No. 118—Defines term "indebtedness to Government" used in para 1, AlNav 324-45 (NDB cum.ed. 1943), enclosure A, note 4: "When the gray working uniform is worn, gold shoulder marks and gilt buttons or gray shoulder marks and blue black buttons are optional" (see p. 69).

No. 121—Reiterates need for food conservation (AlNav 71-46, NDB 15 Feb) to relieve starving populations (see p. 49).

No. 122—Announces procedure for recommending former prisoners of war of certain ranks and grade for temporary warrant grade or commissioned rank (see p. 78).

No. 123—Cancels previous regulations, and adds following to SecNav Ltr 43-1199 (NDB cum.ed. 1943), enclosure A, note 1: "When the gray working uniform is worn, gold shoulder marks and gilt buttons or gray shoulder marks and blue black buttons are optional" (see p. 69).

No. 124—Directs fitness reports of USMC colonels for period ending 31 March be received MarCorps not later than 10 Apr 1946, reporting seniors to airmail such reports not later than 1 Apr.

NavActs

No. 21—Announces disestablishment of SepCen at Memphis, Tenn., and establishment of Wave SepCen at RecSta, Naval Repair Base, New Orleans, to serve same area (see p. 66).

No. 22—Requests applications from USN and USNR officers qualified for duties in classification training and rehabilitation of prisoners at naval prisons, disciplinary barracks and retraining commands (see p. 73).

No. 23—Requests applications for transfer to USN as EDO (aeronautical) officers from qualified USNR and temporary USN officers.

No. 24—Announces disestablishment of SepCens at Sampson, N. Y., and Toledo and extends areas to be served by other SepCens (see p. 66).

No. 25—Requests applications (deadline 25 February) from qualified officers for course in ordnance disposal.

No. 26—States eighth copy notice of separation (NavPers 568) henceforth will be given to separatees for delivery to local Selective Service Board for use of reemployment committee.

No. 27—Opens USN Civil Engineer Corps to USNR and USN(T) line officer applicants.

No. 28—Directs compliance with provisions of AlNav 268-45 (NDB 30 Sept), which states in cases of discharge of EM for immediate enlistment or reenlistment in USN forward old service record and new shipping articles together to BuPers attn. Pers 82241 by 2400 each day.
FANTAIL FORUM

QUESTION: Do you think Waves should be retained as a part of the postwar Navy?

(Interviews on the above question were conducted at NAS, San Diego, Calif.)

Betsy L. Gray, AM3c (Wave), ComFair, West Coast Staff, Fort Worth, Tex.: Waves did a swell job during the war and there is still a lot to be done. Waves can help do it. Waves in my opinion will be an asset to the peace time Navy and in no way degrade the Navy. The war has proved that women are capable in jobs which before the war were believed to belong exclusively to men.

Thomas A. Boniface, ACMM (PA), USN, San Diego, Calif.: I think the Waves should be retained as a part of the postwar Navy if they so desire. They have done an exceptionally good job in clerical and light work during and after the war. However, I don't think women should be placed in shops. Women can be independent in the service and not hurt civilian men who are working to support families.

John S. Burgess, Jr., CY (PA), USN, Seattle 5, Wash.: Definitely not. The Waves did all that was humanly possible during the war. They held good responsible jobs that relieved fighting men for duty in the combat zone. Now, to have a Navy with men who are content we must let the Waves go. As a whole, the morale of the Navy was hurt by sending Waves overseas. Waves got rates in the Navy where men didn't.

Ernest C. Breen, COX USN, Augusta, Ark.: No, it would knock too many sailors out of their two years' shore duty which they rate after six years sea duty. Waves have done a fine job during the war, I hear. But I don't think any of the guys they relieved ever want to go. They relieved took some sailor's job on shore. This is a man's Navy.

Margaret M. Adden, CIC (Waves), ComFair, W.C. Staff, Whittier, Calif.: In my opinion any Wave who ships over or signs over to stay in the peacetime Navy is mentally deficient. She has nothing to gain and the Navy stands to lose a lot of good men by retaining Waves. Waves had nothing whatsoever to do with winning a little at most.

Betty L. Gray, AM3c (Wave), ComFair, West Coast Staff, Fort Worth, Tex.: Definitely not. The Navy is a man's world and women should remain as such. As an emergency measure women in uniform were all right but actually equal conditions can never be attained. Civilian workers in shore establishments are O.K. because a woman can still maintain her femininity.

Marie L. McMahon, Y2c (Wave), ComFair, West Coast Staff, Portland, Ore.: No, the Navy is a man's world and women should remain as such. As an emergency measure women in uniform were all right but actually equal conditions can never be attained. Civilian workers in shore establishments are O.K. because a woman can still maintain her femininity.

Rulon J. Skenes, CAP (PA), USN, Twin Falls, Idaho: Definitely not. I am still old-fashioned and think a woman's place is in the home. Besides I'm a married man and my wife resents the fact that I'm in a Navy with Waves. I think the Waves did a good job in the Navy during the war but now that it is over I don't think there is any reason why they should be retained. However, I'm in no position to say. I've never worked with or around them.

Lucille Snell, Y1c (Wave), San Diego, Calif.: No. The peacetime Navy offers fewer shore billets than during wartime. Maintenance of a Wave organization would greatly reduce the opportunity for shore duty for men. All personnel should be trained to fill billets in the active fleet. A unit which cannot be so utilized lowers Navy efficiency.

ALL HANDS

THE BUPERS INFORMATION BULLETIN

With approval of the Bureau of the Budget, this magazine is published monthly in Wave, San Diego, Calif., 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 time at scene of action unless otherwise indicated.

SECURITY: Since this magazine is not classified, it sometimes is limited in its reporting and publication of photographs. It 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 "NDI" used in references, indicate the official Navy Department Bulletin; followed by the initials "cum. ed.," refer to the cumulative edition of 31 Dec. 1943, which superseded semi-monthly issues through that date; by "Jan.-July" or "July-Dec.," the combined volumes for those semi-monthly periods of 1944, containing all 1944 letters still in effect at the end of each of the two periods.

DISTRIBUTION: By BuPers Circ. Ltr. 162-43 (NDB., cum. ed., 31 Dec., 43-15) 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 the most recent order of distribution. However, because intra-activity shifts affect the Bureau's statistics, and because organization of some activities may require more copies than normally indicated to effect 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 consequently officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the numbers of copies required; requests received by the 20th of the month can be effected with the succeeding issue.

The Bureau should be advised if the full number of copies is not received regularly.

Distribution to Marine Corps personnel is effected by the Commandant, U. S. Marine Corps, on the present basis of four copies per unit, directly and including the company. 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 rate $2.00 a year, domestic; $2.75 foreign. Remittances should be made direct to the Superintendent of Documents. Subscriptions are accepted for one year only.
FOR YOUR FUTURE

keep your records in a safe place

YOU WILL NEED THEM LATER!

YOUR CHECK LIST

✓ service number
✓ or file number
✓ discharge papers
✓ disability claim “C” no.
✓ insurance policies
✓ form 553
✓ rating description