

ALL HANDS



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MARCH 1960



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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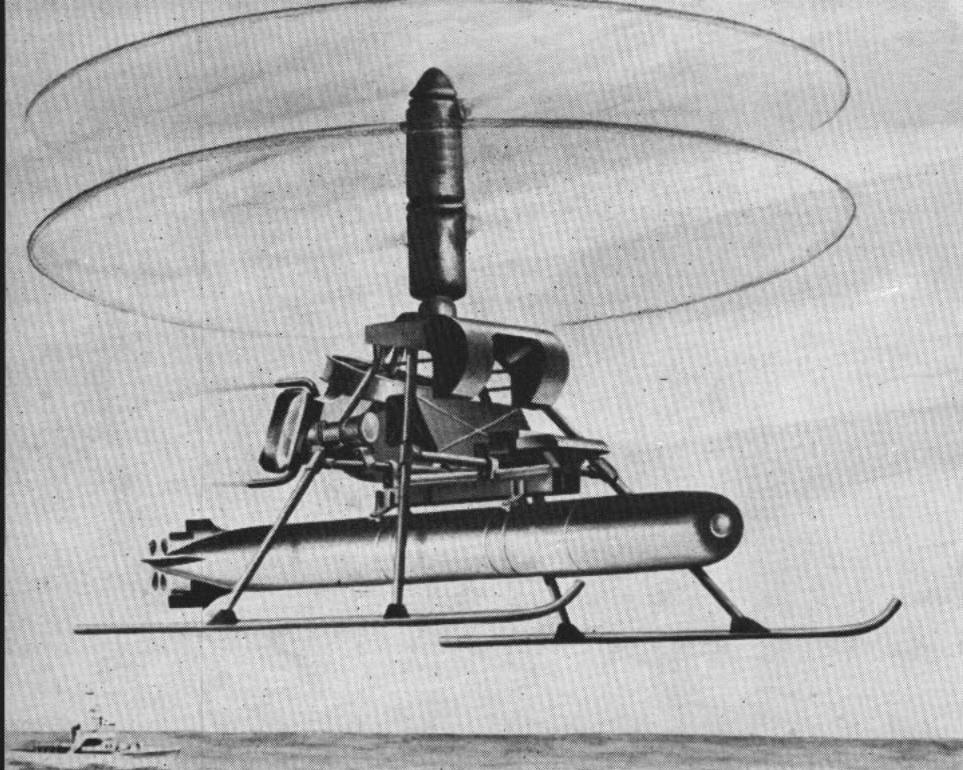
Don Addor, Layout

● FRONT COVER: W. E. COLEY, BMC, USN, boss of the CINCPACFLT boathouse at Pearl Harbor, checks the mooring lines used by his trim craft on harbor runs. His assistant on the job is W. V. Meadows, BM3, USN.

● AT LEFT: Unusual night photo of Antisubmarine Carrier USS *Bennington* (CVS 20) resting in drydock at Hunter's Point Naval Shipyard, San Francisco. Redesignated a CVS, the ship recently completed her overhaul and is getting ready to begin antisubmarine exercises.

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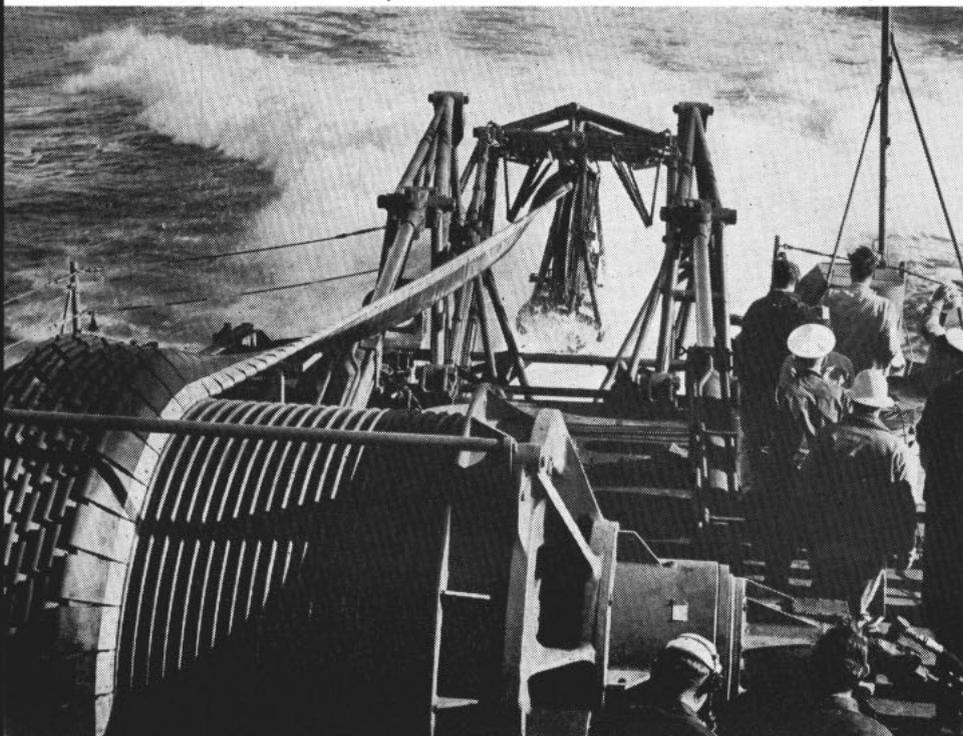


Mark I and II—

Introducing the FRAM

TAKE 250 VETERAN Navy ships, all in the 14-18 year old age bracket. Add the Navy's world-wide operational commitments, including a vigorous antisubmarine warfare program. Then consider that the Navy doesn't have enough funds to build anywhere near that many new ships. Does it sound like a problem? You're right, it is and a big one.

REEL GONE SONAR — Destroyermen of USS *John W. Thomason* (DD 760) lower new Variable Depth Sonar dome below thermal barrier during test run.



Most of us, at one time or another, have been in a similar quandary regarding an aging car. Perhaps it needed major repairs—a ring job, new transmission, clutch overhaul, new brakes or a rebuilt engine. Quite possibly it could also have used a new set of tires, and new upholstery, and a paint job would have spruced up its appearance.

No matter what the requirements were, you knew it was going to cost a good deal of money. Here's where the big rub came in, however. Much as you hated to invest more money in the old buggy, you just couldn't afford a new one.

What to do? Probably you shrugged resignedly and headed for the nearest garage, hoping the bite for putting her in good shape wouldn't be too severe.

The Navy's going to keep those World War II ships that we just mentioned operating for another few years in a somewhat similar fashion. Its solution is FRAM—Fleet Rehabilitation and Modernization—a four-to-five-year, billion-dollar-plus program. It's a big time saver.

Besides being needed now, these ships that are rapidly approaching block obsolescence were all built during substantially the same period.

They're all wearing out at the same time. The object of FRAM is to keep them operating until new ship construction can provide replacements.

Any discussion about FRAM should begin by pointing out that the program has two parts—Mark I conversions and Mark II overhauls. The majority of ships will receive the Mark II treatment—repair, replacement and refurbishment of all shipboard components (hull and machinery) to extend their useful life as effective and reliable ships for at least another five years, together with some modernization of the weapons, electronics and communications systems.

Mark I conversion on the other hand, which is much more extensive, is planned for only a limited number of ships, all destroyer types. This will give them an expected additional life of more than eight years. The ASW type of ships will get improved sonar, radar, electronic countermeasures and communications systems. They'll also get new anti-submarine weapons, including DASH—a drone antisubmarine helicopter—with its accompanying hangar, launching and landing platform and control equipment.

The DASH system is designed to add a long range punch to a de-

stroyer's sub-killer arsenal. Briefly, here's how it will work. Once an enemy submarine is detected in the vicinity, the drone helicopter will be launched and guided toward its target by radar. Once over the target, either homing torpedoes or nuclear depth charges could be dropped to destroy the sub.

Another item included in the FRAM treatment is one all destroyer men will applaud—a greatly enlarged, and air conditioned, CIC on DD types.

uss *Perry* (DD 844), the first ship in the Mark I program, entered Boston Naval Shipyard last spring, and is due to complete yard work in April, 1960.

Over-all plans call for 45 destroyers and 5 escort destroyers (DDE) to get Mark I rehabilitation and modernization over the next four to five years.

Models

Some 150 ships of varied classes will be Mark II'd during the same period—about 100 of them destroyers. The first of these, uss *John W. Thomason* (DD 760), entered Long Beach Naval Shipyard last spring, and has just about completed her yard work.

Eighteen other destroyers will begin getting Mark II by 1 Jul 1960, according to present plans.

Seven of them will have the work done at NavShipYd, Norfolk. They are: uss *Zellars* (DD 777); *Charles S. Perry* (DD 697); *Massey* (DD 778); *Lowry* (DD 770); *Stormes* (DD 780); *Robert K. Huntington* (DD 781); *Goodrich* (DDR 831).

Jenkins (DDE 447), *Nicholas* (DDE 449), and *O'Bannon* (DDE 450) are scheduled to enter NavShipYd, Pearl Harbor. NavShipYd, San Francisco plans to take *DeHaven* (DD 727) and *Blue* (DD 744), while *Mansfield* (DD 728) and *Collett* (DD 730) are tentatively scheduled for Long Beach.

Naval shipyards at New York, Charleston, Boston and Mare Island plan to work over *Turner* (DDR 834), *Kenneth D. Bailey* (DDR 713), *Hugh Purvis* (DD 709), and *Lyman K. Swenson* (DD 729), respectively.

The submarine tenders *Fulton*

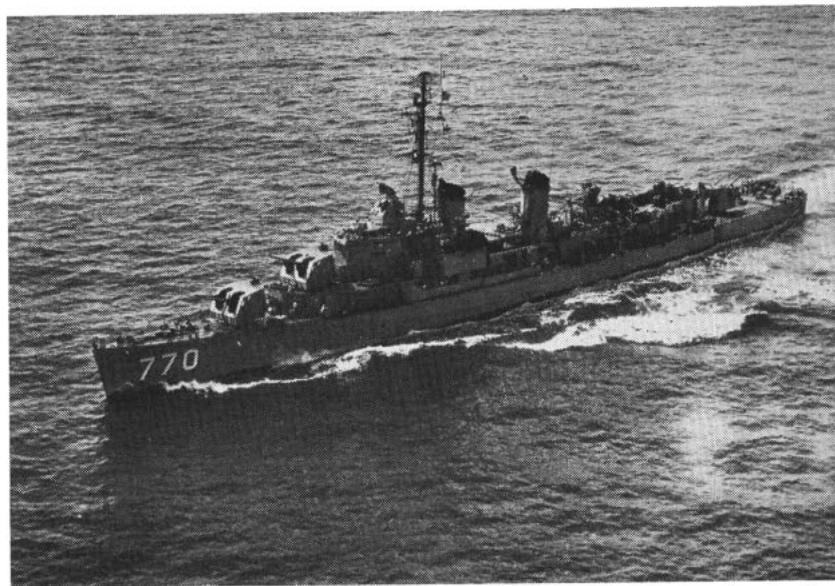


FRAM JOB — Remodeled with the latest in ASW gear USS *John W. Thomason* (above) sets out to sea. Below: Helicopter is directed onto DD's new flight deck.

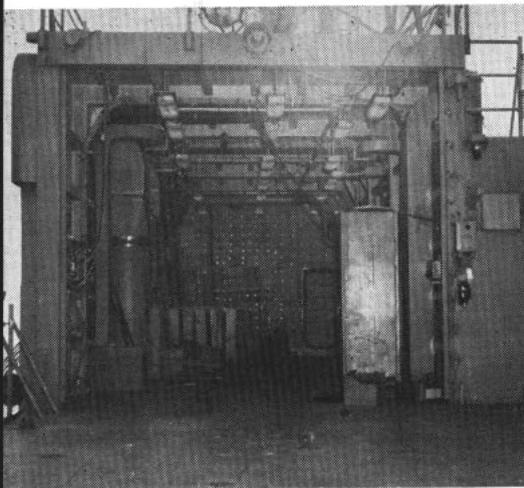


WHIRLYBIRD ROOST — USS *Hazelwood* (DD 531) sports new copter deck.





IN THE MILL — *USS Blue* (DD 744) and *USS Lowry* (DD 770) are among group of destroyers slated for modernization.



(AS 11) and *Nereus* (AS 17) are currently at Philadelphia and Long Beach, both slated for completion early in 1960. Most of the Mark II program, as it applies to them, involves equipping them to tend nuclear-powered submarines.

ADs, a few LSTs and LSDs, some CVSs and two LPHs are among other classes of ships expected to be included in this Fleet Rehabilitation and Modernization program before its completion.

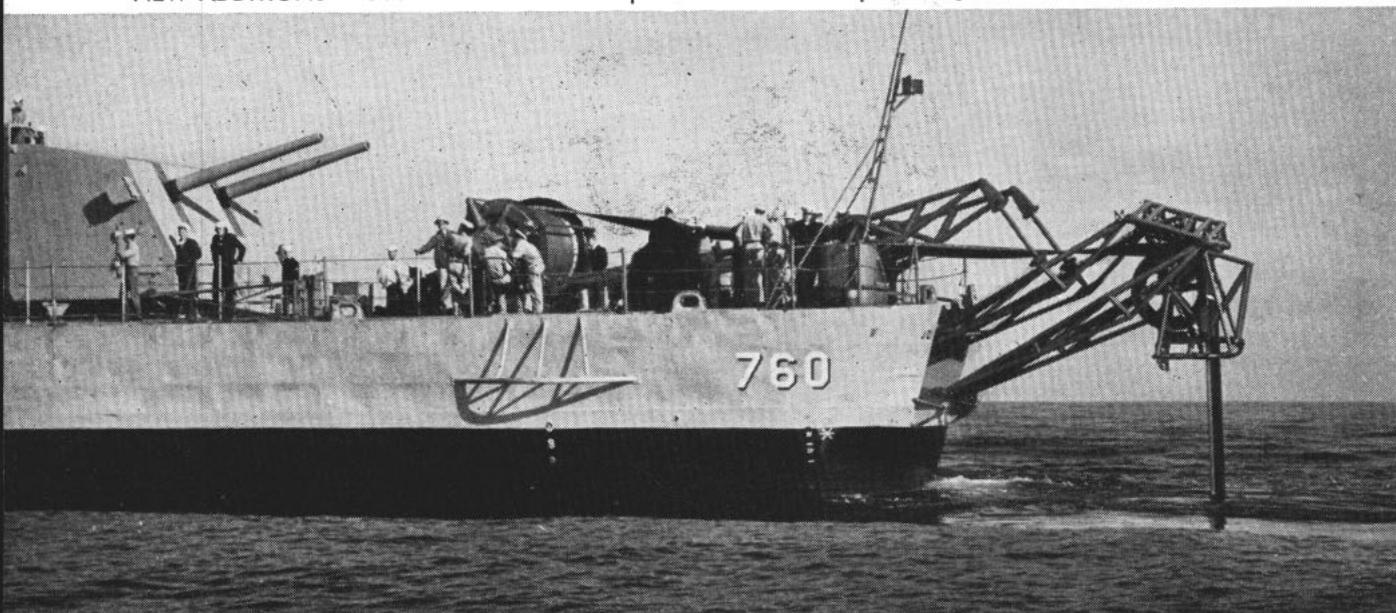
That's the story on FRAM—an ambitious plan to maintain and improve Fleet strength (and a strong challenge to all hands on their part to make it work).

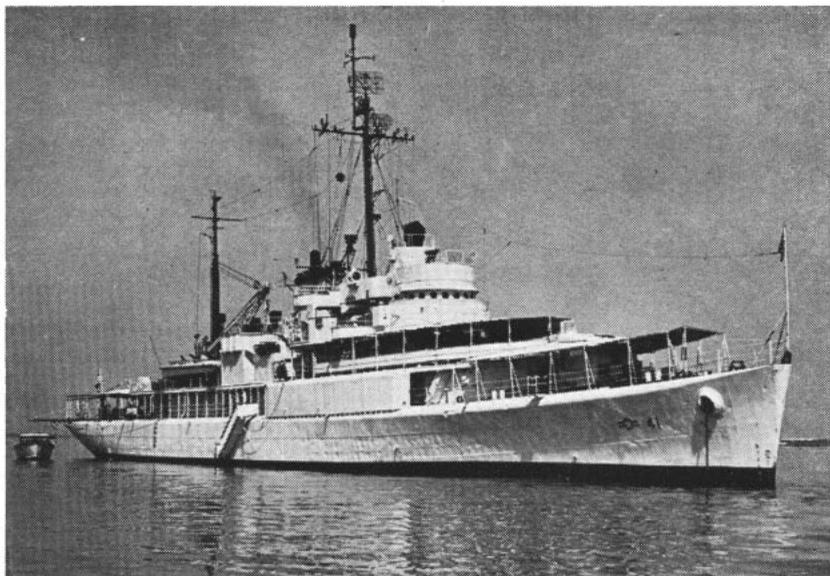
The one big difference in the analogy we drew earlier between overage ships and cars lies in their relative importance. After all, even if we couldn't keep the old gas eater going any longer, we could always take a bus.

Our antisubmarine warfare program, however, involves infinitely higher stakes. If just one World War II vintage ship, operating beyond its normal life span with modern equipment packed in its aging hull, helps seek out and destroy a potential enemy submarine threat to our shores or our Fleet, FRAM will have more than paid for itself.

—Jerry McConnell, JO1, USN.

NEW ADDITIONS — *USS Thomason* has new profile because of copter hangar (above) and new VDS gear on stern.





WHITE-PAINTED USS *Greenwich Bay* (AVP 41) is well known in Middle East.

Sailing in the Middle East

When *uss Greenwich Bay* (AVP 41) steamed into Norfolk late last year, it had completed its 11th Persian Gulf cruise.

Traveling more than half-way around the world, *Greenwich Bay* visited Portugal, Spain, Turkey, Aden, Iran, India, Ceylon, Muscat, Ethiopia and Italy.

During this tour of duty, *Greenwich Bay* acted as flagship for Rear Admiral James R. Lee, USN, Commander, U.S. Middle East Force. Admiral Lee relieved Admiral M. F. D. Flaherty, USN, as COMIDEASTFOR aboard *Greenwich Bay* in the Persian Gulf.

This all-white AVP has made a cruise to the Middle East every year since 1949. Over the years, this small ship has become a well known and familiar sight in ports along the Persian Gulf, Arabian Sea and Indian Ocean. This year, as in years past, the "*Green Witch*" continued her active participation in the President's People-to-People program. An estimated 3000 or more foreign nationals toured this American ship on her recent cruise. Guests included civic groups, school children and political leaders of almost every country the ship visited.

One such port was the small Indian naval training center of Vishakhapatnam on the east coast of India. There, many members of the Indian navy were invited to see what the U.S. Navy ship looked like. In return many members of the crew

were invited into the homes of Indian navy personnel.

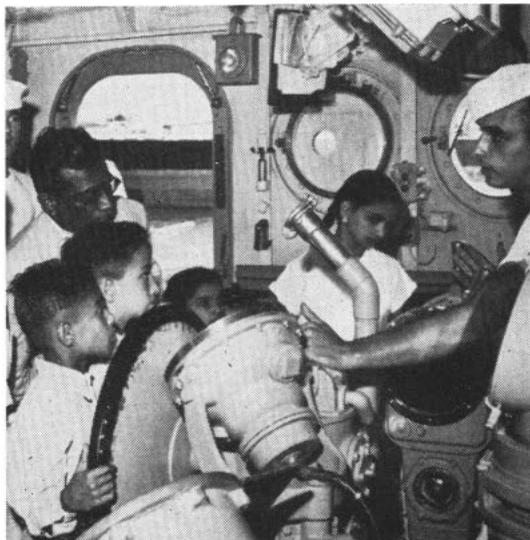
When the ship left that port, an official plaque of the Indian naval base was presented to the officers and men of *Greenwich Bay* as a souvenir of the visit. In return, the men of "*Green Witch*" also left a ship's plaque for the men of the naval training center.

At her Persian Gulf base—Bahrein Island—*Greenwich Bay* contributed money and manpower to the American Mission Hospital in the city of Manama. Crew members not only donated their free time to repair, paint and mend the buildings and grounds of the Mission Hospital, but also donated toys to the children.

The ship's company also gave a completely refinished piano to the American Mission. Perhaps most important of all, the men from this ship were practically a floating blood bank for the hospital. Several times, volunteer donors were rushed to the hospital to give blood.

Greenwich Bay is one of three seaplane tenders which yearly rotate as flagship for COMIDEASTFOR. All three of these ships—*uss Greenwich Bay*, *Valcour* (AVP 55), and *Duxbury Bay* (AVP 38)—are easily recognized because each is painted white. The unusual paint job has proved advantageous in the tropical climate of the Persian Gulf area. Temperatures of over 100° F are often recorded.

—Anthony J. Malta, JO3, USNR

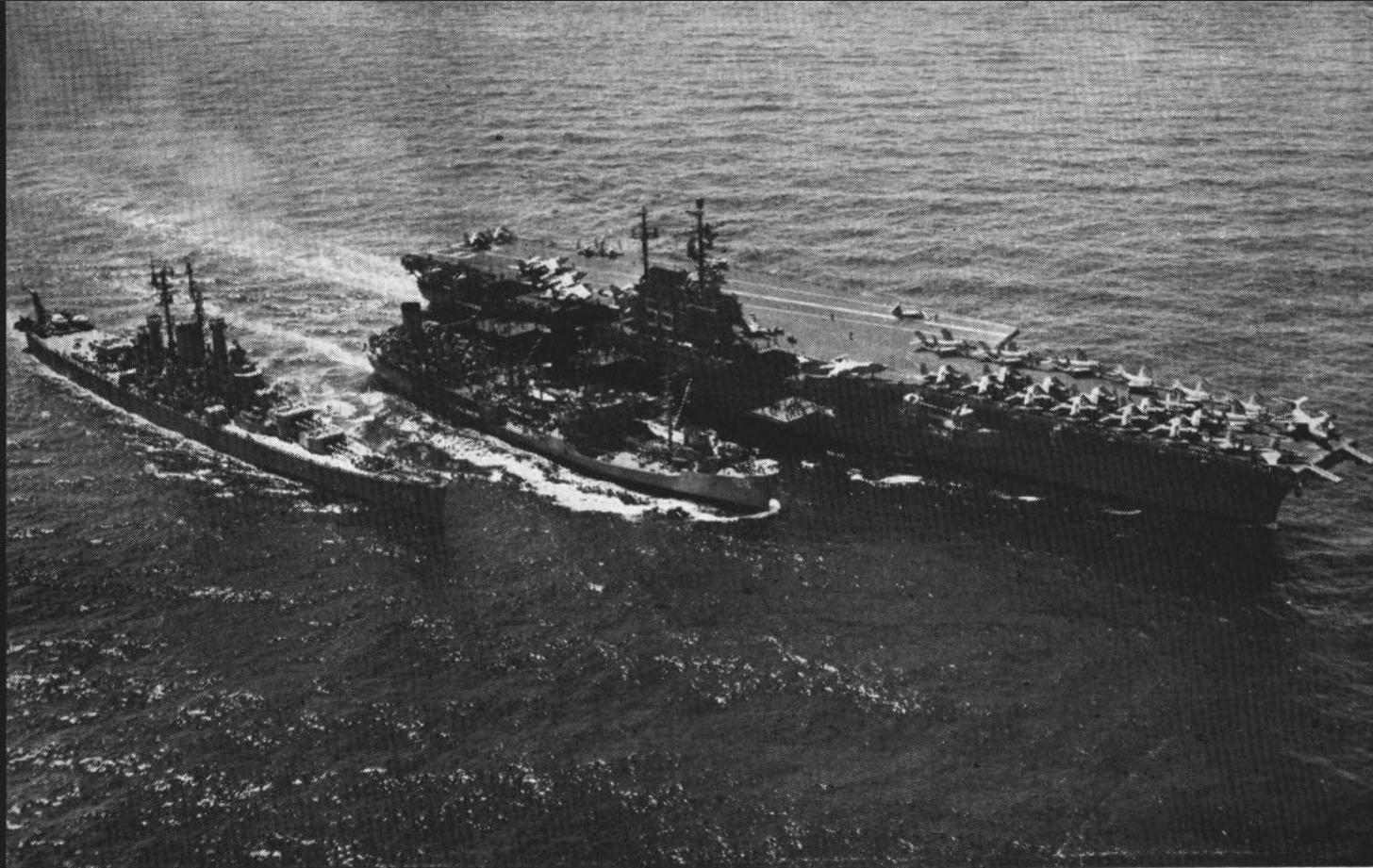


NEW FRIENDS—E. Greene, GMC, (top), eats with Indian navyman. Below: Youth of India tour *Greenwich*.



SALTY TALK—S. Cressey, DK1, chats with Indian navy counterpart. Below: Citizens of Madras, India, tour ship.





PASS THE PETROL PLEASE—USS *Caloosahatchee* (AO 98) refuels USS *Forrestal* (CVA 59) and USS *Salem* (CA 139).

AO Keeps the Fleet

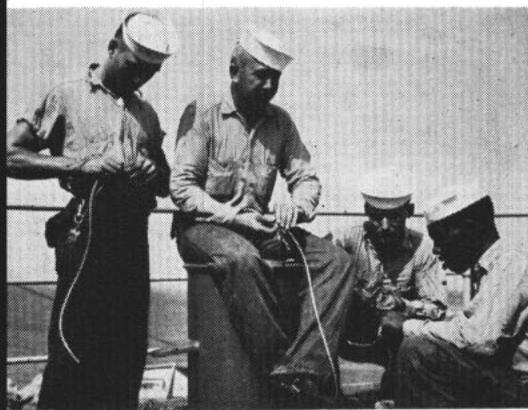
AN AO has one main reason for existence. That is to refuel naval ships at sea. A Fleet oiler refuels in any kind of weather, at any hour of the day and night all over the oceans of the world.

Such a ship, sailing out of Newport, R. I., is USS *Caloosahatchee* (AO 98).

Its interior is a plumber's delight of tanks, valves, pipes, drains, and pumps, and it is designed to carry 115,000 barrels of petroleum prod-

ucts, including black oil, diesel oil, aviation gas and jet fuel.

Topside an oiler is a jungle of booms, cables, steam winches and rubber hose. A sea story has it that years ago a first class boatswain's mate, who reported for duty aboard *Caloosahatchee* from a destroyer, took one look at the rigging and went over the hill. True or not, the story points up the complexity of the oil transferring gear. There are eight booms for refueling at sea. Usually



DECK SEAMEN get lesson in marline-spike seamanship. Below: Preparing dinner on the USS *Caloosahatchee*.



MUSIC TO OIL BY—Carrier's band serenades crew of oiler during refueling.



four are in use at any one time.

A fuel transfer requires most of *Caloosahatchee's* 233 officers and enlisted men to be at their fueling stations many hours at a time. Fuel is pumped to a carrier or destroyer alongside at a rate of 2000-5000 barrels per hour through two 300-foot lengths of rubber hose. The procedure for a ship taking fuel is to ease alongside at a mean distance of 40 yards and receive a hauling line which is made fast to a steel cable. When secured to the receiving ship, the cable bears the weight and strain of the hose which is attached by sheaves.

Fueling begins immediately at bow and stern when the hose nozzle is shoved into a receiving trunk. At the end of a day's fueling operations, an oiler may spend another five hours replenishing her oil from another oiler. "Consolidating," oilerman call it.

In several respects fleet oiler life has advantages over that of many other Navy ships. The bulk of an oiler permits elbow room for the crew. An icebox the size of a small cottage insures plenty of fresh pro-

on the GO

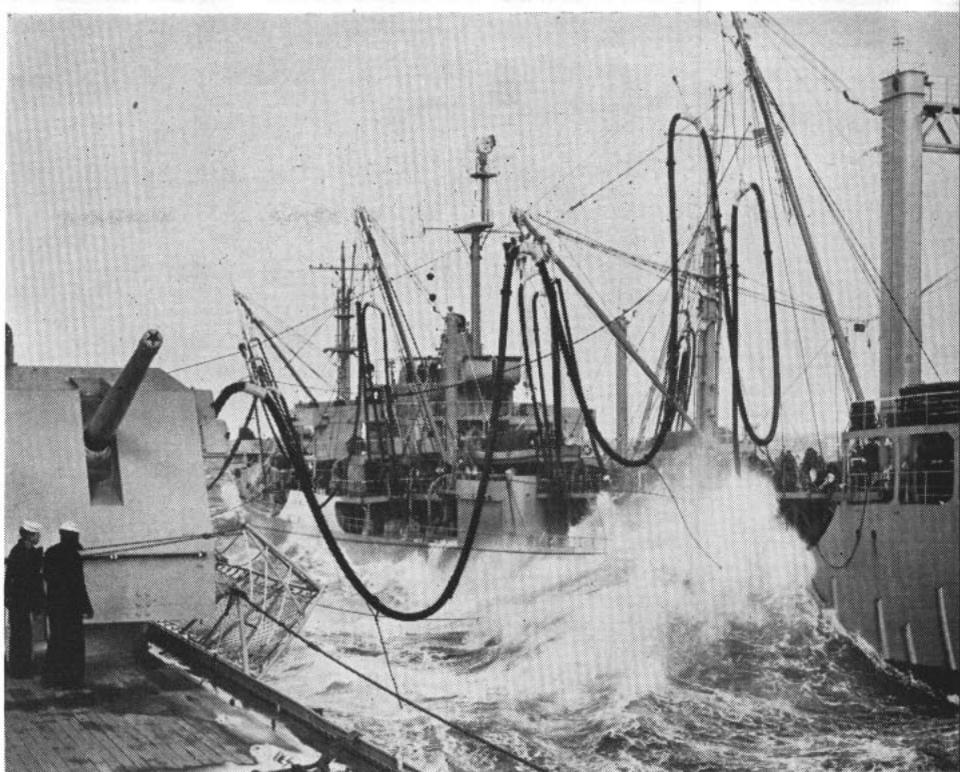
visions during the long stints at sea. No sailor could ever be induced to say shipboard chow is just like Mom used to cook, but after long hours of fueling, a well done steak, pie and strong, black coffee make a man feel as though he's right back home.

This oiler's pride is her softball team.

According to Russel "Lou" Lavigne,, GM2, the team manager, the "Oilers" have played ball and won in just about every port in the Mediterranean area against almost every destroyer or carrier they have operated with. Their season's score is 22 wins and two losses.

Caloosahatchee was commissioned in October 1945 and is now the command of Captain F. B. Gilkeson of Bluefield, W. Va. Her latest cruise was completed 31 August after six months' duty with the Sixth Fleet. During that time 98 fueled 332 ships and steamed 34,000 miles. Oilerman enjoyed liberty in such ports as Cannes, France; Barcelona and Valencia, Spain; San Remo, Italy; Athens, Greece, and Golcuk, Turkey.

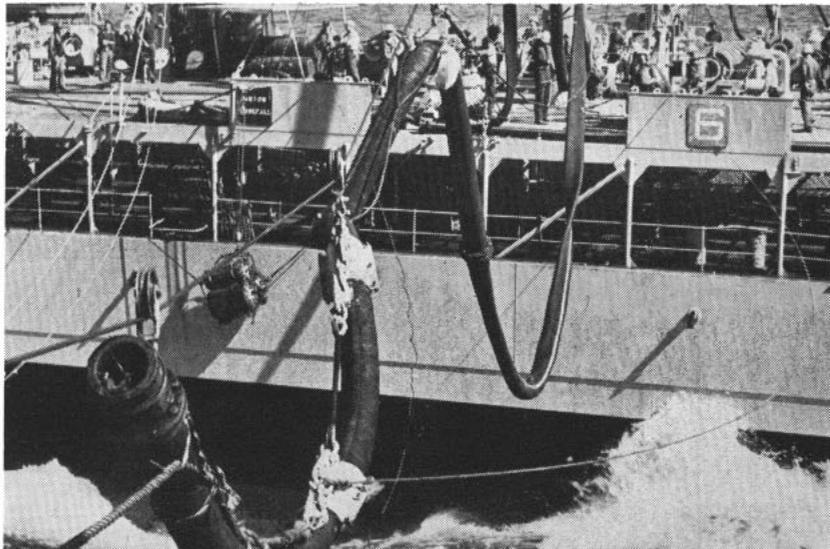
—Jared E. Goetz, JO3, USN.



WET WORK—Heavy seas in the Mediterranean make refueling of cruiser a good test of seamanship. Below: Deck hands swing refueling hose into place.



HOSE NOSE—Network of lines brings fuel hose across gap between ships.





FISH poses with F. Dixon, BM3.

Here's a

THERE'S SOMETHING about the small seagoing ships in the Navy which inspires a certain nostalgia in seafaring men. That feeling is not easy to pinpoint and it is even more difficult to get a seasoned crew member to talk about it—unless you too are an old salt.

But when you first climb aboard one of these ships and set out for a cruise to some distant port, you find out for yourself.

Take *uss Banner* (AKL 25), for example. She's one of the Navy's three light cargo ships still active and in commission. *Banner* operates out of Apra Harbor, Guam, while

the others—*uss Estero* (AKL 5) and *uss Mark* (AKL 12)—are homeported in Sasebo, Japan, and Subic Bay in the Philippines.

No doubt you have never heard of these three ships. You'll never read much about them. They are not headline-making ships. They go about their jobs day in and day out and receive little or no recognition. Their work is not glory-making, but is essential. It's cargo—they deliver it or pick it up and then start all over again.

Sailing from Guam, *Banner* may head for Chichi Jima, a small rock about 800 miles north of Guam. Or

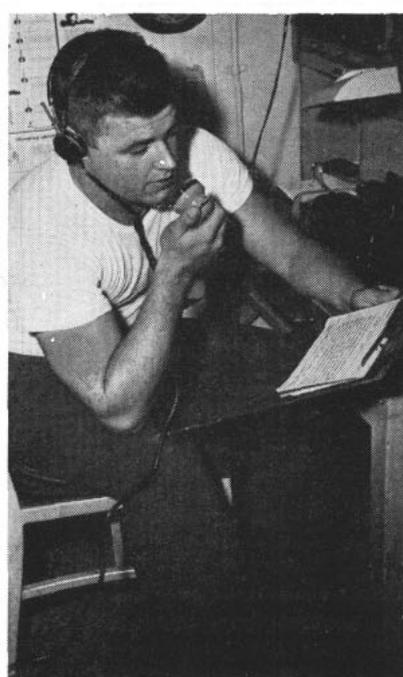
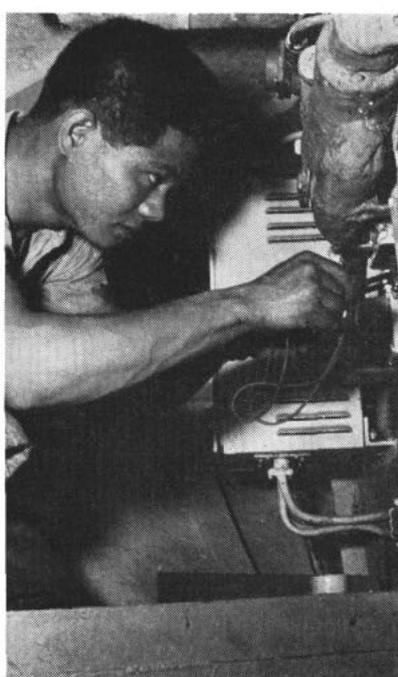
it might be Hong Kong, 1800 miles west. Regardless of her next port of call, her job is the same—deliver and pick up cargo.

Banner is an elegant little lady. But her beauty is fading and you can see that she's had a long, hard life in the choppy Pacific. (With due respect, we won't reveal her age.) After years of hard work she is almost ready for retirement, but the Navy still needs her services. So, like any lady that's wanted, *Banner* spruces up to continue her life-long tasks and puts to sea again.

At the conn you'll find *Banner's* skipper, LT George C. Lowry, USN.

LITTLE LADY—USS Banner (AKL 25) is one of three of her class still in service. Above: *Banner* pulls into Hong Kong.





SALTY SAILORS—Crew members man wheel (left), check engine room gear (center), and send message (right).

Sample of Small Ship Duty

As you observe him performing his duties you can tell that *Banner* is in good hands, will get where she's going and arrive in good shape.

Getting statistical for a moment, we should say that *Banner* is only 176 feet long. With her full complement, she is lucky to carry 34 men aboard. Her top speed is 12 knots. That's slow enough but as little as a 16-knot wind will knock this down considerably. When that happens, it means plenty of bounce, lots of roll and an uncomfortable time for all.

Once aboard, you have a chance to meet *Banner's* crew. Typical of her petty officers is 27-year-old Forrest Dixon, BM3, USN. In charge of the deck force, Dixon has a personality that makes him well liked. His home currently is Guam, where his wife and four children live. Sometimes he is away for weeks at a time, but being from a seagoing Navy family, Mrs. Dixon knows what to expect. He doesn't like the prolonged absences any more than anyone else, "But it all counts on 20."

Then there's Seaman Kenneth Blase, a 20-year-old nearing the end of his first cruise. Finding himself restless at home in San Jose, Calif., he took the Navy's offer to "join up and see the world." He's not certain about the future as yet. Maybe, he'll make a career out of the Navy. But there's plenty of time to think about that during long hours at sea. Blase is one of *Banner's* messmen.

Warrant Officer Gerald Broe, USN,

is one of the most popular officers aboard. Off duty, he always has a crowd around, whether he's discussing photography or recounting stories about a Navy career that has taken him all over the world in almost every type of ship the Navy has put to sea.

Meanwhile *Banner* steams along, slowly and surely. Routine at sea is somewhat similar to that of any other ship. The ever present chipping hammers bang away at the rust gnawing at the gray paint that covers the hull and decks.

Dixon's deck force seems to be on the go all the time. At the same time other crew members are occupied below decks with the many chores required to keep a ship going. At night, activity lessens and the starry tropical sky provides a backdrop for movies on the boatdeck.

Most days are calm and sunny on the Pacific, but sometimes morning breaks with a dark, unfriendly look. Today there is a cool northeast wind coming up slowly and beginning to toss *Banner* about. Although everyone knows what to expect, it becomes official when the wires in the radio shack begin to hum with storm warnings.

The barometer is dropping fast and *Banner* shudders as she slams into the mounting swells on the rim of the disturbance. Dinner tonight will be a topsy-turvy affair.

But the gallant old lady resists the storm the best she knows how

and continues to plow slowly ahead toward her destination.

By midnight, however, conditions are somewhat worse. Seaman Kenneth Karr, USN, has the wheel watch. He's a stocky lad but could use a few more pounds during this watch as it takes all his strength and then some to keep the small ship on course. Every swing of the rudder seems to be deliberately countered by a reverse move from the sea.

The captain, attempting to skirt the storm, decides to alter his course. Steersman Karr is ordered to swing *Banner* around several degrees and come up on Batan from the south. Now with the mounting swells on her starboard quarter *Banner* rides somewhat easier. Storm-tossed crew members, trying to sleep below, are now able to doze a little.

It's a long night. But radio weather reports, from Fleet Weather Central at Sangley Point in the Philippines, bring good news. *Banner* and the storm are going separate ways.

By morning the seas remain heavy but the sun shines brightly overhead. Batan Island is a beautiful sight. *Banner's* crew stands at the rail and eyes the island's 3000-foot peak that was ringed by layers of grey-blue morning mist.

After a short stopover, *uss Banner* will be on her way again. Next stop: Hong Kong.

As you can see, "small ship duty" gets under your skin.

—J. A. Williams, JO1, USN



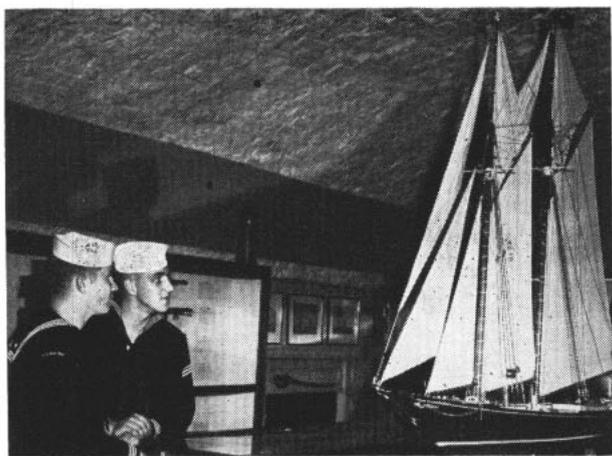
SHOP TALK—'Valley' men chat with sailors from Canadian carrier *Bonaventure*. Left: Trio climbs Citadel Hill.



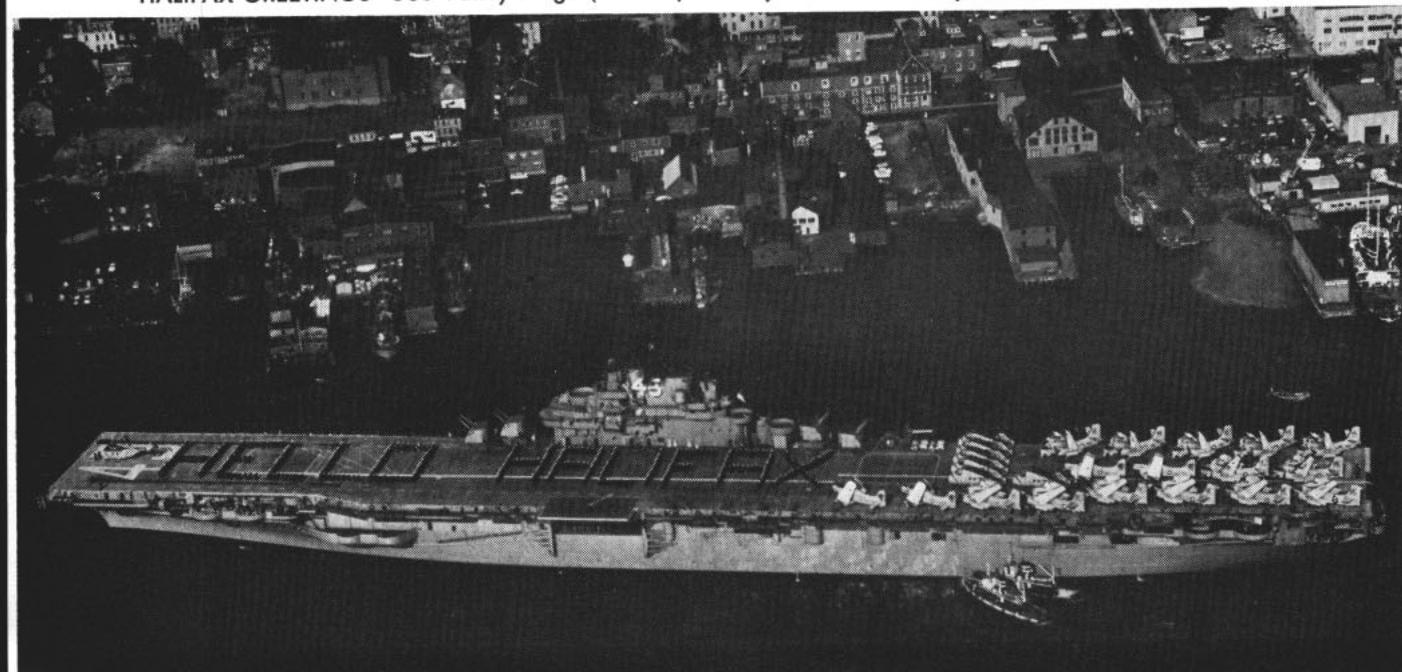
From Halifax

WITH "Hello Halifax" spelled out on the flight deck by her crew, *uss Valley Forge* (CVS 45) led the way into port for good liberty with our northern neighbors in Nova Scotia. Behind the antisubmarine warfare support carrier sailed seven destroyers and two submarines that comprised the rest of the Task Group on a training operation.

Crew members of the 10 task group ships from the Atlantic Fleet settled down for an enjoyable six-day visit to this Canadian port. In addition to the pleasant times with the citizens of Halifax and Canadian sailors, the U.S. Navymen enjoyed sight-seeing in the historic town that included visits to Halifax's popular maritime museum and the scenic Public Gardens.



HALIFAX GREETINGS—*USS Valley Forge* (CVS 45) enters port. Above: Navymen admire exhibit in maritime museum.





RANGOON VISIT — Left: *McCain* man, following hat-off custom, poses by a temple. Right: Navy band entertains.

To Calcutta

THE 4400-TON DESTROYER LEADER USS *John S. McCain* (DL 3) has completed a tour of duty with the U. S. Seventh Fleet that included what is probably the most unusual goodwill cruise of her career.

On her itinerary during the cruise were such exotic ports of call as Calcutta, India; Rangoon, Burma; and the state of Singapore. Of the almost 300 officers and enlisted men on board the ship, not one had visited Calcutta or Rangoon previously. In fact, before *McCain's* arrival it had been five years since an American warship had called at Calcutta and four years since one had visited Rangoon.

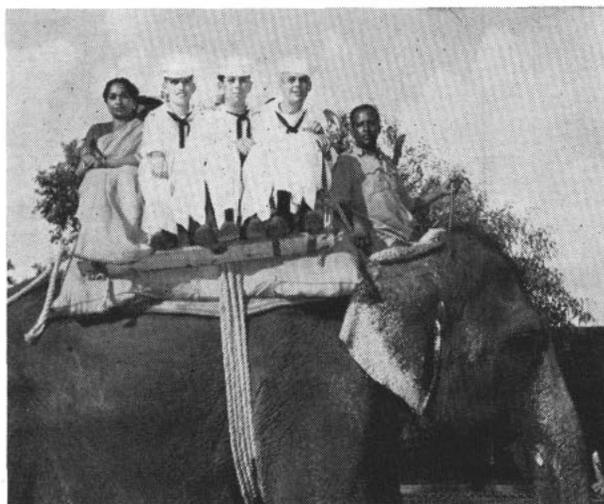
The cruise began when *McCain* was selected to carry \$5000 worth of medicine to India for use in flood-stricken areas of that country. In Calcutta the ship turned this American donation over to Indian health authorities for immediate distribution. Then, moved by the plight of the flood victims, *McCain* added 3500 pounds of her own food supplies to the donation, and organized a charity ball which raised another \$1000 for flood relief.

When they weren't busy with these projects, the men of *McCain* took advantage of every chance they got to tour this great metropolis of India—with its sacred cows, famous temples, turbaned Sikhs and crowded marketplaces.

After five days in Calcutta the ship headed across the Bay of Bengal toward Rangoon, the capital of Burma, where she stayed four days. There, the crew welcomed visitors on board, held parties for local children and took time out to visit such famous places as the Shwe Dagon, or Golden Pagoda, one of the most sacred Buddhist shrines in Burma.

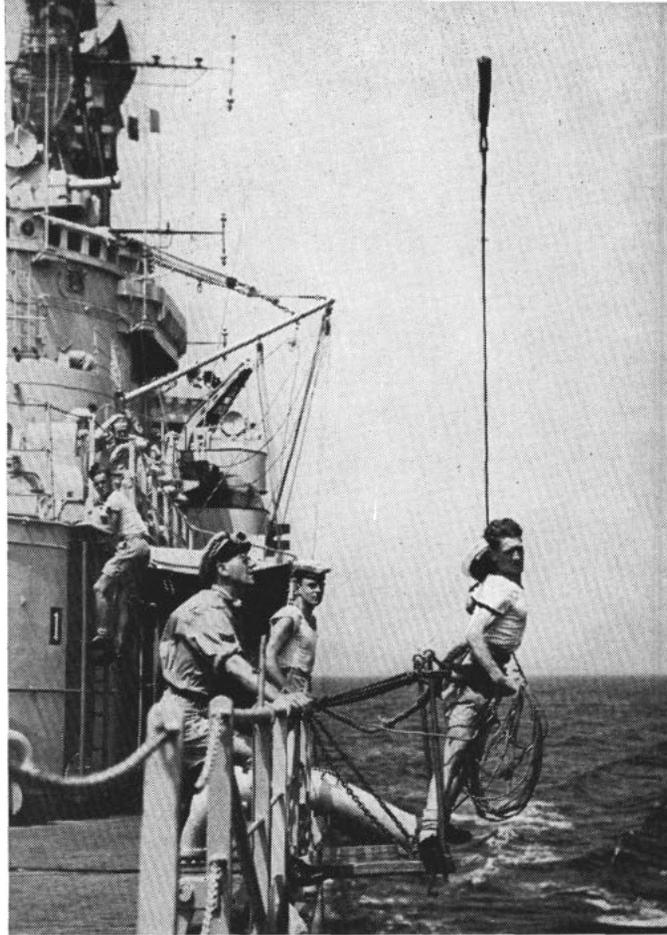
McCain's next stop was Singapore, at the tip of the Malay Peninsula, where the crew had three days to see one of the world's most colorful ports.

From there, *McCain* returned to her regular duties.



ELEPHANT RIDE in Calcutta (above), visit to Rangoon's Golden Pagoda (below) were among features of trip.





BY THE ZEE — Rebuilt since WW II with the help of Allies, the Dutch Navy is now one of the world's most modern.

VISIT WITH THE DUTCH

THE DUTCH PEOPLE have fought on the sea and have fought the sea itself to survive. The very ground on which they live they captured from the sea.

Even today they are building more dikes to hold back the waters of the North Sea to increase the size of their country. The Netherlands people contend that "God made the world, but the Dutch made the Netherlands."

Being a seafaring nation, the Dutch have always had a good navy and a large and busy merchant marine. Today is no exception. The Dutch navy is newly equipped and her merchant marine is one of the largest afloat.

At the end of World War II the Dutch navy was almost extinct. During the first six years of fighting the Netherlands lost 15 per cent of her naval personnel and the bulk of her ships.

The sea service has been rebuilt, however, and with the help of her allies, she now has one of the most modern navies in the world. Most of her 150,000 tons of combatant

ships were new or modernized since 1953. Her minesweeping force is the newest and largest in Europe.

The principal job of the Netherlands navy (Koninklijke Marine) is to protect the coastal waters of Holland and her possessions and to protect the merchant marine on the high seas. It is well qualified and ready to do both. Besides its present strength, the navy has plans which include nuclear propulsion for submarines and rockets for their ships.

THE DUTCH NAVY currently has two squadrons, one operational (Squadron 5) and one training (Squadron 1). The operational squadron is something like our task force. It is built around the Netherlands navy's only aircraft carrier *HNMS Karel Doorman* (R 81). This ship displaces 14,000 tons standard, is 693 feet long (over-all) and has a beam of 121 feet (over-all). *Karel Doorman*, built for the British Navy in 1945, was purchased by the Netherlands in 1948.

Between 1955 and 1958 *Karel Doorman* had her face lifted. A

heavier modified angled flight deck and steam catapult was added, and a mirror sight landing system and new anti-aircraft battery of 10, 40mm guns were installed. A bill for 25 million guilders (over \$6,000,000) was presented the Dutch navy for this job.

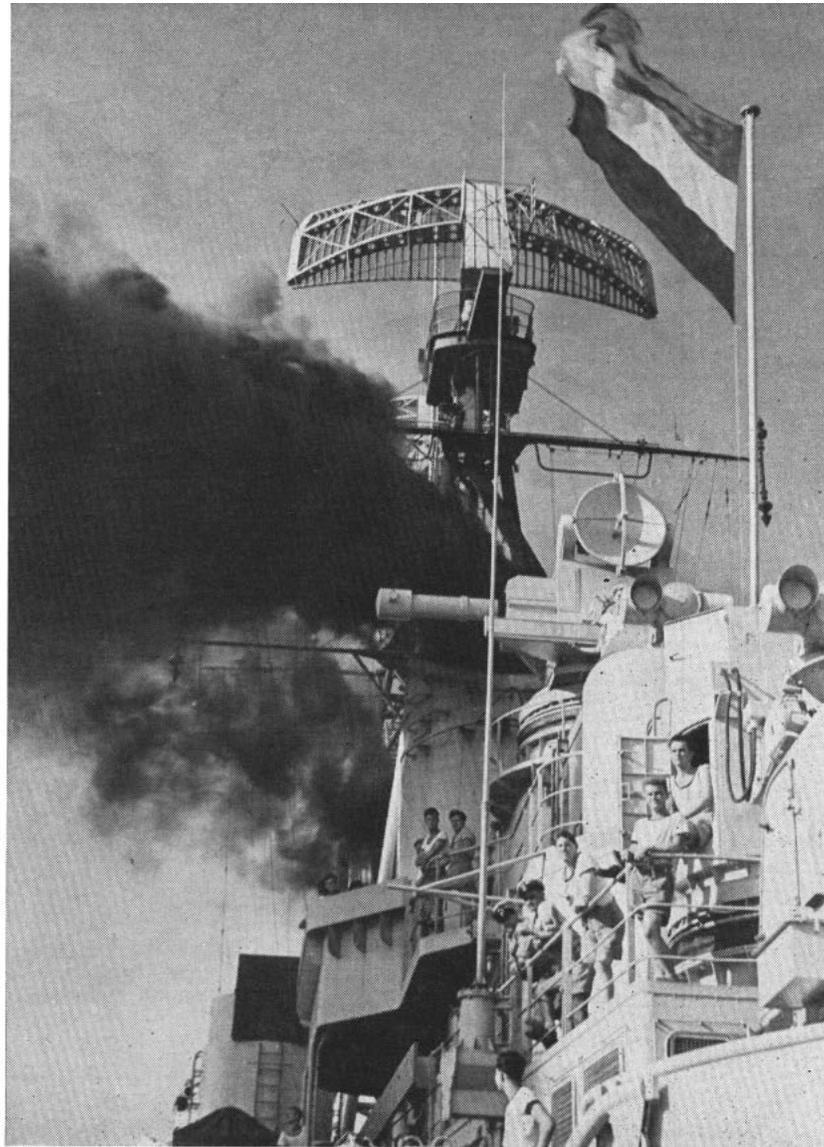
The big guns of the training squadron are aboard the 9735-ton cruiser, *HNMS De Ruyter* (C 801). (Another cruiser of the same size is in the reserve fleet.) *De Ruyter*, which always operates with the training squadron, was completed at a Holland shipyard in 1953.

Escorts for these large ships include 12 destroyers. The oldest of these ships (eight are 2476 tons each, and four are 2164 tons) were completed in 1953. The newest in 1958. Each of these tincans carries a crew of about 250 men. They can glide through the water at speeds which range from 32 to 36 knots. Usually four destroyers operate with the operational squadrons, while two work with the training group.

Seventeen frigates which range in size from 640 tons to 1463 tons



DUTCH SAILOR brings back souvenirs.



DUTCH CRUISERMEN go about their shipboard routine while on training cruise.

NAVY

also provide punch and speed to the mobile Dutch fleet.

The training squadron (Squadron 1) is vital to the efficiency of the Dutch navy. It is in this group that Dutch sailors learn seamanship and get their initial on-the-job training. Dutch sailors receive their very first shipboard experiences in this squadron and in later years return for refresher training and as instructors.

WHEN A MAN ENLISTS in the Netherlands navy at a minimum age of 16 years, he undergoes boot-camp style training for about four months. He learns, much like U.S. sailors, about the navy and a little about life aboard ship.

After the four-month indoctrination the men go aboard one of the training ships. They are not sent to a service school during their first enlistment. Only after they have re-enlisted for the first time are they allowed to attend school.

This system is used because in the past many first cruise men have received extensive navy training at a service school and have then re-

turned to civilian life as a well trained technician. They had trouble keeping well trained men in service. Under this new program, however, they retain most of the men they train in school.

The training squadron and the operational squadron can almost be called a professional group of Navy-men and an amateur group of Navy-men. The operational squadron are all graduates of the training squadron and are well trained before they board a ship in the varsity group. Sometimes the two squadrons compete during exercises, and on some occasions the amateur group wins.

The ships themselves also change from one squadron to the other with the exception of *Karel Doorman* and *De Ruyter*. When a destroyer, for example, finishes a tour of duty with the operational squadron, usually after about nine months, she returns to her home port where a new crew

comes aboard. This new group will take the ship and join the training squadron for either new or refresher training. The men who come off the ships may go to shore duty, to another ship, or to a service school. A few might remain aboard to train the new crew.

BESIDES THESE surface ships, the Dutch also have four operational submarines which work with both squadrons. Two are ex-USS *Balao* type. They were loaned to Holland in 1953 under a five-year loan which has since been extended to 10 years.

Two ex-British "T" class submarines are also part of the submarine fleet. They displace 1090 tons and carry 64 men.

Probably the most unconventional ship in the Dutch navy is a submarine which is currently undergoing sea trials. (Another, under construction, should be ready in 1961.)



IN THE AIR — Netherland's operational squadron is built around aircraft carrier *HMS Karel Doorman* (R 81).

These submarines differ from the subs now in general use by the world navies in that the pressure-proof hull is made of three parallel cylindrical bodies rather than only one. The Dutch claim that these submarines will be able to withstand greater pressure and consequently dive deeper than any known submarine. A new type torpedo and launching tube is also being developed which will allow torpedoes to be fired from greater depths.

The complement of these submarines is 63 officers and enlisted men. Standard displacement is 1070 tons. Two additional submarines of this type have been temporarily cancelled pending a possible switch to nuclear power.

Besides these larger surface ships and submarines, the Netherlands navy has the largest and newest minesweeping force in Europe. Many of these ships were built in the United States and later trans-

ferred to the Netherlands navy under the Mutual Defense Assistance Program (now known as MAP—Military Assistance Program).

Among these ships are six wooden-hull U.S. AM-type minesweepers which displace 665 tons, are 165 feet long and 35 feet wide. They carry a crew of about 85 men. They cruise at about 12 knots.

FOR COASTAL MINESWEEPING work, the Dutch navy has 32 *Dokkum* class wooden-hull ships built in the Netherlands. Eighteen of these ships were provided under offshore procurement by the United States. The remaining 14 were built in the Netherlands and paid for by that country.

Another 14 wooden-hull minesweepers of the *Beemster* class were built in the United States and then transferred to the Netherlands during 1953-54. These 384-foot ships carry 40 men, are 144 feet long and

27 feet wide. They carry two 20mm anti-aircraft guns.

Sixteen additional inshore minesweepers are currently under construction. Eight of these will be paid for by the United States under the offshore procurement program, with MAP funds, and the other eight by the Netherlands government.

This comparatively small navy has a big job to do. Its commitments are both national and international.

On the national level, it must protect the coastal waters of the Netherlands, the naval defense of islands in the Caribbean and Surinam, and the naval defense of the western part of New Guinea. To do this job, the ships of the navy operate mostly in the North Sea and entrance to the Atlantic Ocean; around Curacao; near New Guinea; and sometimes in the Caribbean area.

ON THE INTERNATIONAL level, Holland is a member of the North Atlantic Treaty Organization (NATO), and as such have forces earmarked for the North Atlantic Command (SACLANT), the Channel Command (CINCCCHAN), and the European Command (SACEUR).

Whenever possible the Dutch navy operates and trains with other NATO navies. Although they sometimes operate with ships of the U.S. Navy, much of their combined exercises are with the nearby NATO nations of Belgium, West Germany, France and England.

Routine aboard Dutch ships at sea is somewhat different from that aboard U.S. ships.

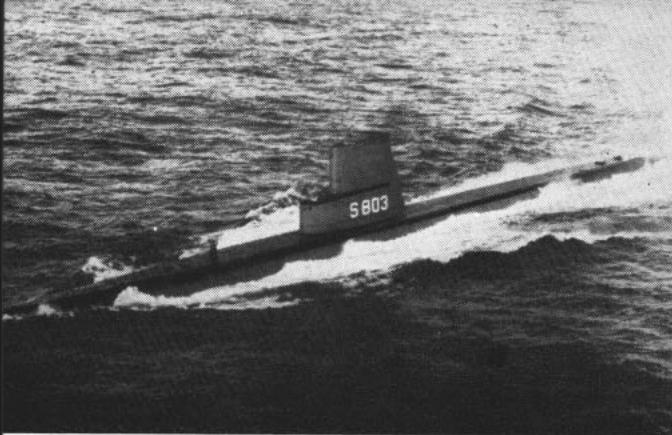
Reveille is at 0700, with breakfast immediately thereafter. For breakfast, bread, butter, jam, cheese and coffee is normally served. Sometimes an egg or some meat is added.

The morning's work begins at 0800 and lasts until 1200, with a 15-minute coffee break at 1000.

A lunch and rest period lasts from 1200 to 1400, at which latter time the men have a 15-minute tea break

LIBERTY IN U.S.A.—Netherlands navymen from the aircraft carrier *HMS Karel Doorman* pose for photo at Hayden Planetarium while sightseeing in New York.





ONDERZEEBOOT (submarine) *HMS Zeeleeuw* and antisubmarine destroyer *HMS Groningen* are typical Dutch navy.

before going back to work. Lunch is the main meal of the day. The men are served potatoes, vegetables, meat and salad (no bread and butter), much the same as men aboard a U.S. Navy ship.

All ship's work is stopped at 1600. For supper, a Dutch navyman will eat bread and butter or sandwiches, some hot food (many times either something left from lunch or soup), and coffee. Later, men on watch are served hot coffee and sandwiches.

The routine after dinner is casual. Some men go to the movies or to the ship's store. The routine here can be a little different from that of our ships.

A Dutch sailor, rather than buy an ice-cream soda and eat it in the fountain, might buy a can of beer and take it with him to the movies. Each man aboard a Dutch ship may buy two cans of beer each day. They may not, however, accumulate their ration. Petty officers and officers can buy from a wine mess aboard the ship.

When Dutch ships were moored at the Naval Operating Base, Norfolk, Va., for the Naval Review in 1957, Dutch and American sailors exchanged visits. They seemed to prove the old adage true—that the grass is always greener. . . . Dutch sailors would visit the American ships and buy ice cream, while the American sailors who visited the Dutch ships, would often order beer.

ALMOST ALL OFFICERS in the Dutch Navy are graduates of the Netherlands Naval Academy (Koninklijk Instituut voor de Marine) at Den Helder. The only officers who are not graduates are former chief petty officers who have received a direct commission.

Established in 1854, the academy has occupied the same buildings in Den Helder since 1870. About 75 ensigns (Luitenants ter Zee 3e Klasse) and 200 reserve officers graduate each year.

These officers, unlike the U.S. Navy's line officers, are all special duty officers. Each one studies one of five different courses. They may specialize in either Executive (Deck), Marine Corps, Engineering, Electrical, or Supply and Secretariat.

Navy pilots are all graduates of the executive class at the Academy. If for some reason a pilot is grounded in later years, he can still fill the billet of a regular naval officer.

Also at Den Helder is the Commander-in-Chief Netherlands Home Station, the Royal Naval Dockyard, the service schools, and the Mine Warfare School and shops. Den Helder is something of a Norfolk of the Dutch navy.

THE MAIN NAVAL AIR STATION for the air arm of the Dutch navy is at Valkenburg, near The Hague. When the aircraft carrier *Karel Doorman* is in port, her planes are

based there. Other navy training squadrons also operate from here.

Besides Valkenburg, the Dutch navy maintains one training squadron at Curacao in the Caribbean, and several other squadrons on the island of Biak, near New Guinea.

Planes currently in use by the Dutch navy include the TBF *Avenger*, *Sea Hawk* (British), S2F *Tracker*, P2V *Neptune*, SNB *Beechcraft*, PBM *Mariner*, and several helicopters. They plan to acquire several newer type planes soon.

The Dutch navy is "somewhat" older than the U.S. Navy. Its admiralty was established in 1487, five years before Columbus discovered America. In the second half of the 17th Century, the Netherlands had the largest merchant fleet and the most powerful navy in the world.

Today the Dutch do not have one of the largest navies in the world. They don't need one. They do have, however, a modern, fast, and efficient navy, and one that certainly stacks up as one of the most important in the world.

The free people of the world depend on the Netherlands navy as part of the combined power of NATO to keep the world free and the sea lanes open. It is the type of cooperation and determination shown by this and other small countries that will keep power-hungry countries confined to their quarters.

—Erwin A. Sharp, JO1, USN

ON PARADE — Dutch sailors parade at Naval Academy and (rt.) in Norfolk, Va., during International Fleet Review.





IT TAKES A LOT of Naval Intelligence to plan an operation such as an amphibious landing on enemy-held beaches.

Intelligence in Reserve

"We are going to destroy the enemy submarine installations by a coordinated air and submarine missile attack and an amphibious operation in order to prevent the enemy from interfering with Allied commercial and naval operations in this area. We need to know the exact location and size of the installations, their characteristics and defense capabilities, hydrographic and weather conditions, and information on landing beaches, roads and other topographic features.

"Are there any opposing navy or air forces in the area? Are there any enemy missile bases capable of interfering with our operations? What enemy troops will we encounter ashore. Will the natives be friendly?"

"Gentlemen, this information must be accurate, complete and reliable. We must have it within 72 hours."

THE OFFICER speaking might be the commander of a task force, or he might be the chief of staff of a wartime Fleet intelligence center.

Actually, he is an instructor of a special Naval Intelligence course at Little Creek, Va., or at the Amphibious Training Command, Coronado, Calif. Seated before him, in a specially equipped room, is a group of Naval Reserve intelligence officers who are studying the problems of gathering the essential elements of information which must accompany

every naval operation. In time of war, such an assignment may take days or weeks of exhaustive research in order to prepare the intelligence annex to the admiral's operation order, or it may have to be done on an emergency basis from whatever information is readily available.

Reserve intelligence officers are a highly select group of specialists who must be qualified in one or more fields of special interest to the Office of Naval Intelligence. Among these are geography, geology, cartography, hydrography, archaeology, architecture, economics, politics, international relations, foreign languages, journalism, business administration, law, transportation, industrial engineering, physics, chemistry, biological sciences, and various other engineering, scientific and technical fields.

SUCCESSFUL TEACHING OR RESEARCH experience in these fields, extensive foreign residence or travel, and previous investigative experience may also qualify applicants for the Naval Reserve Intelligence Program. A bachelor's degree is a minimum requirement, but individuals with higher degrees and significant academic honors are especially desired. Officers with Fleet experience—under age 35 and in the grade of LT and below—who meet these requirements are also among the

most successful applicants. Exceptions to these basic requirements are occasionally permitted.

No matter what their areas of specialization, intelligence officers have several things in common: an insatiable intellectual curiosity, the ability to find and assemble needed information, and superior judgment in evaluating pertinent facts, combined with an unquestionable loyalty to the United States and to the Navy.

To make sure they meet these requirements, applicants must meet with a screening board of from three to five senior intelligence officers and undergo an intensive interview concerning their academic preparation, civilian and military experience, comprehension of domestic and international affairs, and their reasons for requesting affiliation with the Naval Reserve Intelligence Program.

One of the most important factors considered by the screening board is the personality of the applicant. Intelligence officers must be able to work with a wide variety of personalities—admirals, diplomats, government officials, businessmen, merchant seamen, ship owners, "average citizens," people of other countries—even, on occasion, criminals. Thus applicants must have pleasing, flexible and well adjusted personalities in order to be able to elicit and evaluate information provided by people from all walks of life.

ALL PROSPECTIVE INTELLIGENCE officers are given a thorough background investigation which covers their school and college careers, employment records, organizations to which they belong, and other contacts in the United States and abroad. As part of this investigation, a check of FBI fingerprint files and of other government intelligence agencies is required.

Every naval district in the United States has a Naval Reserve Intelligence Division. Each division is composed of officers, except for six to eight yeomen and personnel men who are assigned for administrative purposes. The Intelligence Divisions are organized on a district-wide basis for supervision and administration. Each division is further subdivided into units. At present, there are more than 100 units located in the principal cities of the United States and in Puerto Rico and the Canal Zone.

These units currently have a total enrollment of approximately 1150 men and women officers in pay status and 400 in nonpay status. Officers in pay status are members of the Selected Reserve, with mobilization billets already assigned and pre-cut orders to active duty in the event of a national emergency. Most non-pay officers are members of the Ready Reserve and would be available for mobilization.

Naval Intelligence officers must learn the fundamentals of each outfit of the Navy with which they come in contact. They must understand world affairs, foreign policy, strategy, tactics, logistics and counter-intelligence. They must be administrators, investigators and research specialists. They must also keep up with new developments and technical progress in scientific fields applicable to naval warfare.

THE TRAINING PROGRAM for Reserve intelligence officers is geared to meet this need. Division training is under the direction of the Reserve training section in each naval district. A Reserve Intelligence Program Officer on full-time active duty is assigned to this section; he is responsible, in cooperation with the District Intelligence Officer, for the procurement and training programs of the Intelligence Reserve.

Reserve intelligence units meet in District or Field Intelligence Offices, Naval Reserve Training Centers, Naval Air Stations and other con-

veniently located military or government quarters. Training consists of special classroom courses, from two months to a year in length, conducted during weekly drills, and intensive two-week courses taken during annual active duty for training. Both types of training are designed to prepare the officers for mobilization.

Basic classroom courses offer a general introduction to intelligence—its organization and functions in the Navy—and in the security of classified matter. There follows more advanced instruction in operational intelligence, strategic intelligence, the Communist conspiracy, sabotage, espionage and counter-intelligence, and investigations.

When the prescribed pattern of courses has been completed, specialized training is provided in specific area studies such as the history and development of the Middle East, the Asiatic countries and eastern Europe, foreign language courses, world affairs, and unconventional warfare. Some units, in addition, have organized courses in such fields as industrial security and harbor operations.

IN CONDUCTING the courses, the more experienced intelligence officers take the lead, but all hands are expected to share in preparing and presenting training lectures. Training manuals, recordings and films provided by ONI offer the basic materials. These are supplemented by research into new fields and by

PROBLEM TIME—Naval Reserve officers go over a chart while working on an intelligence problem during special training course for Reserves.



ON THE JOB — Reserve ONI men get shipboard indoctrination, too.

the practical experience of veterans of World War II and the Korean conflict who have had active duty in intelligence billets at home, at sea and abroad.

A special feature in most units is a regular program of guest speakers on topics of current military, political and economic interest. Senior officers of all the military services take part in these events. The list of guest speakers also includes officials from such government agencies as the Federal Bureau of Investigation, the Central



PROSPECTIVE USNR "super sleuth" is screened by ONI board. Only a select group of specially skilled persons are picked for these important positions.

Intelligence Agency, the Immigration and Customs services, the Department of State and others. College professors and researchers in specialized fields in academic circles and private industry also participate.

To supplement the various training programs, the Intelligence Reserve also takes part in field trips and practical exercises. Special tours of harbor areas, visits to ships of the Fleet and of the Coast Guard, and to Navy installations ashore, serve to illustrate many of the topics covered in drills. Practical experience is also provided by the District and Field Intelligence Offices by actual participation in background investigations, security checks, foreign intelligence and special projects.

INTELLIGENCE OFFICERS in pay status are required to take 14 days' active duty for training each year. A series of three special courses in operational intelligence has been organized at Little Creek, Va., and at Coronado, Calif. A comprehensive

Naval Intelligence refresher course is also available to each officer once every four years at the Naval Intelligence School, Washington, D.C., and at NAS Alameda, Calif.

The operational intelligence courses provide specialized training in the preparation of intelligence reports used in amphibious landings and in operations at sea. The amphibious landings study includes such subjects as hydrography, beach gradients and composition, mapping, roads and facilities ashore, photo interpretation and target analysis. The sea operations training includes the preparation of intelligence on the area of operations, enemy characteristics and capabilities, possible courses of action, tides, winds and currents, and the collection of information by submarine, UDT, surface and aerial reconnaissance teams.

In both types of training, special emphasis is placed on the function of the intelligence officer as a member of the staff of the commander

INTELLIGENCE LEARNING—During WW II approximately 90 per cent of Naval Intelligence officers were Reservists. Here, USNR officers are briefed on chart.



of a task force or a task group in determining his mission and making an estimate of the situation.

Other ACDUTRA courses are: anti-submarine warfare, combat information center, bacteriological and chemical warfare, atomic defense and amphibious operations. Intelligence officers also take part in sea-going cruises, many of them to foreign ports. On-the-job training is provided at District and Field Intelligence Offices and in the Office of Naval Intelligence. In ONI, officers may be given special training in the various foreign, investigative, and technical sections, and in the training and administration of the Reserve program.

DURING WORLD WAR II, approximately 90 per cent of the Naval Intelligence officers were Reservists on active duty. During the Korean conflict, some 125 Reserve intelligence officers were ordered to active duty and, throughout the cold war period, a number of intelligence billets have been filled by Reservists. Mobilization plans, kept current by ONI, provide for full use of Reserve intelligence officers in the event of national emergency.

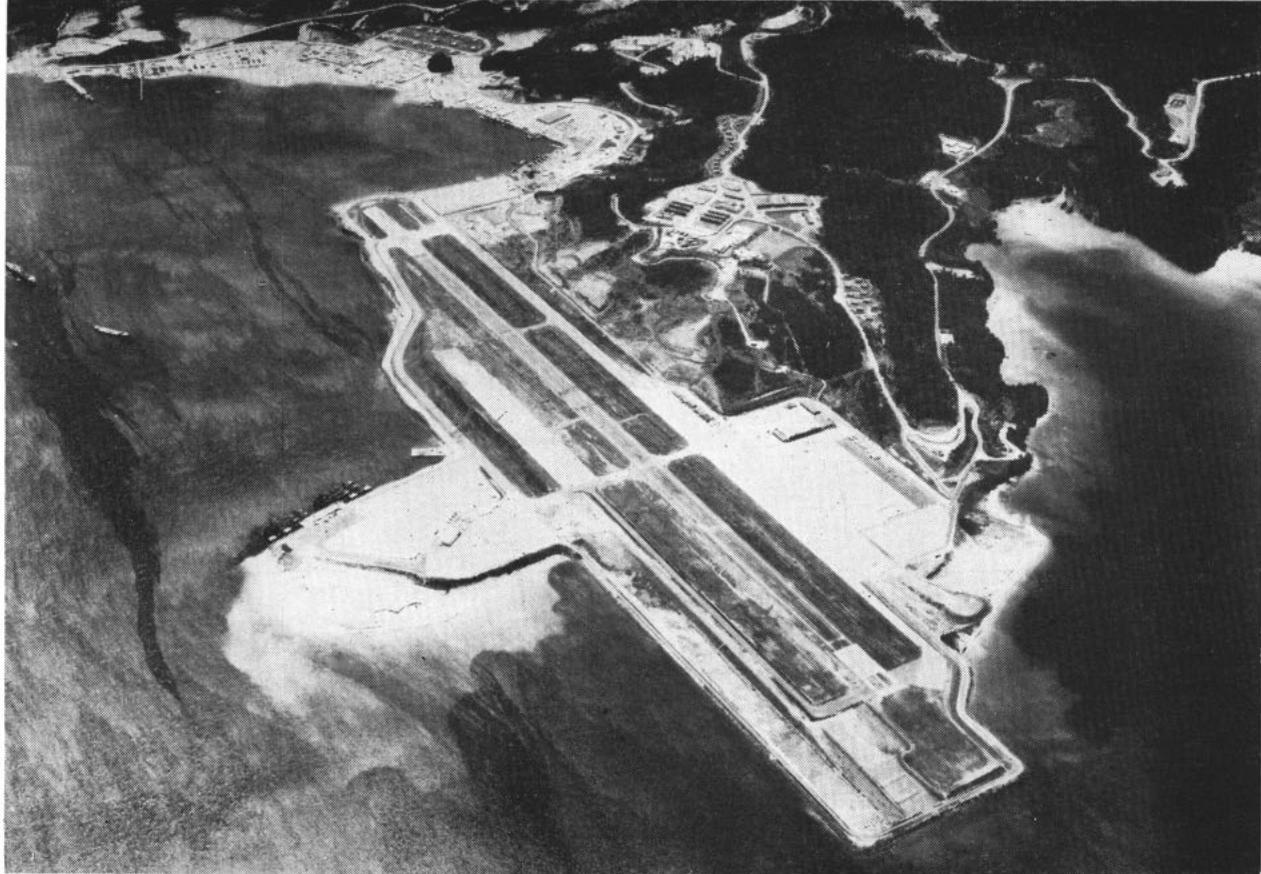
Although the exact nature of the mobilization plans cannot be revealed, the probable assignments of the Reserve intelligence officers indicate four principal areas of operations—in the Office of Naval Intelligence, in District and Field Intelligence Offices, in operational intelligence billets, and certain foreign shore duty assignments. The plans are carefully designed to provide a world-wide network of ONI outposts ashore and afloat reporting all military, naval and political activities of possible interest to the Navy.

In making assignments, the personnel section of ONI works closely with the Bureau of Naval Personnel to assure the most effective utilization of intelligence officers in their fields of specialization. For this purpose, ONI maintains comprehensive files on the background, experience and qualifications of each Reserve intelligence officer. This information is readily available both in ONI and the Bureau of Naval Personnel on special machine-punched cards.

In the event of mobilization, Reserve intelligence officers will be trained and ready to take on their jobs as "eyes and ears of the Fleet."

—CDR Donald H. Scott, USNR.

ALL HANDS



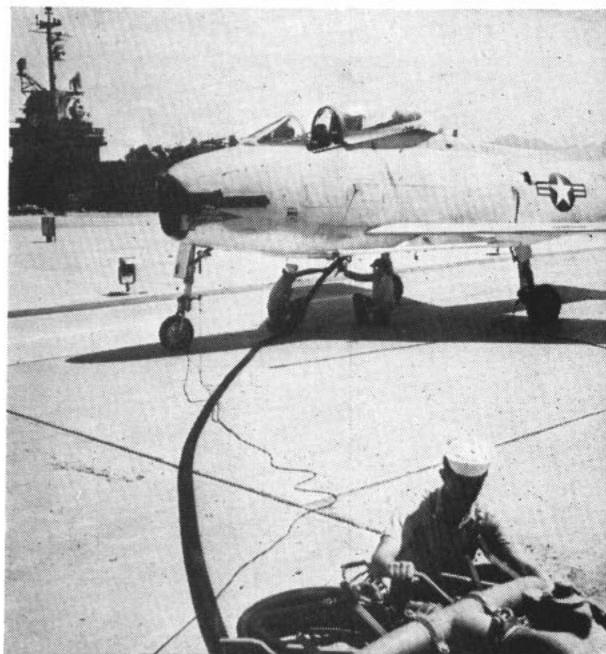
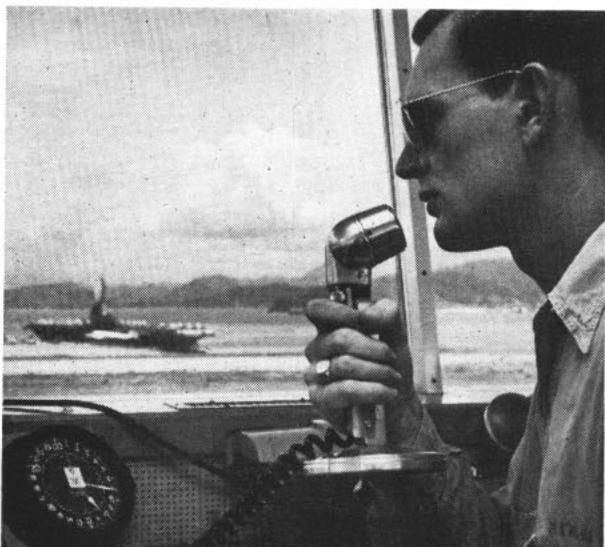
Cubi Point

THE NAVAL AIR STATION at Cubi Point in the Philippines, one of the biggest and most difficult projects ever undertaken by the Seabees, now serves its main mission as a naval air arm of the Seventh Fleet. Since its commissioning in 1956 the station has received every carrier of the Seventh Fleet as well as one deployed from the Med during the Formosan crisis.

Its location and physical characteristics give Cubi a key position in the defense system of southeastern Asia.

In addition to its primary mission, NAS Cubi has already on many occasions served as an emergency base of operations for the Seventh Fleet and as home base during Fleet picket operations.

Top: Cubi Point looks like this from the air. *Right:* Crash crew stands by as jet takes off. *Lower Right:* Ground crew fuels jet with new high-speed system. *Lower Left:* Towerman contacts pilot.



Happy Birthday to You

THROUGHOUT THE NAVY today cakes are baked for special events—ship anniversaries, carrier landings, homecomings or for almost any other celebration aboard a ship or station.

Perhaps the one that means the most to the individual Navyman is the birthday cake. In recent years the practice has grown.

One of the best examples of this birthday program was described in the January 1959 issue of ALL HANDS in an article, "Is There a Formula for a Smart Ship?" Aboard PHIB-LANT ship USS *Rankin* (AKA 103), as in many other ships, a cake was baked for every man aboard on his birthday. It was presented to him in the captain's cabin, where each man was given an opportunity to jump the chain of command, and discuss anything he had on his mind.

A photographer was usually present for the occasion, and an eight-by-ten print was sent to the parents of the Navyman who celebrated his birthday aboard ship. Accompanying the photograph was a personal letter, written by the captain, to the folks at home.

This is just one sample of the shipboard celebration. When USS *Nautilus*, SS(N) 571, returned from her first trip under the North Pole, chief commissaryman M. A. Fergione, and two CS3s, E. F. Gretowski, and W. E. Linsinbigler, baked a special cake for the whole crew.

Besides the regular icing and decoration around the side, on the top was a large ice floe "icing" with

a sign marking the "North Pole." The inscription read "uss *Nautilus*, SS(N) 571, — The First Time in History."

The same three commissarymen, assigned aboard the submarine tender USS *Fulton* (AS 11), have baked and decorated special cakes for other submarines of the squadron returning from noteworthy missions.

When USS *Skate*, SS(N) 578, returned from her trip under the North Pole a cake was presented to the crew. And after USS *Seawolf*, SS(N) 575, spent her record 60 days submerged, she got her cake too.

A submarine has a relatively small number of men in her crew. But what about a celebration on an aircraft carrier, with a complement of 3000-plus men? Each one wants a slice of that special cake. And some of them are going to want seconds.

We don't know—yet—for what occasion the largest Navy cake was baked or who assembled it. But we do know about two cakes that have weighed 3000 pounds each; another that weighed 1382 pounds; two of 1000 pounds each; and a "little" one that weighed 700 pounds.

The 3000-pounders were a considerable mouthful. One of them was baked by Milton Harp, then CS1, aboard USS *Leyte* (CVS 32). He baked the cake in connection with the ship's 10th anniversary, some time before the flattop was retired to the Reserve Fleet. Commissaryman Harp, and 250 of the ship's crew members, appeared on a nation-

wide television show, along with the cake.

The only other 3000-pound cake baked by Navy bakers (that we know of) was prepared back in 1954 aboard the aircraft carrier USS *Yorktown* (CVA Now CVS 10), to celebrate the second anniversary of her recommissioning. They had "rehearsed" for the occasion with a 1382-pound cake the previous year, for her first recommissioning anniversary.

If you want to know what goes into a cake weighing a ton and a half, you'll have to check with the cooks and bakers, but here's one for a little 700-pounder. It was baked by C. E. Dornsyfe, CS1, W. Morris, CS2, and D. R. Tippie, CS3, for the opening of a new PHIBPAC mess hall.

Clip this recipe—if you like cake—and take it home to the little woman: 200 pounds sugar, 40 pounds shortening, 12 ounces vanilla, 15 pounds butter, 200 pounds flour, 63 quarts milk, 6 pounds baking powder, and 3 pounds salt.

She should come up with a cake about one-and-a-half feet deep, eight feet long and four feet wide. It'll be just the thing for that party you're planning.

USS *Philippine Sea* (CVS 47) has come up with a few 1000-pounders. One that is recorded on film commemorated her 66,000th landing, and another the 70,000th landing on board, a few months later. Since then a lot more landings, and many cakes, have been chalked up by the crew.

To prepare the cakes, bakers mixed 22 pounds of flour with 282 pounds of granulated sugar and 300 pounds of powdered sugar, added 100 pounds of shortening, poured in 31 pounds of powdered milk, stirred in 132 dozen eggs, sprinkled in four pounds of salt, and completed the mixture by adding one pound of cake coloring. (The crew consumed this particular cake in less than two hours.)

King-sized cakes are not a new fad. Possibly the largest one ever baked was made in June 1730 for the army of Frederick William I, King of Prussia. It was 18 yards long, eight yards wide, and more than 18 inches thick. A cart drawn by eight horses carried it. Among the ingre-

TASTES GOOD TOO—One of the biggest Navy cakes weighed 3000 pounds. It is shown here just about polished off by crew of USS *Yorktown* (CVS 10).





SPECIAL CAKE for crew member's birthday is popular treat aboard ship. *Rt.:* Navy cakes come in a variety of forms for many celebrations. Here are a few.

dients were 36 bushels of flour, 200 gallons of milk, one ton of butter, one ton of yeast and 5000 eggs.

The smaller cakes may not be so newsworthy but they taste just as good, if not better. ALL HANDS' files are filled with any number of examples of smaller cake celebrations.

One of the most recent was in USS *Antietam* (CVS 36). The ship's bakers laid the keel of the vanilla cake ship, *Antietam Junior* on one day, and by 1600 the following day a 350-pound cake-carrier was complete.

Two days later *Antietam Junior* left the mother ship on a diplomatic mission. It was a rough trip aboard a one-and-one-half-ton truck down St. Charles Ave., New Orleans, La. And just before she anchored outside City Hall for her rendezvous with the Mayor, she received damage to her superstructure. Thanks to one of the ship's pastry technicians, she was repaired before the encounter with the head of the city.

Shortly after this she proceeded to the New Orleans Crippled Children's Home for replenishment (children's, not the ship's).

Who has the honor of cutting the ceremonial cake? On this matter of etiquette there seems to be no set rules. It depends on circumstances.

Naturally if it's your birthday, you cut the cake. Cakes commemorating a particular number of landings are sliced by the person who made the landing. Most often, however, a senior officer—the most senior

in the area—seems to be the most popular.

And what about the instrument with which to demolish the baker's masterpiece? That's easy. A sword is the only appropriate tool.

The decoration of a particular cake often overshadows its size. A flat single layer cake is probably the easiest shape to decorate and this is the type most commonly seen at Navy celebrations.

To add a touch of luxury and still keep the job comparatively simple, just add more layers, making them smaller each time. Aboard different ships this idea has been carried all the way from a two-layer cake to a complete pyramid.

Another shape that is popular, but requiring more artistry, is a cake shaped like the ship itself. We've seen a whole fleet of cake flattops, cruisers, destroyers, and submarines.

You may have the idea that these elaborate baker's concoctions have been made in giant molds, but few ship's ovens could hold a 3000-pound cake. Actually, they're baked in smaller sizes and then assembled by the experienced Navy baker to form the final size and shape.

Baking a cake—round or square, large or small, simple or elaborate—for almost any special occasion, is a popular pastime for many a Navy commissaryman. And, unlike some works of art, the end product meets an enthusiastic reception with the creator's severest critics.

—Erwin Sharp, JO1, USN.



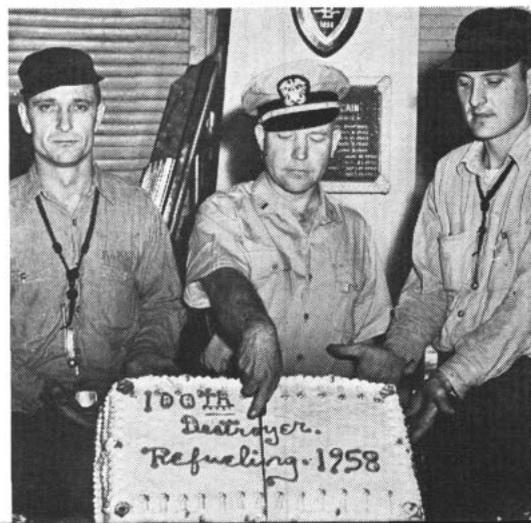
Ship's Anniversary



Under-the-Arctic Voyage



Ship's Mascot's Birthday
Below: Destroyer Refueling Record



SERVICESCOPE

Brief news items about other branches of the armed services.

THE SECRETARIES OF THE ARMY AND NAVY have been designated by the Secretary of Defense to serve as single managers for the procurement and distribution of all general and industrial supplies and equipment for all branches of the armed forces.

As a result of this assignment, which went into effect 1 January, the Army will provide all military general supplies which include such items as housekeeping supplies, hand tools and the like. The Navy will provide all services with military industrial supplies which include hardware and related items.

The single managers will be charged with complete responsibility for wholesale supply of the armed forces in their respective commodity areas. This includes responsibility for deciding what will be bought, and cataloging, standardization, distribution, and disposal of excess items in the system.

This single manager concept is not new. Various phases of it have been in operation since 1956. During the three years the system has been in operation, substantial savings have resulted from streamlined distribution systems and reductions in inventory, storage space, personnel and overhead.

Previous single manager assignments have been established for subsistence (Army), clothing and textiles (Army), medical supplies (Navy), petroleum (Navy), air transport services (Air Force), sea transportation service (Navy) and traffic management (Army).

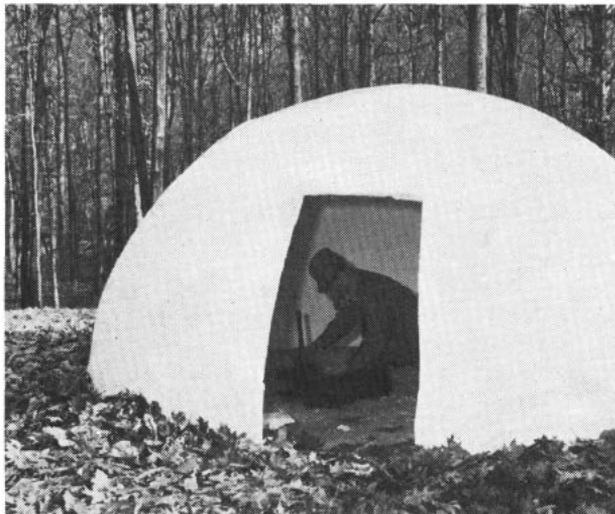
Additional assignments for management by the Army, Navy or Air Force are being considered.

★ ★ ★

THE ARMY IS TESTING LOW-COST PLASTIC FOAM for lightweight, weatherproof shelters that may eventually replace military tents.

Sprayed over an inflated canvas dome, the "self-rising" plastic foam mixture hardens in less than an hour and produces a shelter much like an igloo.

Ready for use after the canvas dome is deflated and



ARMY IGLOO—New type shelter developed by Army is made from self-rising plastic foam sprayed from a can.



CUBE HUNTERS—Coast Guardsmen man small boat to check iceberg that has drifted south into shipping lanes.

withdrawn, the shelter measures six feet tall by 12 feet in diameter. It weighs less than 200 pounds. Its superior insulating qualities make it attractive for possible living quarters or for storage.

Foam for the structure is mixed on the spot, and when sprayed on the canvas hemisphere, it expands outward much like a cake rising in an oven. It can easily be cut with a bayonet, making it possible to cut out doors or windows of any desired size wherever needed.

This new plastic foam may ultimately enable one member of a squad of ten men to carry in two small containers the tents of the entire squad.

When combined, the two chemical components which form the foam-in-place mixture expand to about ten times their original volume. Color additives can be blended with the mixture for camouflage purposes.

★ ★ ★

A ROBOT THAT IS NOW OPERATIONAL permits Air Force pilots to give their supersonic planes a complete pre-flight "electronic physical checkup" in 60 seconds while in the cockpit preparing to take off.

This new testing system is called RADFAC (Radiating Facility for Aircraft Flight Line Testing). It eliminates time-consuming checks of electronic gear in the Air Force's new F-105 Mach 2 fighter-bomber.

RADFAC is housed in a 247-cubic-foot trailer that can be parked as far as two miles away from the plane that it is checking—and still function effectively. It uses self-contained power sources, weighs about 3500 pounds and can be transported by air.

When the pilot or crew chief activates a remote-control unit in the cockpit, the electronic RADFAC system immediately locates the aircraft to be tested, "locks onto it" and proceeds through a programmed series of pre-flight tests. It checks the jet's communication, identification and navigation systems and advises the pilot, verbally or by tone signals, that the systems are in good working order. If anything is amiss, the robot pinpoints the trouble.

The programming of the test checks eliminates possibility of human error or forgetfulness. If any portion of RADFAC itself should break down, this is immediately

made known and then the preflight check can be made manually.

All aircraft located within the two-mile operational radius can use the robot to check out their systems, either one at a time or simultaneously.

Although developed especially for the F-105 being built for the Tactical Air Command, the new check-out system can be adapted for use on other types of aircraft and electronic equipment with only minor modifications.

★ ★ ★

THE ARMY ENGINEERS have built a better mosquito trap.

Perfected by the Army Engineer Laboratories at Fort Belvoir, Va., the new aluminum trap has proved to be more rugged and corrosion-resistant than standard models. It is used to catch a representative sample of a mosquito population so that density and species can be determined, and the effectiveness of controls measured.

Now standard military equipment, the trap consists of an aluminum frame, a cover-protected light bulb, a 10-milli-horsepower electric fan, a screen cone and a collecting jar. Mosquitoes attracted by the light are blown down through the screen cone into the jar, where they are killed by sodium cyanide or paradichlorobenzene. The trap operates on a 110-volt line, and is controlled by an electric timer.

★ ★ ★

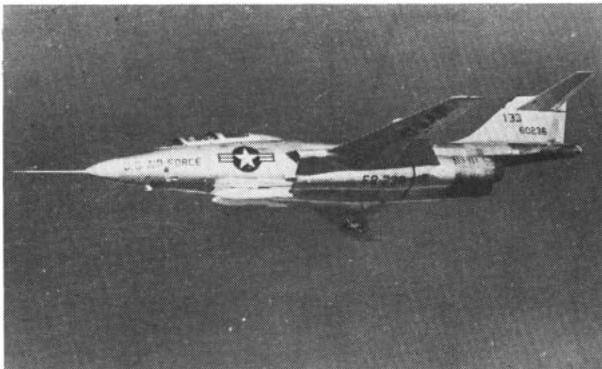
A NEW "SUPER SENTRY" RADAR ANTENNA to warn against enemy air attack is being tested by the Air Force for use with the nation's SAGE defense network.

This is one of the heavy-weight radars designed to feed advanced warning data into a central combat center. Its rotating boxcar-shaped antenna is 104 feet long and weighs 50 tons.

The antenna represents a considerable advance in this field. Its immense size is required to perform its distant warning task. It will detect invaders hundreds of miles away.

Newly developed power tubes—the amplatron and traveling wave—coupled with improved design, give the advanced surveillance set many combat advantages.

The antenna will be tower-mounted on a three-story transmitter-receiver structure housing the 262 separate



BLACK MAGIC—Air Force Voodoo, F-101B interceptor, carries two MB-1 Genie air-to-air nuclear-armed missiles.

units that make up the entire system. Its over-all weight is 800 tons.

The SAGE defense system gathers and computes early warning data and decides the best retaliatory tactics against targets. SAGE results are fed to the North American Air Defense Command Headquarters at Colorado Springs, Colo.

★ ★ ★

A COLD REGIONS RESEARCH AND ENGINEERING LABORATORY will be built by the Army on the campus of Dartmouth College at Hanover, N. H.

This new lab will be used for research on physical properties of snow, ice and permafrost, and the developmental aspects of engineering methods and techniques applicable to arctic and polar construction.

It will combine two existing Army facilities located at Wilmette, Ill., and Waltham, Mass., that are currently engaged in similar research.

Dartmouth College—which has carried out scientific and academic programs in the problems of snow, ice and permafrost and has greatly expanded its work in geology and geography of arctic regions—donated 15 acres of its campus to the Army for the laboratory.

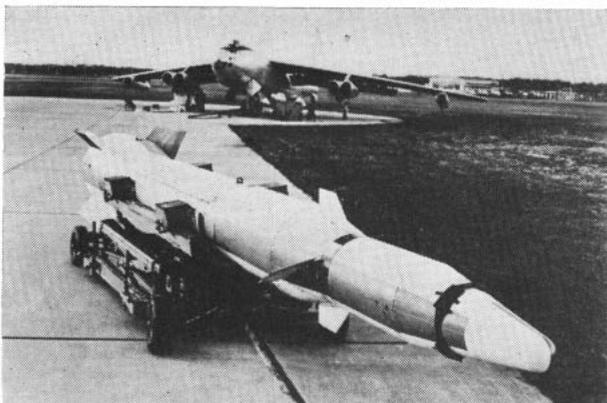
★ ★ ★

A 41-MAN ARMY POLAR RESEARCH EXPEDITION spent the summer identifying and marking safe snow routes on the Greenland icecap, studying ice, snow and weather conditions, and developing new techniques of polar navigation and transportation.

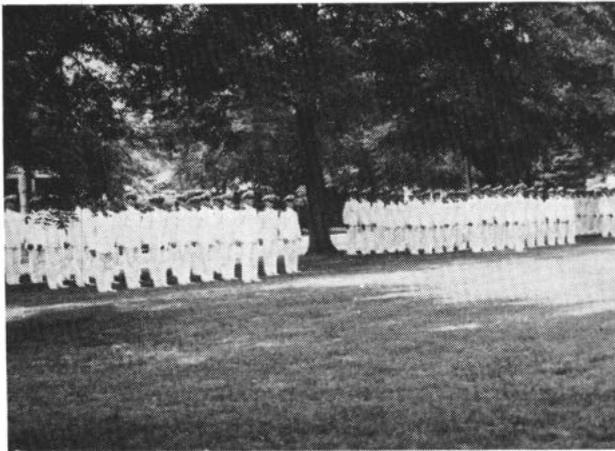
Called "Operation Lead Dog," the exploration party made an 1800-mile trek across the icecap to previously unexplored Nyeboes Land, in northern Greenland.

After leaving Camp Tuto, near Thule, Greenland, the expedition followed a previously marked trail over the icecap for 340 miles to the east, then swung north to Nyeboes Land. They navigated by dead reckoning to a point on the northern edge of the icecap, where base camp was set up 500 miles from the North Pole.

The party, all volunteers, were members of the U. S. Army Transportation Environmental Operations Group from Fort Eustis, Va. They were accompanied by scientists of the Corps of Engineers' Snow, Ice and Permafrost Research Establishment (SIPRE), the Signal Corps, Quartermaster Corps and the Transportation Research and Engineering Command.



BIG BLAST—Two-stage Air Force experimental missile was launched from B-47 into vicinity of Explorer VI satellite.



STUDENTS LINE UP for a regimental inspection (left). At right, the administration building of the SC School.

The Navy Has a School in Athens

To prepare Supply Corps officers for the role they are to play, all newly commissioned Supply Corps ensigns go to one of the country's more unusual institutions of learning, the Navy Supply Corps School at Athens, Ga. Here, on a campus purchased from the University of Georgia, the student Supply Corps officer begins his basic training and receives his first duty assignment.

Normally, the sequence begins with a six-month basic qualification course, followed by an assignment to a destroyer where he is the junior department head for 18 to 20 months. This is followed with shore duty in the United States, then foreign duty.

Of the junior rank Supply Corps officers who enter the school, 95 per cent are graduates of the Naval Academy or civilian universities. The remaining five per cent are former enlisted men. For 26 weeks they study naval supply, disbursing and administration matters.

Since its establishment in 1921, the Navy Supply Corps School has

been shifted from Washington, D. C., to Philadelphia, Boston, Bayonne, N. J., and finally to its permanent home in Athens. Here some 750 officer students prepare themselves annually for duty with the Fleet. They have at their disposal a 40-acre campus that was formerly a part of the university, and 14 major academic and administration buildings. In addition, there are living quarters for 32 married officers and 337 single officers.

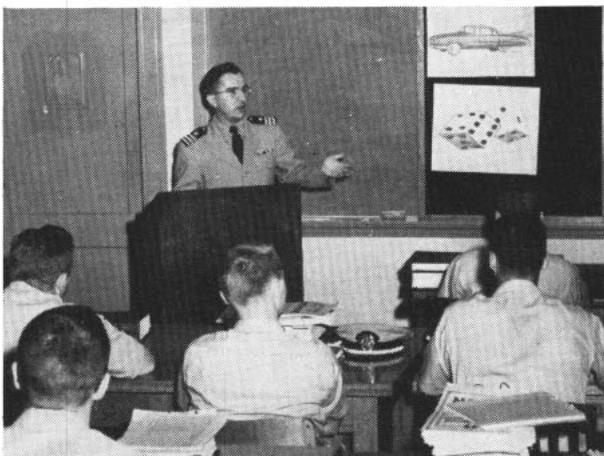
Since moving to Athens the school has graduated more than 4000 Supply Corps officers. In addition to the basic qualification course of 26 weeks, the school offers a 16-week qualification course in disbursing, naval administration, technical supply and supply afloat review for officers who have received part of their supply training in one of the 12 Supply Option NROTC universities; a nine-week Foreign Officers Supply Course for junior officers of friendly navies; a two-week supply management seminar on techniques of supply management in shore billets; a two-week commissary administration class

and a two-week general supply refresher course with emphasis on afloat billets. These two-week classes are conducted for Reserve officers on active duty for training.

Despite the heavy study load, the school has a physical fitness program featuring intramural sports throughout the year. Facilities are available on the base and in the local area for swimming, softball, tennis, volleyball, basketball and golf. The school also supports a wide variety of other extracurricular activities, including a dramatic group, philosophy club, toastmaster's club, glee club and student newspaper.

Instructing the student body and administering the station is a staff of 48 officers, supported by approximately 75 enlisted personnel and the same number of civilian employees. Staff and faculty include Supply Corps officers from virtually every important university and college in the country. All are experienced in supply, fiscal matters, storage and warehousing operations, subsistence and other phases of mobile support logistics. It's an excellent course.

INSTRUCTOR MAKES A POINT in classroom lecture (left). Library (right) is a good place to study or just relax.



LETTERS TO THE EDITOR

Advance Pay and Travel

SIR: There have been a few words passed between the disbursing officer and me about advance pay for officers when they are transferred.

Disbursing says that an officer who draws both advance pay and advance travel must have the commanding officer's endorsement on the orders.

I seem to remember a recent Nav-Compt Notice which said it was no longer necessary for officers to have their CO's approval to draw advance pay. I am not sure, however, about advance travel.

If officers do not need their commanding officer's approval to draw advance pay or advance travel, I don't see why an endorsement on the orders is necessary.—A. N. M., PN2, USN.

• *There is a little confusion here, but you're both right.*

The NavCompt Notice you mentioned was number 7220 of 7 Mar 1958. It eliminated the requirement for a commanding officer's approval of advance pay exceeding one month's pay to officers and warrant officers upon a permanent change of station. (The same notice authorized advance pay to be given officers on a PCS without their commanding officer's approval.)

If an officer wants both advance pay and advance travel, however, it must be authorized in the orders, endorsement to the orders, or by a pay record order, just as the disbursing officer said.—Ed.

Nautilus' Birthday

SIR: While serving aboard *uss Beale* (DDE 471) in 1955, I was certain that we operated with *uss Nautilus*, SS(N) 571. However, every time I tell about some of our experiences with the Navy's first atomic-powered sub I get shot down.

The "authorities" seem to say that *Nautilus* wasn't even launched in 1955. But I insist that we operated with the mighty 571 in 1955. Will you set them straight?—E. A. P., BT1, USNR.

• *You are so right.*

We can't verify the fact that *Beale* operated with *Nautilus* but the SS(N) 571 was operational at the time you claim you were aboard DDE 471, so we'll take your word for it.

As a matter of record, the keel of the world's first atomic sub was laid on 14 Jun 1952; she was launched on 21 Jan 1954 and commissioned while undergoing builder's trials on 30 Sep 1954. It was on 17 Jan 1955 that the historic message "Underway on Nuclear Power" was flashed from *uss Nautilus*.—Ed.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

Permanent CPO in Fleet Reserve

SIR: I made GMC (acting) on 16 Jul 1959. I understand that I must satisfactorily hold that rating for three years before it becomes permanent. However, I will become eligible for transfer to the Fleet Reserve about June 1961.

Will my appointment to GMC become permanent upon transfer to the Fleet Reserve?—J. T. H., GMCA, USN.

• *Yes—a man can be recommended for permanent appointment in one year following advancement to acting, if transfer to the Fleet Reserve is involved.*

Par. 15 (b) of BuPers Inst. 1430.7C has this to say on the subject:
"Chief Petty Officers who have completed at least 12 months' satisfactory

Precedence of CPOs

SIR: Article 1817 of U. S. Navy Regulations states: "The senior line chief petty officer in each mess shall be mess president." Where can we obtain a list or table of line rates which shows military precedence? Another thing, can the position of mess president be construed as anything but a military duty?—D. J. O., SHC, USN, and W. D. M., GMC, USN.

• *The term "line chief petty officer" carries back to the days when line and staff petty officers were distinguished by right and left arm rates. When right arm rates were abolished, the concept of line petty officer became obsolete. Action has been initiated to modify Article 1817 in which the term is used.*

The presidency of the chief petty officers mess is considered military duty. Precedence for military purposes is shown in "BuPers Manual," Article C-2120. A revision of this article, which clarifies precedence for military and non-military matters and includes an up-to-date list of enlisted ratings, is included in the current Manual reprint.—Ed.

service under the acting appointment may be recommended for permanent appointment at the time of their retirement or transfer to the Fleet Reserve and concurrent release to inactive duty.

"Recommendation regarding personnel approaching this status should be made in accordance with provisions of article C-7209 of the 'BuPers Manual.' In order to insure that the permanent appointment may be issued on release to inactive duty, this recommendation should reach the Chief of Naval Personnel three months before the anticipated date of release."

In other words, Chief, you'll get your permanent appointment, provided your request for same, and your CO's recommendation, reach the Bureau well in advance of your release from active duty.—Ed.

Rate on Retirement

SIR: Recently a Naval Reservist was released to inactive duty as a PO2 after he had completed 20 years' active service.

About three months later this same man was advanced to first class—his highest rating held. If he now requests retirement, will he retire as a PO1?—C.F.W., YN3, USN.

• *Yes. If he is a petty officer first class at the time of retirement, that is the rating in which he will draw retainer/retirement pay.—Ed.*

Shipboard Equipment

SIR: We've been having a discussion, and would like to know who owns the following equipment aboard ship: main engines, reduction gears, electric switchboards, and emergency diesels.

The majority say the Navy owns this equipment. A few of us are sure that the Navy leases it. Up to now I have always been told that the Navy leased almost all equipment except consumable items. We haven't been able to find anything on this subject in the *BuShips Manual*.—C. A. H., MM1, USN.

• *In this case, at least, the majority rules. The Navy owns all the machinery items listed in your letter and all other equipment installed in a ship. The only exception to this is small equipment, generally portable, that has been furnished or loaned to the Navy for service evaluation.*

The machinery items you mentioned are generally bought by the shipbuilders and their cost is included in the total contract price of the ship.—Ed.



DOUBLE THREAT—Navy's air-to-air and air-to-ground Zuni rocket travels faster than twice the speed of sound and can smash many types of targets.

More Light on the Subject

SIR: The Navy's ships are great, and they are versatile, but they are not quite up to one of the jobs described in the article, "Face-Lifting for a Flat-top," in your November 1959 issue.

Contrary to a statement in that story, *uss Oriskany* (CVA 34) is not capable of meeting the electric power needs of a city the size of San Diego, Calif.

Based on the 1958 figures for consumption of electric power, an average generating capacity of about 400,000 KW is required for San Diego. According to your article, *Oriskany's* ship's service generators have a capacity of 50,000 KW, which would mean she could supply only one-eighth of San Diego's requirements. However, a deci-

mal point must have been misplaced, for *Oriskany's* ship's service generators are rated at 1250 KW each, for a total of 5000—not 50,000—kilowatts. And, a considerable part of the ship's power output would have to be used to meet her own needs.

This letter is triggered not so much to correct the error in an otherwise excellent article as it is to straighten out a misconception which has been popular ever since the old *uss Lexington* (CV 16) supplied part of the electrical power for Tacoma, Wash., during a water shortage in 1929.

Lexington was an electric drive ship. (None of our large combatant ships are, today.) The characteristics of her *main propulsion*—not ship's service—

generators happened to make it possible to obtain the required frequency for shore use (which is often infeasible). Through large transformers and switchgear, set up ashore, *Lexington* provided 20,000 KW—a fraction of Tacoma's total requirements—to that city for about a month.

Since then, the Navy has been asked from time to time to supply large quantities of electric power. In some instances, the amounts requested were within the capabilities of naval ships, and the need justified such use. In most cases, however, either the output required was far beyond the capabilities of warships, or the situation did not justify this very expensive method of supplying electric power.

Most American cities use from .6 to one kilowatt of generating capacity per capita. None of our ships is able to meet all the electrical requirements of any sizable U. S. city.

Incidentally, some electric-drive DEs from World War II have been fitted so that they can readily supply about 4000 kilowatts for shore use to meet military or civilian requirements.—S. Neman, CDR, USN.

• *We were just getting all set to put up a brisk argument when we checked our Navy Department phone book to find out what office you were in, and discovered that you are Head of the Electrical Branch, Machinery Division, under the Assistant Chief of the Bureau of Ships for Technical Logistics.*

We hate to admit it, but you obviously know more about this subject than we do, so we must have been wrong.

Nolo contendere.—ED.

Counting a Minority Enlistment

SIR: Is every man who finishes a minority enlistment eligible to wear a service stripe?

Some of the older petty officers contend that a man who completes a minority enlistment is eligible for a service stripe even if he has only served three years and one day.

U. S. Navy Uniform Regulations, 1951, Article 1202, paragraph 6(e), states: "Enlisted personnel shall wear one service stripe for each full four years of service (other than on the retired list) in the Navy, Marine Corps, Coast Guard, Army, Air Force, Naval Reserve, or any combination thereof."

I say the minority enlistment serves only for constructive service and does not count as four years toward earning a service stripe.—J. D. R., YN2, USN.

• *You're right all the way. A minority enlistment counts as four years for constructive service only. Four years' day-for-day service is required to earn a service stripe.*

Looks as though you can fill in the older petty officers on this one.—ED.

TOP SALUTE—Crew of *USS Salisbury Sound* (AV 13) man the rails during rendering of full honors to Viet-Nam's president while visiting Saigon.



What's in the Wind?

SIR: Which way the wind blows?

Take a look at the flags in this photograph, and you'll get some idea of the trickiness of the wind currents in Suda Bay, Crete.

The picture was taken from the boat deck of *uss Sierra* (AD 18), by C. M. Falkenstein, SN, USN. The ships alongside are *uss Lowry* (DD 770) and *Hawkins* (DD 873).—G. M. Freedman, LTJG, USN.

• *This is one for the record, and that's a fine photo, too.*—ED.

Mole St. Nicholas

SIR: In your December 1959 issue, page 22, you quoted John Harris as saying "We towed some John Ericson monitors from around New York to Philadelphia. We also took the modern monitor *uss Amphitrite* (ARL 29) from Mole St. Nicholas."

I would like to know more about Mole St. Nicholas. Where is it, and for what is it named?

I have heard of *Amphitrite*, however. I believe I boarded her in the spring of 1903 at the New York yard after I completed my training cruise on *uss Hartford* about June that year.—B. M. P., ex-USN.

• *Mole St. Nicholas is located on the western tip of Haiti, opposite Cuba. It now has a population of about 1700 persons. At the time of John Harris' visit, Mole St. Nicholas was authorized as a coaling station for U.S. ships.*

Exactly how the port got its name, we were unable to ascertain. Here's what the dictionary has to say:

Mole (a word of French origin) is "A mound of massive work formed of masonry or large stones, etc., laid in the sea, often as a breakwater; also sometimes the harbor itself."

St. Nicholas, the dictionary goes on to say, is "a bishop of Myra, Asia Minor, who died, according to some authorities, about 345 A.D. He is the patron saint of . . . mariners, merchants, and children."

Situated where it is, Mole St. Nicholas seems appropriately named.—ED.

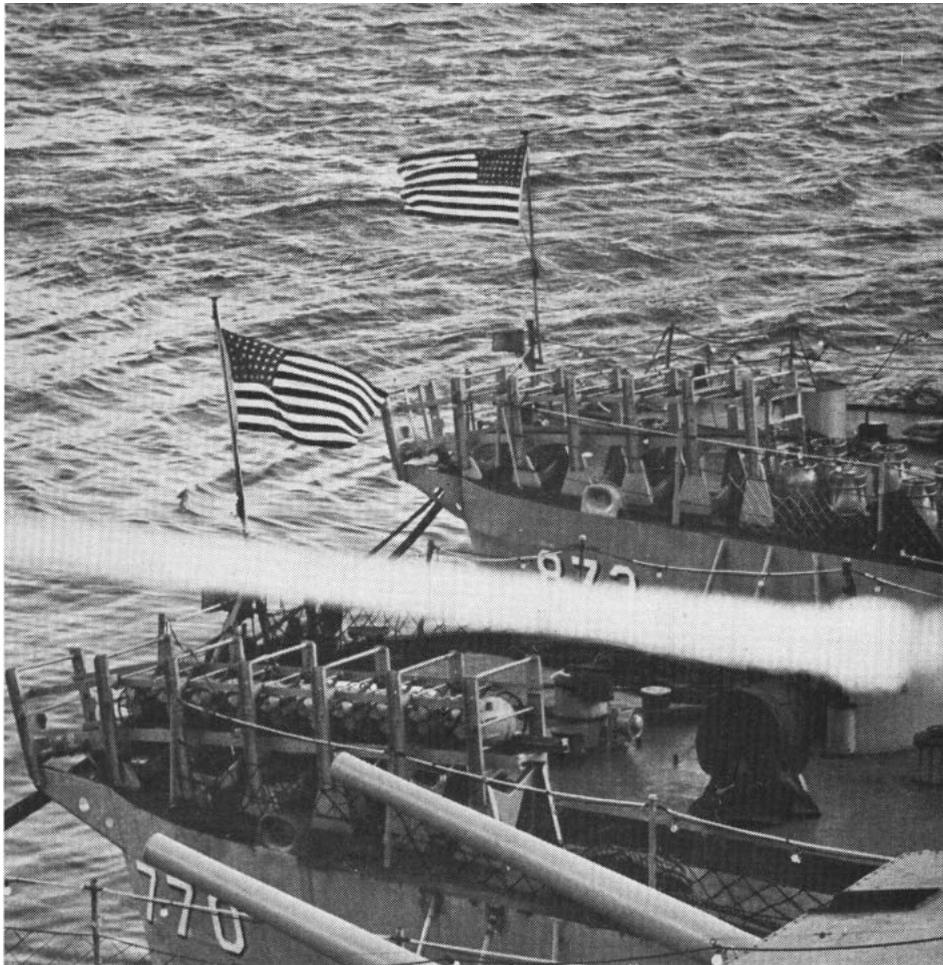
If ADs Up

SIR: The abbreviations for most Navy ratings are related to the full names for those specialties—for example—SM for Signalman, BM for Boatswain's Mate and GM for Gunner's Mate.

I am curious as to the meaning of the "D" in AD, for Aviation Machinist's Mate, since it seems highly unlikely it would stand for Diesel.—R. J. S., ex-USN.

• *The "D" doesn't stand for anything in particular.*

In 1947, when the rating structure was revised, the designators for all the General Service Ratings were converted to two-letter abbreviations. This was done mainly to make the designators



'BLOW ME DOWN'—Tricky winds in Suda Bay, Crete, have flags on sterns of USS Lowry (DD 770) and USS Hawkins (DDR 873) waving in opposite directions.

easier to handle with machine-accounting methods.

Wherever possible, the rating designator was designed to reflect an approximate abbreviation of the name of the rating. However, this could not be done in all cases.

If the abbreviation, AM, had been assigned to the Aviation Machinist's Mate rating (which was then abbreviated AMM), it would have been necessary to change the designator of the old Aviation Metalsmith rating (now Aviation Structural Mechanic) to something else. So—Aviation Metalsmith remained AM, and another two-letter designator was assigned to what had been AMM. See how simple it all is?—ED.

Constructive Time for Officers?

SIR: Can an officer, who earned constructive time as an enlisted man, count that time in figuring his years of service for retirement?

According to my records, I gained eight months of constructive time by coming in on a minority cruise and another four months by shipping over early, under Alnav 147-47, in 1947. I made Ensign, LDO, in 1952.

If I apply for retirement when I complete 10 years of commissioned service, I will have 25 years of actual service by then, plus more than a year

of constructive time—if it counts.

Could I plan on a pension based on over 26 years' service?—J. F. S., LT, USN.

• *The statutes which authorize constructive service credit for minority enlistments and for enlistments terminated within three months of the normal expiration of enlistment or extension of enlistment apply only to enlisted men. Therefore, you would not get credit for 26 years.*

In other words, no—officers are not credited for constructive time.—ED.

Wearing the Uniform Right

SIR: Since everyone nowadays seems to be talking about effective leadership, I would also like to make a few comments.

To begin, I believe the first requisite for a Navyman is to present a good military appearance—not only for the benefit of his colleagues, but for the public as well. It seems to me that this aspect of the Navy is somewhat neglected by a good percentage of personnel in all grades.

I contend that if we are to build up leadership within the service, we will have to start with the personal appearance of its leaders. A senior will not command respect if his personal appearance does not deserve it.



SHIPSHAPE AND SHARP—All stations manned and ready for General Quarters is the situation on board USS Halsey Powell (DD 686) during training cruise.

Speaking as a senior chief petty officer, I feel it is my responsibility to set an example in appearance and military etiquette for my juniors, and I expect nothing less of my seniors.

It is not my intention to accuse all Navymen of carelessness in their appearance, but rather to point out that one "crumb" can spoil the reputation and respect of an entire division.

I'd like to point out just a few shortcomings with regard to the uniform, which present an unmilitary appearance, at least in my opinion:

- White hats and cap covers frayed, dirty and discolored.
- Rating badges and service stripes threadbare, faded and torn loose.
- Shoes not shined, laces broken and heels worn.
- Shirt collars curled up, soiled and worn.
- Leather belts worn with khaki uniforms.
- Books and other gear carried in the hip pockets.
- Men with their hands in pockets.

Men of (and with) Constitution

SIR: I cannot guarantee the historical accuracy of the information below, which appears on a tray I recently purchased. However, it gave me a chuckle, and I thought your readers might enjoy it too.

"On 23 August 1779, *uss Constitution* set sail from Boston. She left with 475 officers and men, 48,600 gallons of fresh water, 7400 cannon shot, 11,600 pounds of black powder and 79,400 gallons of rum. Her mission—to destroy and harass English shipping.

"Making Jamaica on 6 October, she took on 826 pounds of flour and 68,300 gallons of rum. Then she headed for the Azores, arriving there on 12 November. She provisioned with 550 pounds of beef and 64,300 gallons of Portuguese wine. On 18 November, she set sail for England.

"In the ensuing days she defeated five British men-of-war and captured and scuttled 12 English merchantmen, salvaging only the rum. By 27 January, her powder and shot were exhausted.

"Unarmed, she made a night raid up the Firth of Clyde. Her landing party captured a whiskey distillery and transferred 40,000 gallons aboard by dawn. Then she headed home.

"*Constitution* arrived in Boston on 20 Feb 1780 with no cannon, no shot, no food, no powder, no rum, no whiskey and 48,600 gallons of stagnant water."

—Lee Rocke, New York, N. Y.

• There's just one flaw in this interesting account. *Constitution* wasn't launched until 21 Oct 1797—more than 17 years AFTER your tray has her returning to Boston. Got any more like this one?—ED.

• Wallets hung over the top of the trousers in saddlebag fashion.

One reason for carelessness about the uniform is the fact that some personnel are under the impression that their uniform is only a working uniform, to be worn when absolutely necessary. This misconception (in my opinion) clearly indicates that such personnel are not being properly indoctrinated by their seniors or leaders. Otherwise, they would show more respect for, and have more pride in, the uniform of the U. S. Navy.—R. Z. W., SMCS, USN.

• Well said. Your views sound like a good start in the right direction.—ED.

Promotion Opportunities

SIR: In the few years I have been in the Navy I've seen many men who passed the examinations for advancement in rate time and time again but were not advanced because of quota limitations. As a possible solution to this problem, I would like to recommend a change to the present examination system.

It is understood that there must be certain limitations as to the number of persons who can be advanced each year. However, wouldn't it be more appropriate and economical to give advancement examinations only once a year? And, a result of this annual exam, advance those within the pre-determined limitations and place the others who qualify (those who'd normally lose out because of quotas) on a waiting list. Then, in six months, instead of administering another exam, fill vacancies from personnel on the waiting list.

I think such a system would be economical and at the same time be a big boost to morale as it would give a fair shake to those who "get quota-ed" time after time.—C.A.H., YN3, USN.

• Examining once a year, and maintaining an eligibility list of personnel not advanced owing to quota limitations, has been explored. It was determined, however, that such a system is not feasible for personnel in the lower pay grades, since the majority of them are serving in their first enlistment and only about 20 per cent of them reenlist.

It is felt that your system would not work for this reason: Say that on 16 May, the Navy required 1000 PO3s and 2000 passed the examination. Of these, 1000 would be rated and the remaining 1000 placed on a waiting list. Then, on 16 November, the Navy needs 1000 more PO3s and goes to the waiting list. But, instead of 1000, there are only 200 left. The other 800 have been discharged or released to inactive duty. Had another examination been administered, there would be 1000 persons available for advancement on 16 November.

Your suggestion was in the right direction but . . . any more ideas?—ED.

First Medal of Honor

SIR: Just for the record, the first Navy Medal of Honor went to seaman John Williams of *uss Pawnee* for action against Confederate batteries near Aquia Creek, Va., on 21 Jun 1861.

This information appears in Roscoe and Freeman's *Picture History of the U. S. Navy*.—LCDR M. F. Studebaker, USN.

• *We've spent many pleasant hours poring through the book you mention. However, we can't quite go along with your interpretation of the statements made in it.*

Our copy of Picture History states (in Para. 666): "Action at Mathias Point was also memorable for episode in which enlisted man won Navy's first Medal of Honor."

*Paragraph 668, on facing page, further states: "On April 3, 1863, Naval Secretary Gideon Welles awarded the [Medal of Honor] to some 30 Union sailors. Among the first citations approved was that of John Williams, captain of the maintop, *uss Pawnee*, "for conspicuous gallantry in action during the attack on Mathias Point."*

As we see it, Williams could have been the first, and most certainly was among the first, to have received the Medal of Honor. But he was not necessarily the first.

According to the book Medal of Honor (1861-1949), Williams was one of 41 men who were awarded a Navy Medal of Honor as a result of General Order 11. Which one of these actually received the first medal is not known.

However, so far as we know, Williams did perform the earliest deed for which a Navy Medal of Honor was presented. Here is the citation which described his action:

*"Serving as captain of the maintop of *uss Pawnee* in the attack upon*

Ship Reunions

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

• *American Defenders of Bataan and Corregidor*—The annual reunion will be held at the New Hilton Hotel, Pittsburgh, Pa., on 6, 7 and 8 May. For details, write to Kenneth Curley, 221 Evaline St., Pittsburgh 35, Pa.

• *uss Idaho (BB 42)*—The third annual reunion will be held in Norfolk, Va., on 17, 18 and 19 June. Write to *uss Idaho Association*, P. O. Box 8048, Norfolk 3, Va.

• *uss Oklahoma (BB 37)*—A reunion is scheduled for 6, 7 and 8 May at the Hotel Sylvania, Philadelphia,

Pa. For information, write to Edward H. Lutz, 673 Lindley Rd., Glenside, Pa.

• *uss South Dakota Veterans' Association of World War I*—The 39th annual reunion of the World War I crew will be held at Everett, Wash., on 9 April. For more details, write to Carl Haggland, 2519 N.E. 59th Ave., Portland 13, Oreg.

• *Submarine Veterans of World War II*—The sixth reunion is scheduled for 22-26 August in San Diego, Calif. For additional information, write to Ernst T. Rosing, 1409 S. East Ave., Berwyn, Ill.

• *uss The Sullivans (DD 537)*—A second reunion for those who served from September 1943 to December 1945 is being planned. Write to Robert H. Sander, 325 Thatcher Ave., River Forest, Ill.

Mathias Point, 26 June 1861, Williams told his men, while lying off in the boat, that every man must die on this thwart sooner than leave a man behind. Although wounded by a musket ball in the thigh, he retained the charge of his boat; and when the staff was shot away, held the stump in his hand, with the flag, until alongside Freeborn."

Since this first deed for which a Navy Medal of Honor was presented, the Medal has gone to hundreds of men who have distinguished themselves by heroism.—Ed.

Not Time to Retire

SIR: Your recent articles about *uss Scorpion*, SS(N) 589, have been both interesting and informative. I also modestly enjoyed seeing my own small

contribution in your October issue. There is only one sore spot. I must take exception with your rewrite man who added the (Ret.) to my name.

As Mark Twain once remarked, "the report of my demise is highly exaggerated," so in my case the (Ret.) is somewhat premature. I am currently on active duty with the Navy Medical Unit, Tripler USA Hospital here in fair Hawaii. My last tour of sea duty was aboard *uss Stark County* (LST 1134).

In a few years I will be happy to put the (Ret.) after my name and rate, but for now, let's just stick to USNR.—Raymond T. Strunz, HMC, USNR.

• *Sorry we turned you out to pasture before you were ready. Now you know how your name will look in print when you do retire.—Ed.*

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LETTERS TO THE EDITOR (Cont.)

What Was That Ship?

SIR: In the "Letters to the Editor," back in your October 1959 issue, R. T. Strunz, HMC, USNR (Ret), asked the identity of a former American battleship, sold to Greece, which he saw at Piraeus in 1920. Perhaps I can help.

In 1919, when *uss Dupont*, destroyer 152, arrived at Constantinople, Turkey, I reported to my captain (W. A. Bag-galey) that there was an American battleship in the harbor. He told me to look further aft, and I then saw that she was flying a Greek flag. I found

later that this was the old *Mississippi*—renamed *Kilkis*.

Perhaps the one that Chief Strunz saw in Piraeus was the old *Idaho* or *Iowa*—renamed *Lemnos*.—John A. Perry, QMQ1, USN (Ret).

• *From the sound of your letter, we get the idea you're eliminating the old Mississippi as a possibility. If so, the ship in question must have been the old uss Idaho.*

The uss Iowa of that era (our second ship by that name) was sunk as a target at the end of World War I—not sold

to Greece—so she's out of the running.

The second uss Idaho was sold to Greece in July 1914, so she's probably the one we're after.

A forerunner of the modern battle-ships, she was launched on 9 Dec 1905. She displaced 13,000 tons, was 375 feet long, measured 77 feet at the beam.

In 1913 Idaho was placed in the Reserve Fleet at the Philadelphia Navy Yard, but soon afterward she was put back in commission to sail to the Medi-terranean. While still in those waters, she was sold to Greece.—Ed.

Bosun's Mate Wants to Change His Rate

SIR: I'd like to change my rate to machine accountant. Is it possible to do so, and is there a school or on-the-job training program for such a purpose?

I will obligate myself for any time necessary to receive such school or on-the-job training. My GCT plus ARI total is 125.—N.W.B., BM2, usn.

• *You're on the right track, Boats, but you're shooting for the wrong job. Machine Accountant is not one of the ratings that is open for "changes to." The Navy-wide allowance in that rating is satisfactory, and it is not one of the ratings included in the conversion program.*

Don't despair, though. With a combined GCT/ARI of 125, there are several other ratings open to you. We won't quote the entire BuPers Instruction (1440.18B) which deals with the rating conversion program, but we will list the eligibility requirements for Class "A" schooling, which is normally offered to personnel in your pay grade under the conversion program.

They are:

(a) Must be a volunteer for change to one of the open ratings.

(b) Must be in one of the ratings in which there is an excess of requirements.

(c) Must meet obligated service requirements.

(d) Must meet test score requirements.

(e) Must be recommended by commanding officer.

(f) Must meet security clearance requirements.

(g) Must have less than 14 years' active naval service at the time of submission of request for school.

The following table may suggest a rating you'd like to switch to, providing you can get a recommendation from your commanding officer, and can meet all the other criteria. We've listed only those ratings which are open to conversion from persons in your pay grade (E-5).

In the case of the QM and SM

ratings, where no schools have been established, your request to convert, if approved, would result in your being placed in "in-service" training. You would be given a primary NEC Code Number showing you to be a trainee for the rating to which you were converting. When you were considered fully qualified as a result of

this in-service training, you would be given an exam for change of rating.

If you were ordered to school in connection with converting your rating, you would be changed in rating in equal pay grade upon successful completion of the course.

Hope this will be of some help to you. Good luck.—Ed.

Rating	Schools	Approximate School Length	Obligated Service	Requirements
AT	AT Class "A"	30 weeks	36 months	GCT + ARI + ETST 170 or GCT/ARI 115 and MECH 55. Normal color perception. Clear speaking voice.
ET	ET conversion course	28 weeks	36 months	GCT + ARI + ETST 170 or GCT/ARI 115 and MECH 55. Normal color perception. Clear speaking voice.
IC	IC Class "A" plus IC Class "C" (Gyro) (only at Great Lake)	26 weeks	36 months	ARI/MECH 105 or ARI/MECH 100 + ETST 55. Normal color perception.
NW	IC Class "A" (San Diego)	14 weeks	24 months	ARI/MECH 105.
	NW Class "A"	20 weeks	24 months	Normal color perception.
QM	No school established			
RD	RD Class "A"	12-26 weeks	24 months	GCT/ARI 105. Normal color perception. Normal near vision.
RM	RM Class "A"	16-24 weeks	24-36 months	GCT/ARI 100. Radio 60 or demonstrated code ability. Normal color perception and hearing.
SM	No Class "A" school			
SO	SO Class "A"	16-24 weeks	24-36 months	GCT/ARI 110 and Sonar 55 or GCT/ARI 105 + Sonar 55 + ETST 55. Normal hearing and color perception. Normal near vision. Clear speaking voice.



TOPSIDE VIEW shows area where Seabees worked at Squaw Valley. At right, they discuss their plan of attack.

Navy Seabees Have Plenty of "Snow-How"

THE SEABEES, tackling a job assigned to them by Congress and the administration, have put their "snow-how" to use at Squaw Valley, Calif., to help make the 1960 Winter Olympics a success.

Their assignment, known as "Operation Packdown," was to turn 125 acres of snow into an area capable of accommodating 12,000 automobiles. In the High Sierras, where Squaw Valley is located, an overnight snowfall can bury a car, so the accomplishment of such a feat presented a sizable problem. The Navy developed a solution to the problem last year, when a special detachment of Navy Mobile Construction Battalion Ten (MCB 10) completed a series of successful experiments at the Olympic site. Using a technique they had developed for the construction of snow aircraft runways in Alaska and Greenland, the Seabees packed down the snow to form a level area.

Snow compaction is one phase of the Navy's Polar Research Program. The Navy's first major field experiments in snow compaction were conducted on the Greenland Ice Cap in 1953 and '54. Later, Polar Division of the Naval Civil Engineering Laboratory at Port Hueneme, Calif., which has pioneered most of the Navy's research in snow construction and compaction, furnished much of the special equipment used in cold weather experiments during Operation Deep Freeze.

In 1957 and '58, when the Polar Division was making snow compaction tests at Truckee, Calif., the Olympic Commission became inter-

ested in the possibility of using the pack-down method to make a parking area on the floor of Squaw Valley to take care of the thousands of cars and buses bringing spectators to the Olympic site.

The average annual snowfall at Squaw Valley is 450 inches, and the average depth of snow there is 108 inches. In February 1959, 49 inches of snow fell in a single day.

The successful Seabee experiments in the area led to a conference between Navy Civil Engineer Corps officers and the Olympic Commission—and later—to a recommendation by President Eisenhower that federally appropriated funds be used for the construction of the ice arena for the skating events at the Winter Olympics. The appropriation also included money for the armed forces to lend a helping hand during the Olympics, and special funds were set aside for the Navy to conduct a series of snow compaction tests at Squaw Valley in the winter of 1958-59 to determine the problems the Seabee project would involve.

During last year's tests the Seabee Detachment built a parking area big enough for 350 vehicles, which ranged in size from small European cars to huge passenger buses. The area provided the Seabees with the same sort of terrain, snow and weather conditions they encountered this year during Operation Packdown.

For that project, the Seabees had a crew standing by on a 24-hour basis. As soon as new snow hit the ground, they went after it with a five-ton steel roller. After the roller's corrugated surface broke up the

snow, the parking area was re-rolled with a smooth-faced roller. Then, a pulverizing process, employing a rotor mechanism, was used to chew the snow into fine particles and discharge them back onto the snow pack. The pulverizing rotors are eight feet wide and studded with many small, hoe-like blades that rotate at up to 800 revolutions per minute. The Civil Engineering Lab designed new drive systems for these units, and powered them with larger engines.

After the pulverizers had done their job, another pass was made with the smooth-faced rollers (which were entirely designed and developed by the Civil Engineering Lab). Seven of these were used.

Next, the area was scraped level by two tractor-pulled snow planes, which are modified versions of conventional construction equipment. They are mounted on skis, with hydraulic steering. In addition, the planer blades have been changed so they can be used for either planing or grading.

The planing was followed by another pass with the rollers. Then, two modified fertilizer spreaders were used to cover the planed area with sawdust. This helped protect the snow from the heat of the sun, absorbed moisture and provided traction for the cars and buses using the parking area.

Without the Seabee's help, spectators and participants would have had to park at Tahoe City—six miles from Squaw Valley—or at Truckee—11 miles away.

—Fred W. Doby, JO1, USN.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



HOME GROWN MUSIC—Cruisemen of USS Macon (CA 132) being entertained by their own band. L. to r., S. R. Howard, CSSN, J. D. Everett, CS1, C. C. Lord, AK3, CWO W. G. Murphy, Z. A. Strait, GM3, and M. H. Schwartz, SA.

Silver in the Oil

Another safety feature in Navy flying is a newly-developed technique which makes possible the evaluation of aircraft engine condition by analyzing engine oil.

Simply stated, the process consists of analyzing samples of engine oil with a spectrometer to determine the kind and amount of metals present.

A one-ounce sample from the engine oil reservoir is burned between two carbon electrodes in a direct-reading spectrometer which identifies the metals and indicates their quantity.

A high concentration of silver in

the oil, for instance, indicates a faulty bearing. Excessive chromium denotes cylinder wall damage, while a large amount of aluminum might be caused by piston or valve guide failure.

The new process was developed by the Bureau of Naval Weapons in its Engineering Materials Laboratory at NAS Pensacola. While not previously applied to aircraft engines, the technique has long been used by railroads and other operators of diesel equipment.

BuWeps thinks similar methods might be applied to checking out gas-turbine engines. NAS Pensacola engineers are testing that concept.

Latest in Sub Tenders

When *uss Proteus* (AS 19) puts out from Charleston, S. C., in the near future, the mobile concept of our new fleet ballistic missile submarines will take another step forward.

Proteus—the Navy's largest and most modern sub tender—will provide full mobile base facilities and support for our Fleet of FBM and other nuclear-powered submarines. The converted tender will have the capabilities for full nuclear reactor support and facilities for handling, replacement and limited servicing of the *Polaris* fleet ballistic missile.

To accomplish these tasks—which were not provided for in her original design—*Proteus* had to be cut into two parts and have a “plug” inserted 12 feet forward of the original midship. (*Proteus* was originally built in 1942, as an 18,000-ton, 530-foot *Fulton* class tender. She now displaces an additional 500 tons and is 44 feet longer.)

The surgery and addition of more displacement to *Proteus*—technically referred to as “jumboizing”—was a delicate and complicated operation. When a ship's length is increased, more longitudinal strength must be added so that it will not break apart.

The new plug added to *Proteus* was six decks high (63 feet, 7 inches) and had a beam of 73 feet. The bare hull weight of the 44-foot midsection weighed about 500 tons.

Many detailed plans had to be worked out before this plug could be inserted. When the job actually began, much of it had to be accomplished at night. Thermal expansion caused by the sun's heating has a tendency to make an intact ship grow toward the ends. A gap to allow for this had to be included in the initial plans and compensated for in the design and construction of the plug.

All *Proteus*' stability characteristics had to be carefully studied so that the stern section would float after it was cut from the forward part. After the ship was trimmed to the proper attitude, the forward section was flooded and held on blocks in the drydock. This served as a point

YESTERDAY'S NAVY



On 2 Mar 1815 the United States declared war on Algiers and ordered a squadron under Commodore Stephen Decatur to the Mediterranean. On 3 Mar 1819 a law was passed setting up a system for naming Navy ships. On 9 Mar 1847 the Navy landed General Winfield Scott's army at Vera Cruz, Mexico. On 20 Mar 1920 *uss Maryland* (BB 46) was launched at Newport News, Va. On 31 Mar 1941 the South Greenland Survey Expedition arrived in Greenland to locate and recommend sites for military and naval installations and to gather hydrographic information.

of reference in positioning the after section. (Holes were burnt into the forward section in order to flood it and destroy its buoyancy.)

Before the hull was cut, stiffening braces were installed in the forward section of the ship in order to strengthen the hull structure since there were no through transverse bulkheads at the point where the cut was to be made.

It took a crew of workmen only two days to make the cut. Working inside the ship, they worked from extreme outer to inner areas. The cut was not straight, but recessed in spots.

When the cut was completed, the stern section of the hull was pulled aft and the drydock was then pumped dry, leaving the separated sections resting on oak-capped blocks. Almost immediately, the existing gap in *Proteus'* midsection began to be filled. A number of 29-foot sub-assemblies that had been constructed in the shipfitter's shop ashore, were lowered into their proper position. The size of the sub-sections were limited because of the restricted capacity of the drydock crane facilities.

As the plug construction advanced, the various sub-assemblies were welded to the two cut surfaces of the original ship. Upon completion of this phase of the conversion, the lengthened ship was floated out of the drydock for its final fitting out period.

Proteus has been having her navigation and electronics equipment installed. She then completes all machinery tests before beginning her dock trials. Sea trials will commence on 24 May and commissioning is scheduled for 17 Jun 1960. Expected completion date is 1 Jul 1960.

Proteus will then become operational—about the same time as *USS Patrick Henry*, SSB(N) 599, our second *Polaris*-firing sub. This nuclear-ballistic missile sub tender and the nine FBM submarines that are in operation or under construction, will be assigned to SUBRON 14 in the Atlantic Fleet.

Angle Solver for Astor

A new fire control instrument, called the Mark 18 angle solver, is being developed for the Bureau of Naval Weapons under a \$2.5 million contract.

It will be used to control the *Astor* torpedo, which has the longest



HERE'S HOW *USS Proteus* (AS 19) is being converted to handle FBM subs. It was cut amidships, and a 'plug' to accommodate new gear was inserted.

range of any operational underwater weapon. The transistor-powered apparatus can also control the firing of most other operational torpedoes.

The Chief of the Bureau of Naval Weapons has said that the *Astor* torpedo promises to be one of the Navy's most reliable and effective defenses against enemy submarines.

TV Probes Deep

Molars and bicuspid, or maybe an appendix, brought to you in living color?

It just may happen, now that a new instrument which makes it possible for a dentist to view any part of a patient's mouth, highly magnified, on a TV screen has been perfected.

Developed by private contract under the sponsorship of the Office of Naval Research, the new device was successfully demonstrated recently at the U. S. Naval Dental School, Bethesda.

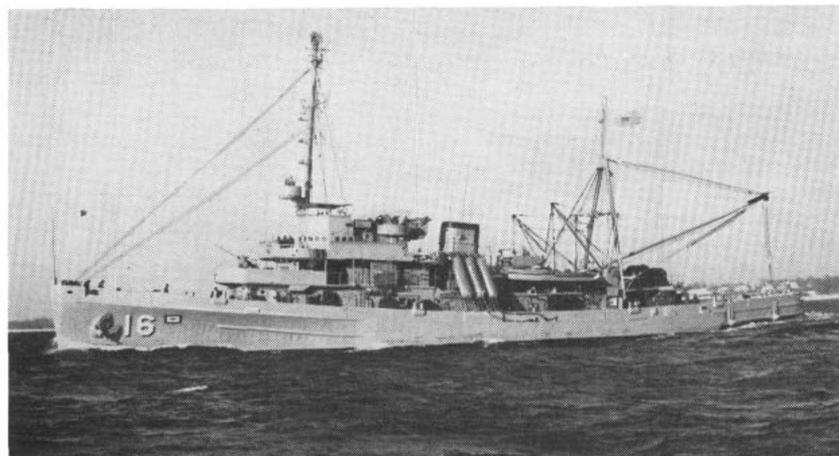
The new system consists of a bundle of optical fibers bound together in a small whip-like cable, with a fingertip-size lens arrange-

ment at the probing end. It is coupled to a closed-circuit TV camera at the other end.

A bundle contains up to 10,000 of the hair-like fibers. Each tiny fiber picks up light from a microscopic section of the surface in front of it and transmits it to the other end. With thousands of the fibers bound tightly into a cable, a picture made up of the thousands of light segments is sent from the lens inside the patient's mouth to the TV camera and from there to the screen. There the tooth, or a portion of it, is seen magnified up to 35 times its actual size.

The Surgeon General of the Navy feels that the new instrument will be very useful in dental procedures, promises improvement in dental training, and, with further development, could be adapted to other medical usage.

TV cameras have been used for some time in very limited dental intraoral application. They could view only part of the mouth, presented a difficult lighting problem, and caused discomfort.



TOPSIDE PALS—Submarine rescue vessel, *USS Tringa* (ASR 16), stands by to rush to the assistance of submariners should trouble develop down below.

SERVICE JACKET

Among recent naval activities:

- *uss Tarawa* (CVS 40) entertained some 500 dependents and friends on a one-day family cruise.

- *uss MSC 286* was transferred to the Korean navy and is now known as *ROKNS Kum Kok* (MSC 525).

- *uss John S. McCain* (DL 3) entertained more than 10,000 Burmese during a four-day visit to Rangoon—the first U. S. warship to visit Burma in four years.

- The first nuclear ship to be built in the South, the FBM sub *Robert E. Lee*, SSB(N) 601, was launched at Newport News, Va.

- The 28,000th landing and the 25,000th catapult takeoff were chalked up on the same day by *uss Hancock* (CVA 19) of the Seventh Fleet.

- A few days later, LTJG John W. Potter, USN, scored *uss Midway's* (CVA 41) 80,000th landing.

- And—the following day, LTJG R. R. Smiley, III, made the 22,000th landing of an A4D on the deck of *uss Ticonderoga* (CVA 14).

- Meanwhile, Patrol Squadron 48 returned to San Diego after a six-month tour of duty in the Western Pacific.

- *uss Shangri La* (CVA 38) is in the Bremerton Naval Shipyard for routine overhaul after her most recent Far East tour.

- *uss Toledo* (CA 133) concluded her Far East good will tour with a five-day visit to Saigon, Republic of Viet-Nam.

- This was followed by a three-day good will visit by *uss Saint Paul* (CA 73) to Djakarta, capital city of Indonesia.

- At Subic Bay, Philippines, *uss Thetis Bay* (LPH 6) received a special CNO Safety Award for her 16,000 accident-free helicopter landings during three years of operations since her commissioning as a helicopter assault carrier.

- *uss Portunus* (ARC 1) has been recommissioned the *NRP Medusa* following her transfer to the Portuguese navy under provisions of the Military Assistance Program.

- *Scorpion*, SS(N) 589, ninth atom-powered submarine to join the nuclear underwater fleet, was launched at Groton, Conn.

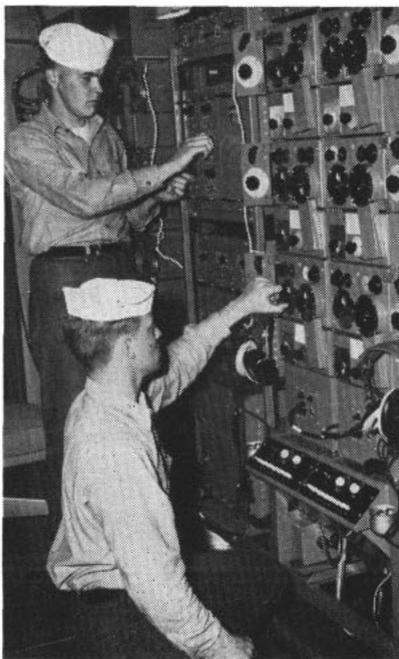
- The Navy's deep-sea diving bathyscaph *Trieste* broke the all-time world depth record when it

reached an underwater depth of 18,600 feet in the Pacific Marianas Trench, near Guam. It was assisted by *uss Lewis* (DE 535) and *Wandank* (ATA 204).

- *uss Essex* (CVA 9), oldest combatant carrier in active naval service, racked up her 94,000th arrested landing while conducting exercises in the Med.

- Ships of Amphibious Squadron One, which has been deployed in the Western Pacific, have returned to their home port of San Diego. Homecomers include: *uss Henrico* (APA 45), *Lenawee* (APA 195), *Noble* (APA 218), *Bexar* (APA 237), *Union* (AKA 106), *Washburn* (AKA 108), *Epping Forest* (LSD 4), *Thomaston* (LSD 28), *Comstock* (LSD 19), *Washtenaw County* (LST 1166), *Terrell County* (LST 1157), *Whitfield County* (LST 1169), *Dunn County* (LST 742), *Washoe County* (LST 1165), *Floyd County* (LST 762) and *Stone County* (LST 1141).

- *uss Claxton* (DD 571) is the latest of five destroyers to be transferred to Germany under the Military Assistance Program. The others who have been, or will be, made available are *ex-Ringgold* (DD 500) and *ex-Wadsworth* (DD 516) and *uss Dyson* (DD 572) and *Charles Ausburne* (DD 570).



PROBLEM TIME—Tradevmen of Air Early Warning Training Unit, NAS Patuxent River, set radar generator.

Leaving the Active Fleet

Twenty-two ships of the Atlantic and Pacific Fleets will be inactivated and placed in reserve by 30 June.

Nine ships are in the Pacific Fleet and 13 in the Atlantic Fleet. The move is part of Navy policy to place more of its older ships in reserve status and thereby make funds available for rehabilitation and modernization of other ships remaining in the Fleets.

Ships to be deactivated in the Atlantic Fleet are: *uss Gatling* (DD 671), *Dashiell* (DD 659), *Cotten* (DD 669), *Caperton* (DD 650), *Daly* (DD 519), *Cassin Young* (DD 793), *Hale* (DD 642), *Benham* (DD 796), *Jack W. Wilke* (DE 800), *Robinson* (DD 562) and *Snyder* (DE 745).

Pacific Fleet ships are *uss Floyds Bay* (AVP 40), *Onslow* (AVP 48), *Mulberry* (AV 27), *Greer County* (LST 799), *Saline County* (LST 1101), *Rice County* (LST 1089), *Currier* (DE 700), *Lewis* (DE 535) and *Perch* (APSS 313).

Ever Heard of Snow Fleas?

Fleas have been found in Antarctica. They were discovered by a team of entomologists working with Operation Deep Freeze '60.

Known as snow fleas or springtails, they are said to be the first known living insect life uncovered in the Antarctic. These black, wingless, primitive-type insects are about an eighth of an inch long. They were found in several stages of development under dry rocks at Hallett Station, 340 miles north of McMurdo Sound.

The springtails, named for their ability to spring several inches at a time by using their tails, are usually quite fast. The fact that 60 specimens were collected in approximately 15 minutes indicates that the flea population in Antarctica is very large.

In addition to the springtails, a few specimens of mites were also found. Measuring less than one half of a millimeter in length, these orange-red, spider-like creatures inhabit the soil in dry areas.

Navymen at McMurdo have found no springtails there. Scientists explained, however, that the insects move about, away from the shelter and warmth of rocks, and sooner or later prevailing winds will scoop some of them up and carry them in the direction of McMurdo area.

Rocket Catapult Escape System

The Navy's new rocket catapult escape system, capable of saving a pilot's life in "bail-out" from ground level to high altitude, is now ready for the Fleet.

It consists of a solid propellant rocket fastened to the pilot's seat, operating as a piston inside another tube which is attached to the aircraft. One feature, unique in propulsion development, is a gas booster tube contained inside the solid propellant.

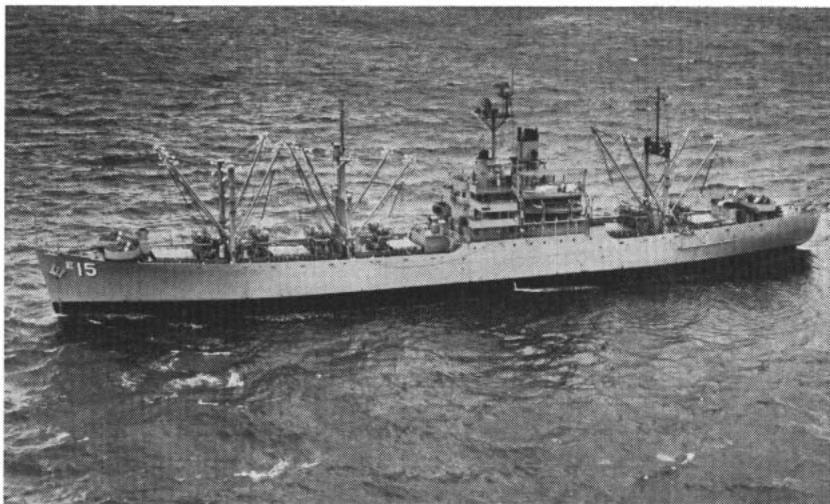
The system works in four stages: (1) propellant gases push the seat out of the aircraft; (2) the rocket projects pilot and seat 200 feet above his aircraft; (3) mechanical device separates pilot from seat; (4) parachute opens, lowering pilot safely.

The system has been under development at the Naval Ordnance Test Station, at China Lake, for two years. It is one of Navy's answers to the fatality factor for aircraft accidents below 2000 feet. Most jet crashes occur because of flameout on takeoff or landing.

The rocket-ejecting equipment pushes a pilot out of the cockpit at a maximum acceleration of 13 G's for .4 seconds. This is safely below the human tolerance figure.

A load-limiting, energy absorbing system protects the pilot in the event of a crash landing.

The system has a two-phase ejection control. The first is triggered



HOT CARGO—Ammunition ships like *USS Vesuvius* (AE 15) take their names from volcanoes, indicative of the explosive characteristics of their cargo.

when the pilot pulls a curtain over his face. If unusual flight conditions prevent this, an alternate control, located at the seat front between his legs, also enables him to eject.

The system is being installed in the A4D attack bomber; it will replace all existing systems in the *Skyhawk*, and all new aircraft will come so equipped.

Carriers Shifted

The Navy's latest moves in a series of planned rotations of its ASW and attack carrier forces have affected three 27,000-ton *Essex*-class flattops.

Triggering the changes was the

shift of the ASW support carrier *USS Tarawa* (CVS 40) to inactive status. *Tarawa* completed its final Fleet ASW exercise early this year and proceeded to Philadelphia, Pa., where she was decommissioned and assigned to the Atlantic Reserve Fleet.

Slated to replace *Tarawa* is *USS Essex* (CVA 9). She'll return from the Med in March and enter New York Naval Shipyard for overhaul and some modernization before being redesignated a support carrier.

The tag end of the triple play will see *USS Shangri La* (CVA 38) shift from the Pacific to the Atlantic Fleet in May as relief for *Essex*. Her new home port will be Mayport, Fla.



DUMMY UP—New rocket-propelled aircraft escape system blasts man-sized dummies to safety during tests.



LITTLE BIG TOP—The side show is just one of the many interesting features in Navyman Parker's miniature circus.

Sawdust and Salt

Model-building is not an unusual pastime among Navymen, but James M. Parker, YN3, has given the hobby a different twist.

He's building a model circus—complete with side show.

According to Parker most other model circus enthusiasts try to recapture the past with oldtime wagon shows. "So far as I know," he says, "there are just two model circus builders who have mud (truck-borne) shows—myself and someone in Maryland."

Jim just started his circus in March 1959, but his love for the world of sawdust, spangles and the spectacular goes back to his boyhood. Whenever the circus was in town, he was

always on hand. He has been a member of the Circus Fans Association of America since 1957.

Now attached to the 14th Naval District Passenger Transportation Office at Pearl Harbor, Parker finds being in the Navy a considerable help in building up his collection of miniature animals and figures. He started the collection when he was in Japan two years ago and now has model animals from all over the world.

These must be just right in every detail, and in his vast menagerie he has camels made in Australia, a rhinoceros from Great Britain and several horses from Germany. Altogether he has a total of 69 members of the horse family, ranging from draft animals to baby burros.

Most of his figures have come from ordinary model railroad sets, but you'd never guess it to look at his nearly completed side show. At present, the attractions include four midgets, a bearded lady, a fire eater and a tattooed lady. Normally, all of them would have been just plain people hanging around a model railroad layout, but thanks to Parker's alterations they have now found their way into his Congress of Freaks.

The owner of the Parker Brothers Circus makes his own flat-bed trucks and wagons, using model trucks and wagons as a base. He then builds the bodies of balsa wood, working with parts from model circus wagons. The finished product then joins a variety of circus vehicles that range from an automatic stake driver to a

"dining department semi"—more commonly known as the "cook house."

Because space is limited, Parker is unable to set up his show in its entirety. He works on one unit at a time, and is now completing his side show.

There is too much sawdust in Parker's blood for him to stop at model building. He also collects circus photographs, posters and music, and occasionally "clowns around" in the familiar face paint and costume of the traditional circus funnyman. He has joined the Circus Historical Society, and he hopes to become a life member of the Circus World Museum.

—By Lynn Turner, JOSN, USN.



ON THE JOB—Jim Parker, YN3, USN, takes care of clerical tasks at 14th ND, Passenger Transportation Office.



OFF THE JOB—Yeoman Parker is a circus man at heart. Here, he dons clown costume for some youngsters.

Loran-C Hits New High

A radio navigation system called Loran-C, which will permit a ship to determine its position accurately at long ranges from transmitters, has been tested with favorable results.

An outgrowth of earlier pulsed-type radio navigational systems, Loran-C achieves a greater range because it operates at a lower frequency and uses more sophisticated circuitry than did earlier systems. The Loran-C system also provides a ship with a more precise method of "position fixing" than did earlier systems.

The evaluation was based on a study of the East Coast Loran-C system. This system, with transmitting stations in Massachusetts, North Carolina and Florida, has been operated by the Coast Guard since 1957, using older Loran transmitters which have been modified.

The evaluators found that in transmitting ground waves close to the earth's surface, the system operated to a range of 1400 nautical miles during the day and about 1000 nautical miles at night with high precision. Encouraging results were also obtained using this system to ranges of 1800 nautical miles during the day and 2300 nautical miles at night, with slightly larger errors. The latter ranges were attained by bouncing the signals off the ionosphere, a method which gives a greater range with somewhat reduced accuracy.

To study the system, a civilian firm analyzed one year's operation of a monitor station located about 550 miles from the closest transmitter and about 900 miles from the most distant transmitter. The results indicated that a ship in this area could expect 95 per cent of its fixes to be within 800 feet of the correct geographical position. Results also indicated that even greater accuracies were obtainable.

The North Carolina station sends out a series of radio pulses which are picked up by the Massachusetts and Florida transmitter stations, and by ships and aircraft using the system. Following receipt of the master pulses, the Florida and Massachusetts stations transmit similar pulses after a closely controlled time interval. Upon receipt of the later pulses, ships, in turn, measure the time differences between the receipt of pairs of pulses from the North Carolina and Massachusetts stations

and from the North Carolina and Florida stations. These "time difference" readings correspond to "lines of position," printed on regular navigation charts by the Hydrographic Office, and indicate ship's position at their point of crossing.

The final evaluation report recommended that Loran-C systems be installed in other areas of the world and that its use be encouraged as a universal long-range electronics navigational system.

Floating Dock School

The PHIBPAC dock landing ship USS *Colonial* (LSD 18) has been dubbed "the floating schoolhouse." The reasons are quite obvious.

Crew members of this LSD spend a great deal of their spare time hitting the books in courses ranging from Russian to auto mechanics. All this is part of a self-improvement program launched by *Colonial's* CO—CDR Harold Durham, usn.

When CDR Durham reported aboard last August, he discovered that one-fourth of his crew had never completed high school and few knew about the education available through the United States Armed Forces Institute.

Now, the I and E office with its 170 educational texts and the mess deck—which has been turned into a study hall—have become the two most popular places aboard the ship.

More than 200 counseling interviews have been held during the last three months and 16 men have enrolled in 15 different USAFI courses. In addition, 27 crew members have passed General Educa-



ZIPPY ZUNI—Navy test pilot, CDR N. J. Smith, steadies Zuni rocket as G. E. Cook, AOAN, loads an F4D Skyray.

tional Development tests—24 at the high school level and three at the first year college level.

Colonial's self-improvement program, however, is not limited to individual educational advancement. During the past quarter, 27 lectures on naval leadership and other subjects aimed at improving the quality of the military have been presented.

In addition, the officers and blue-jackets have viewed 94 training and information films on varied topics.



BRIGHT SHIP—Heavy cruiser USS *Bremerton* (CA 130) lights up the area in port at Sydney while celebrating anniversary of Battle of Coral Sea.



THE END—Coastal minehunter, USS *Bittern* (MHC 43) is one of Navy's many little ships that perform big jobs.

New Fire Control System

The Navy's first fleet ballistic missile submarine *uss George Washington*, SSB(N) 598, which joined the Fleet on 30 Dec 1959, features a fully transistorized shipboard fire control system.

It is designed to provide the *Polaris* missile's inertial guidance system with all the information necessary to guide the missile successfully to its target.

Heart of the new fire control system is a battery of computers into which target data is fed. They in turn transmit intelligence to the guidance system of the missile.

As the ship moves prior to the launching of the missile, the system automatically makes constant corrections to the guidance intelligence. The system is capable of operating under all conditions of sea and weather. It contains more than 15,000 transistors, 1054 digital boards, 18,000 diodes, 40,000 circuits and 70,000 terminations. Although it is complex, it has been made compact enough to fit within the allotted space aboard the 380-foot nuclear sub.

The fire control system will continuously provide accurate information to the missile guidance system despite sea conditions which induce roll, pitch, yaw and other motions of the ship. It will also provide information required for operational

control of the missile launching, including monitoring and controlling countdown procedures.

Round the World with Canberra

uss Canberra (CAG 2) is on her way around the world on a combination goodwill cruise and operational mission that will last for about nine months.

During the voyage, which started from Norfolk, Va., *Canberra* will operate with every major U. S. Fleet around the globe and, at the same time, play an important role in the People-to-People program. By her transit of the Panama Canal she becomes the first surface-to-air guided missile ship to enter Pacific waters.

Her service in the Pacific will begin with the U. S. First Fleet off the California coast. Then, she'll move on to join the Seventh Fleet in the Far East to give Navy units there a chance to operate with a ship of her type for the first time. She'll then pass through the Suez Canal to join the U. S. Sixth Fleet in the Med some time in August.

Commissioned on 14 Oct 1943 as a heavy cruiser, *Canberra* is the only cruiser in the Navy not named for an American city. She was given her unique name as a result of the First Battle of Savo Island in World War II. During that battle, fought on 9 Aug 1942, the Australian cruiser *Canberra* was lost in action after she joined three American cruisers in a night engagement against Japanese naval forces. In her honor an American ship scheduled to be *uss*

Pittsburgh was renamed *Canberra*.

The four-year conversion job which turned the ship into the Navy's second guided missile cruiser was completed on 15 Jun 1956 at the Philadelphia Naval Shipyard. Her principal armament now consists of two *Terrier* surface-to-air guided missile launchers aft, and two mounts forward containing a total of six 8-inch guns, plus additional 3- and 5-inch guns.

Newest in Jet Fighters

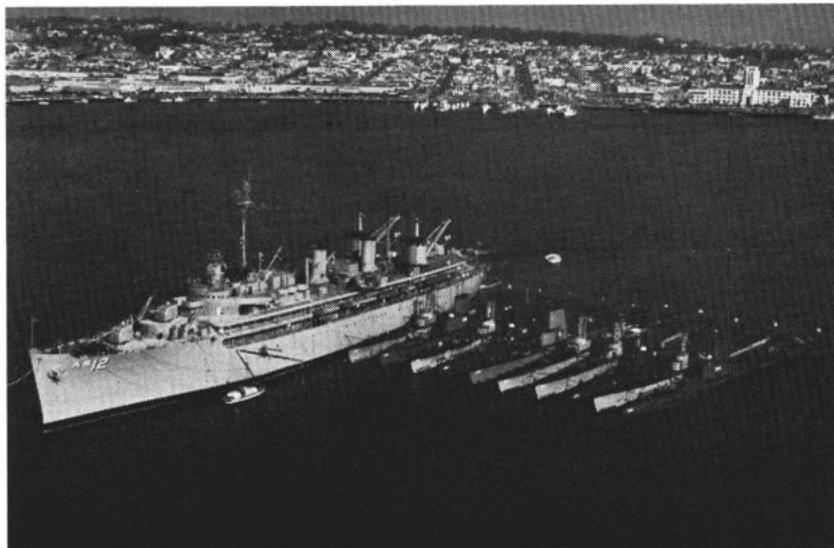
The newest in the Navy's series of *Crusader* jet aircraft has made its first flight, and will be delivered to the Fleet later this year.

Called the F8U-2N, it's bigger, faster and has more firepower than its predecessors, the F8U-1 and F8U-2 day-fighters now operational with land and carrier-based units of the Navy and Marine Corps.

Furnishing the speed—nearly twice that of sound—is a J-57 engine. The firepower is provided both by *Sidewinder* heat-seeking guided missiles, and by provisions for some more advanced missiles now under development.

The pilot, too, will get some help in the form of an autopilot, which will hold altitude, heading and pitch and roll attitude while he is concentrating on his mission.

Ventral fins, mounted under the tail assembly, provide increased stability at high speeds. Increased fuel capacity will enable the F8U-2N to remain in the air for more than three hours without refueling.



ALL TOGETHER—Submarine tender *USS Sperry* (AS 12) rides between her mooring buoys with most of the submarines of Squadron Three alongside.

Atomic Fuel Gauge

A new fuel gauge, which uses sources of atomic energy to measure the amount of fuel in aircraft and missiles, has been developed for Navy use.

Capable of measuring amounts of fuel with greater accuracy and reliability than conventional devices, the light-weight, transistorized gauge has been tested at altitudes up to 38,000 feet, and has performed accurately in all flight attitudes.

All types of solid and liquid propellants can be measured by the gauge, and its performance is not affected by impurities in the fuel. It is easily installed, and automatically accounts for differences in hydrocarbon, or petroleum-based fuels which affect the accuracy of conventional devices.

The radiation materials are mounted on the sides of each fuel tank, along with detectors. Gamma rays given off by the radioactive materials pass through the fuel supply, decreasing in intensity as they do so. The amount of fuel is determined by the intensity of the gamma rays reaching the detectors. A ratemeter converts pulses, picked up by the detectors, into DC voltage, and the quantity of fuel is recorded in pounds by an indicator.

The new fuel gauge was developed for the Navy under private contract. Additional tests are scheduled.

Balloons Take Off from Flattop

A seven-ship Navy task group recently participated in a cosmic ray research program in the Caribbean during which the world's largest balloons were launched from the ASW support carrier *USS Valley Forge* (CVS 45).

This program is jointly sponsored by the Office of Naval Research and the National Science Foundation. The balloons were designed to measure cosmic ray activity at altitudes up to 120,000 feet. The launching operation was called *Skyhook 60*.

Accompanying *Valley Forge* on the operation were the destroyers *USS Davis* (DD 937), *Compton* (DD 705), *Harlan R. Dickson* (DD 708), *Hyman* (DD 732), *Purdy* (DD 734) and *Beatty* (DD 756).

The balloons, gondola and rigging towered more than 500 feet above the carrier's deck just before launching. The balloons held more than



UNDERCOVER MEN—Cruisemen on board *USS Newport News* (CA 148) look like spacemen as they check for radiation during battle problem.

10 million cubic feet, as large in diameter as a football field is long, when inflated at ceiling altitude. They were made of seven acres of one-thousands-of-an inch polyethylene plastic.

Although balloons launched from an aircraft carrier normally create unusual problems, Navy balloon experts said that the gigantic balloons launched from *Valley Forge* went off more easily than previous launchings from land.

Surface wind is one of the most serious problems encountered in launching towering balloons. But an aircraft carrier, by steaming in the same direction as the wind, and with the same speed, can create "zero wind across the deck," which in effect produces an absolute calm.

Another requirement of the experiment which led to the use of an aircraft carrier was the desirability of launching the balloons near the magnetic equator. The magnetic field is stronger near the equator and filters out cosmic rays of the type that scientists did not want to study in the recent experiments.

Tracking the balloons entailed precise teamwork by the ASW group. The radio and radar devices of the seven-ship task group, as well as that of aircraft of Airborne Early Warning Squadron Four, were used to track the balloons.

The balloons carried a payload of emulsion sheets sensitive to cosmic ray activity, much in the same manner as photographic film is sensitive to light.

Remote-controlled radio devices were used to bring the gondola to the surface of the sea where it was recovered by the escorting destroyers. The emulsions were then returned to the University of Chicago and processed by scientists who are engaged in cosmic ray research. The huge stack of processed emulsion sheets will eventually be divided among scientists in 14 countries for analysis.

Cosmic ray research with balloons is not new. In these recent experiments, however, each balloon carried an unprecedented weight of 2500 pounds, including 800 pounds of emulsion, a gondola, ballast and control equipment, to a height above most of the earth's atmosphere.

The 10-million-cubic-foot balloons used to lift this weight were by far the world's largest. They were almost twice as big as the previous record holder, a six-million-cubic-foot Navy balloon that carried a 94-pound payload to an altitude of 149,000 feet during a cosmic ray flight in September 1959.

Upon completion of the cosmic ray experiments, the seven-ship task group conducted antisubmarine warfare exercises in the Caribbean area.

1960 All-Navy and Inter-Service Sports Program

SPORT	ALL-NAVY	INTER-SERVICE	OLYMPIC TRIALS
Basketball	8 - 11 March NAS Seattle	21 - 26 March Denver, Colo.	31 March - 1 April Denver, Colo.
Boxing	30 March - 1 April NavSta, Norfolk	27 - 29 April Quantico, Va.	11 - 13 May San Francisco
Bowling	27 - 29 April NAS Patuxent River, Md.	None	None
Track	None	10 - 11 June Camp Lejeune, N. C.	1 - 2 July Stanford University, Palo Alto, Calif.
Tennis	3 - 6 August NavSta, Newport, R. I.	15 - 19 August Army-Navy Country Club, Washington, D. C.	None
Softball	6 - 9 September San Diego area	None	None
Golf	26 - 29 September San Francisco area	3 - 7 October Fort Ord, California	None

The above schedule and details of the 1960 All-Navy Sports Program were announced in Change 2 to BuPers Inst. 1710.1E.

All-Navy Sports

The All-Navy Basketball Championship to be held earlier this month at NAS Seattle officially opens the 1960 All-Navy and Inter-Service Sports Program.

(This tournament is not scheduled to be concluded in time to announce the winners in this issue.)

An All-Star squad was selected from the five teams representing the Atlantic Fleet, North Atlantic, South Atlantic, Pacific Coast and Western Pacific regions that participated in the All-Navy finals. This All-Navy team competes in the AAU Inter-Service Basketball Tournament at Denver, 21-26 March. From these play-offs, an All-Star Armed Forces Team is to be picked for the Olympic trials to be held in Denver, 31 March, 1-2 April.

In addition to basketball, this year's All-Navy/Inter-Service Sports Program embraces bowling, boxing, tennis, softball and golf—for men—plus bowling, tennis and golf, for women.

BOWLING

This year, All-Navy Bowling champs will be determined through actual man-to-man competition rather than telegraphic matches. The final roll-offs will be conducted at NAS Patuxent, 27-29 April. Both men and women will be eligible.

To qualify for the All-Navy bowling finals, men must average 170 and women 140 for 18 games in the regional eliminations.

BOXING

Boxing also returns to the regional

and All-Navy levels this year with the finals slated for 30 March—1 April at NavSta, Norfolk. Each of the five regions are permitted to send a squad of 10 boxers (one for each weight division) plus a coach and manager to the All-Navy finals.

From the finalists a 10-man squad will be selected to represent the Navy in the Inter-Service Boxing Matches at Quantico, Va., 27-29 April. After these matches, each service will select a 10-man squad to represent their service in the Olympic boxing trials at San Francisco, 11-13 May.

TENNIS

The All-Navy tennis finals for both men and women will be conducted 3-6 August at NavSta, Newport, R.I.



ELECTRONIC SAIL—William Thelan, ET3, of USS Northampton (CLC 1), poses with electronic backdrop.

Women will be permitted to participate in the All-Navy golf and tennis finals this year, although they were dropped from basketball and softball competition.

The tennis tournament will consist of single elimination with singles and doubles play in the men's open and senior divisions. Women's play will consist of open division, singles only (best two sets). The senior division is limited to men who have reached 40 on or before 1 Aug 1960.

Men's matches will consist of the best two sets until the semi-finals, then the best three sets.

Regional squads will be limited to a maximum of six male players (four open and two seniors) and four women (open only—singles).

Selected male personnel will make up the Navy squad to participate in the Leech Cup/Inter-Service competition to be held at the Army-Navy Country Club in Washington, D. C., 15-19 August.

SOFTBALL

The 1960 All-Navy Softball championship will be determined in a double elimination tournament in the San Diego area on 6-9 September. Each of the five regions will conduct area eliminations and each will send a 16-man team to the All-Navy finals.

GOLF

Com 12 will be the host command for the 1960 All-Navy Golf tournament scheduled for 26-29 September. It will be played on a course in the San Francisco area that has not as yet been designated.

Competition will be limited to 72 holes of medal play for men in both open and senior divisions and 54 holes of medal play for women in the open division.

Men who have reached 45 years of age, on or before 1 August, may enter the senior division. An eligible senior, however, may also elect to participate in either division—but his total participation must be in the division he selects.

To qualify for the All-Navy Golf tournament, open division players should consistently shoot in the mid-70's or better, while seniors should repeatedly break 85. No qualifying scores have been established for women.

Regional squads will be limited to four men and three women in the open division and two men in the senior division.

Selected male finalists will remain in the San Francisco area to compete in the Inter-Service Golf championships to be held at Fort Ord, Calif., 3-7 October.

In addition to these six sports, a selected track team will represent the Navy at Camp Lejeune, N. C., 10-11 June, in the Inter-Service eliminations for the Olympic track trials to be held at Stanford University, Palo Alto, Calif., 1-2 July.

Mid-Western Gun Toters

If you want to learn about top-notch shooting, bend an ear. Two of the Navy's top rifle and pistol men have some sound advice to offer you.

These experts agree that most of the gun-slinging heroes you see on TV are mighty impressive, but would find rough shooting if they ever fired in competitive matches.

"The fast gun is strictly show—a thing of the present, not of the past," claims Cecil M. McConnell, MA1, USN, the Ninth Naval District's pistol champ. Supporting McConnell's view is Melvin B. Branch, PMC, USN, who recently earned Distinguished Rifle and Pistol badges—the nation's top awards for excellence in competitive shooting. Only 18 other Navymen have gained the awards for proficiency in both categories.

Branch and McConnell both hail from Kansas and are stationed at the Naval Examining Center, Great Lakes.

Referring to TV gun slingers, Chief Branch said, "Accurate shooting demands a stiff wrist and a slow



SURE-SHOTS—Two of Navy's top marksmen, Cecil M. McConnell, MA1, USN, Melvin B. Branch, PMC, USN, pose with some awards for their sharp shooting.

trigger squeeze. The barrels of some of the old Western six shooters are 10 inches long. Imagine whipping one of them out of a holster and hitting a distant target in a split second!"

Navy expert McConnell started shooting competitively in 1955. Since then, he has won 10 trophies and more than 60 medals in top-flight matches sponsored by various military, civil and law enforcement organizations.

Having earned 10 trophies and 80 medals for his marksmanship in two years of competition, Chief Branch is distinguished as one of the Navy's "top hands" in both rifle and pistol.

"We're not taking shots at TV Westerns," McConnell is quick to

point out. "We are only stressing the fact that, if a real shooter expects to hit the target repeatedly, he will take his time and concentrate."

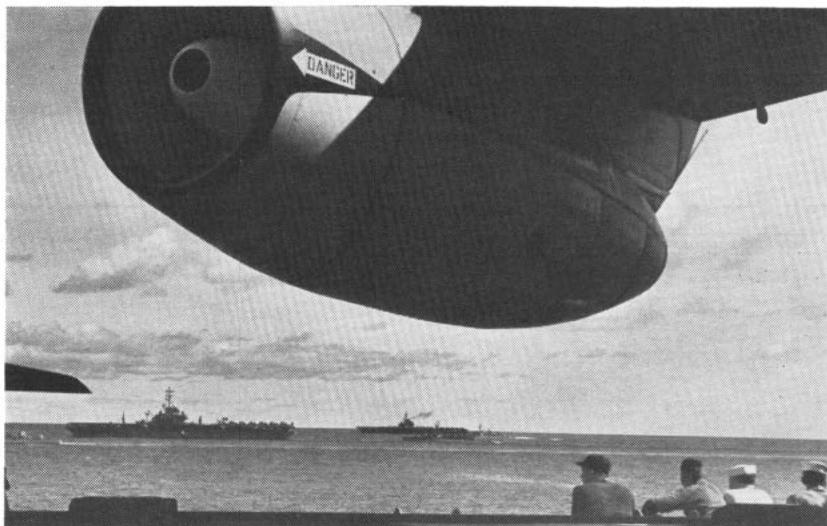
Both of these Kansans were members of the Ninth Naval District team which won the Atlantic Fleet pistol championship last year and placed third in the Fleet rifle team competition. Later, they were selected for the All-Navy matches in San Diego, and again for the National Rifle and Pistol matches at Camp Perry, Ohio.

The National Rifle Association has rated Chief Branch in the "Master" class for both rifle and pistol, while McConnell has earned the NRA's Master in pistol and Expert in rifle.

For years, Navy rifle and pistol championships have been dominated by personnel from ordnance ratings. Branch and McConnell are exceptions to that tradition. Chief Branch, a patternmaker, is assigned to the Examination Development Department which prepares enlisted advancement examinations. McConnell operates IBM equipment used in scoring and processing the service-wide exams.

McConnell is already setting his sights on next year's Navy and Inter-Service matches. He needs one more rifle "Excellence in Competition" award to join Chief Branch in the elite of top U. S. shooters.

Navy life seems to be tailor-made for two of the best guns in the mid-west. Last year they traveled more than 5000 miles carrying Navy colors into five major matches.



FORCE FOR PEACE—In the shadow of a jet engine, men of USS Forrester (CVA 59) watch USS Lake Champlain (CVS 39) and Intrepid (CVA 11).

THE WORD

Frank, Authentic Advance Information On Policy—Straight From Headquarters

• **EPDOCONUS ESTABLISHED**—The majority of enlisted personnel being assigned to shore duty hereafter will be ordered through the Enlisted Personnel Distribution Office, Continental U. S., which was established on 2 Jan 1960 at NTC Bainbridge, Md.

This new distribution center handles all ultimate duty assignments for active duty personnel within the Continental U. S. for the Chief of Naval Air Training, Chief of Bureau of Medicine and Surgery and District Commandants, as well as the Potomac and Severn River Naval Commands. This also includes district sea duty.

Before this central distribution point was established, personnel being ordered to shore based activities within Continental U. S. were assigned by this Bureau to the Naval Districts or Air Training Commands. These activities then made the ultimate duty assignments.

EPDOCONUS will not handle the assignment of personnel to Fleet Shore Duty, TAR billets controlled by CNATRA and certain Bureau-controlled "B" billets.

• **NEW ODC SYSTEM**—Some officers have already seen and verified their new officer data cards (ODC) which were sent to them in February 1960 from the Bureau of Naval Personnel.

This is the first mailing of the ODC under a new system whereby the Bureau fills out the cards from information compiled on magnetic tape and mails them to the officers

concerned. The taped information is taken from the officer's service record in the Bureau.

In this way the officer knows exactly what information is on file on tape in the Bureau, and it gives him a chance to verify or correct this information.

Officer Data Cards will be mailed from the Bureau to ships and stations quarterly for officers who have reported aboard during the preceding fourth, fifth, and sixth month. For example, officers who reported to an activity in the three-month period, August through October 1959, received their cards in February 1960. In this way, each officer should verify and correct his ODC, if necessary, about every two years.

Complete information about the data cards is contained in BuPers Inst. 1301.34.

• **SELLING YOUR HOME?**—If you are, take another look at Para. 7 of DD 802 (Request For and Certificate of Eligibility).

If you have been buying your home under FHA-military agreements, you are required to notify your commanding officer by means of DD 803 (Certificate of Termination) when the property is sold. Failure to do so may mean that you will be liable for a considerable sum of money.

Here's how it works out: If you fail to notify your CO, the Navy continues to pay its portion of the mortgage insurance even after you have sold your house. When this happens, the Navy Finance Center

has to start action to regain its money.

Where does the money come from? *You*.

To refresh your memory, this is what Para. 7, DD 802, has to say: "I hereby agree that in the event I am issued a Certificate of Eligibility and subsequently obtain financing pursuant to the provisions of Housing Act of 1954, I will immediately notify my commanding officer in writing when I terminate my ownership of the property so financed.

"In the event I fail to notify my commanding officer I further agree that any liability incurred by the military service of which I am a member on mortgage insurance premiums paid subsequent to the date of such termination of ownership will be reimbursed by me."

• **FASTER WO PROMOTIONS**—Regular and Reserve warrant officers will have a shorter wait for promotions after 1 Jul 1960—thanks to a reduction in the service-in-grade requirements for temporary promotions.

For the past several years, promotions for temporary and permanent warrants have both been administered on the same basis, using identical eligibility criteria. However, beginning with the fiscal year 1961 WO selections for promotion (to be made in May 1960), the time requirements for temporary promotions will be relaxed. These requirements, which must be met by 30 June of the fiscal year for which selection is made, will now be reduced as follows:

• Warrant Officer W-1 to W-2— from three years to two years.

• Chief Warrant Officer W-2 to W-3— from six years to four years.

• Chief Warrant Officer W-3 to W-4— from six years to four years.

The waiting periods for permanent



DON'T CUT IT OUT until you've cut nine other men in by passing on this copy of ALL HANDS Magazine.

QUIZ AWEIGH

appointment which are governed by the Warrant Officer Act of 1954 will remain the same—three, six and six years, is indicated above. A permanent warrant officer advanced temporarily will be issued a permanent appointment to his new grade when he has completed the term of service in his permanent rank as specified by law.

Permanent warrant officers who are twice passed over for temporary promotion to the next higher grade shall be retired, or have their appointments terminated, in accordance with the WO Act of 1954.

An annual announcement will be made to prescribe the field of eligible warrant officers to be considered for selection to the next higher grade. The first such announcement, Alnav 70-59, was issued in December 1959.

The new regulations on temporary promotions were announced in SecNav Inst. 1421.2. Those portions of Article C-7105, *BuPers Manual*, which conflict with the instruction, are being held in abeyance until the manual is changed.

• **TEMPORARY OFFICERS**—The policies and procedures governing temporary officers in the grade of ensign or above who have or will have twice failed selection for temporary promotion to the next higher grade have been reissued and brought up to date in BuPers Inst. 1800.1A.

Temporary officers, whose permanent status is enlisted, are granted the same retirement benefits upon completion of 20 years of active service (of which at least 10 years are commissioned) as Regular and Reserve officers in accordance with Section 6323, Title 10, U.S. Code.

Here are the provisions of BuPers Inst. 1800.1A which apply to temporary officers in the grade of ensign and above, whose permanent status is a warrant or enlisted grade, if twice failed of selection for temporary promotion to the next higher grade.

Unless the needs of the service otherwise require, they shall:

- Be afforded the option of retirement in the grade then held (if eligible for retirement), or revert to their permanent status not later than 30 June of the fiscal year in which they fail of selection the second time.

- If within two years of attaining eligibility for retirement as of 30 June of the fiscal year in which second failure of selection occurs, be

retained on active duty in present grade, subject to the needs of the service and at the discretion of the Chief of Naval Personnel, until eligible for retirement.

- If with less than 18 years of active service, be reverted to their permanent status not later than 30 June of the fiscal year in which they fail of selection the second time.

Individuals affected by this policy will be given a minimum of four months' advance notice before they are subject to mandatory retirement or reversion.

- **SEAVEY SEGMENT TWO**—Navy-men in Seavey Segment Two (1960) will start receiving orders to shore duty in June according to BuPers Notice 1306 of 31 Dec 1959.

In setting the sea-tour commencement cut-off dates, the Chief of Naval Personnel noted that in some cases third and second class petty officers may receive orders to shore duty before some POIs and CPOs.

This can happen because there are many more billets ashore for certain junior petty officers. If POIs and Chiefs were brought ashore to fill some of these billets, it would not only be misuse of personnel, but it would leave the Fleet short of senior men.

The following sea-tour commencement cut-off dates have been established for Seavey Segment Two (1960):

RATE	DATE	SF3, FN	...	Mar 56
CSC, 1	Sep 57	DCC	.....	Jun 58
CS2	Nov 57	DC1	.....	Mar 57
CS3, SN	Jun 58	DC2	.....	Feb 57
SHC	Sep 57	DC3, FN	.....	Jun 57
SH1	Dec 53	PMC	.....	Jun 58
SH2, 3, SN	Sep 53	PM1, 2, 3, FN	.....	Mar 57
MMC	Mar 57	MLC	.....	Sep 57
MM1	Mar 55	ML1, 2, 3, FN	.....	Dec 54
MM2	Sep 55	SVC, 1, 2, 3, CN	.....
MM3, FN	Nov 55		.....	Jun 58
ENC	Dec 56	CEC, 1, 2, 3, CN	.....
EN1	Apr 56		.....	Jun 58
EN2	Aug 55	EOC/CDC, 1	.....	Jun 57
EN3, FN	Dec 55	E02/CD2, 3, CN	.....
MRC	Sep 56		.....	Jun 58
MR1	Jun 57	CMC, 1, 2, 3, CN	.....
MR2, 3, FN	Jun 58		.....	Mar 58
BTC/BRC	Dec 55	BUC, 1	.....	Sep 57
BT1/BR1	Dec 52	BU2	.....	Jun 58
BT2, 3, FN	Dec 54	BU3, CN	.....	May 58
EMC	Jun 58	SWC, 1, 2, 3, CN	.....
EM1	Sep 57		.....	Mar 57
EM2	Dec 57	UTC, 1, 2, 3, CN	.....
EM3, FN	Oct 57		.....	Dec 57
ICC, 1, 2, 3, FN		SDC	.....	Dec 57
	Jun 58	SD1	.....	Dec 54
SFC	Dec 55	SD2	.....	Mar 55
SF1	Mar 56	SD3	.....	Jun 55
SF2	Jan 56	TN	.....	Aug 55

Let's check the various categories and designations of U. S. Navy ships and see how well you're acquainted with the various units of the Fleet.

Navy ships are designated according to their mission, and in turn divided into three broad categories—combatant, auxiliary and service craft.

1. Combatant ships include warships, amphibious warfare, mine warfare and patrol vessels. Which of the following ships is not classified as a warship? (a) CVHA, (b) CVHE, (c) CVE.



2. Ships of this type are used primarily for convoy and ASW duties. This is a/an (a) destroyer escort, (b) escort destroyer, (c) escort vessel.

3. This ship would be classified as (a) warship, (b) patrol vessel, (c) auxiliary.



4. This is a/an (a) inshore minesweeper, (b) coastal minesweeper, (c) minesweeping boat.

5. These small, but important units of the Fleet are (a) mine warfare vessels (b) patrol vessels, (c) service craft.

6. A ship that carries dependents as well as troops would normally be designated as a/an (a) AP, (b) APA, (c) APD.

7. U.S. Navy ships assigned to the Military Sea Transportation Service are identified by their designation and hull number and the prefix (a) "A," (b) "T," (c) "M."

You'll find the answers to this month's Quiz Aweigh in the Blue-jackets' Manual. If you don't happen to have one available, check page 46, of this issue.

THE BULLETIN BOARD

Here's Your Opportunity to Increase Your Monthly Paycheck

PERSONNEL IN PAY GRADES E-4 through E-7 who are recommended by their commanding officer will be permitted to participate in proficiency pay examinations slated for May 1960.

Exams for personnel in pay grades E-4 and E-5, however, will be limited to those serving in the 40 ratings declared critical for fiscal year 1961.

Originally, the examinations scheduled for May were intended for personnel in pay grades E-6 and E-7 only, while the two lower pay grades were scheduled to be examined annually in November. Second and third class petty officers in the critical ratings are being permitted to take the pro pay exams in May, as well as in November, to insure that the loss of proficiency pay awards experienced in fiscal year 1960 does not occur again in fiscal year 1961.

As a result of the November 1959 exams, 25,767 Navymen were granted P-1 awards of \$30 per month, while 15,869 additional awards went unfilled. This is because a sufficient number of personnel—especially in pay grades E-4 and E-5—did not take the exams.

In pay grade E-4, for example, only 11,261 men took the examinations while 13,436 pro pay awards had been allocated. Even if every third class petty officer who took the exam had passed, there still would have been 2275 pro pay awards unfilled. The final outcome, however, left 6240 P-1 awards unassigned.

For the PO2s, the situation was even worse. There were 15,426 awards allocated and 8101 of these went unfilled.

A total of 24,336 PO1s competed for 7999 P-1 awards. Of these, 6774 were granted and 1225 remained unfilled. The situation was similar for CPOs: 16,365 chiefs competed for 4774 pro pay allocations, 4475 were granted and 299 went unfilled.

Although 15,869 P-1 allocations were not utilized, all quotas for the outstanding effectiveness ratings

were filled. The unfilled quotas were mainly in the lower pay grades of the critical ratings where insufficient numbers of personnel took the examinations.

Most of the pro pay recommendations for the November exams were in pay grades E-6 and E-7, yet 70 per cent of the P-1 awards were allocated to personnel in pay grades E-4 and E-5.

Table One shows the number of pro pay awards that were allocated for fiscal year 1960 by rate, and the actual number of men who were authorized to receive pro pay as a result of the November 1959 exams. Those granted the P-1 awards began receiving the \$30 monthly payments as of 16 Jan 1960. Personnel in pay grades E-4 and E-5 will get this extra compensation for 12 months—until 15 Jan 1961. Those in pay grades E-6 and E-7 will receive the additional \$30 per month until 15 Jul 1961. The difference in the length of time between the two groups was set in an effort to establish proper examination phasing for E-6 and E-7 personnel.

Personnel in pay grades E-6 and

E-7 who are recommended for pro pay in Fiscal Year 1961 will be examined on Tuesday, 3 May 1960, and personnel in pay grades E-4 and E-5 will be examined just two days later, on Thursday, 5 May.

Here's a breakdown of the proposed proficiency pay allocations for Fiscal Year 1961:

E-4	.....	18,748
E-5	.....	18,036
E-6	.....	10,867
E-7	.....	5,870

These figures indicate the maximum number of men who may draw proficiency pay during the next fiscal year. They should not be interpreted to mean that an additional 53,521 men will be granted proficiency pay as a result of the forthcoming exams. What these figures actually mean, is that the Navy is authorized to pay proficiency pay to a total of 53,521 men, broken down by pay grades as shown above, during the coming fiscal year. Thus, these totals include the 25,767 awards granted as a result of the November exams.

Table Two shows the Navy's approximate petty officer strength, the current critical ratings for FY61 and a breakdown of the proposed pro pay allocations for FY 1961. By comparing the number of awards allocated in this table with the number of P-1 payments authorized as a result of the November 1959 exams, as shown in the right hand column on Table One, you will be able to determine approximately how many pro pay awards will be granted as result of the May exams.

As an example, take the ET rating, which is one of the critical ratings. You'll see in Table One that 1295 persons in that rating were awarded pro pay as a result of the November exams. According to Table Two, a total of 4759 pro pay awards are anticipated for ETs in fiscal year 1961. Thus, by subtracting the 1295 awards that already have been granted, from 4759 (the maximum number of ETs permitted to draw pro pay for the next fiscal year) you'll come up with 3464. This is

All Navy Cartoon Contest
Leo J. Felbinger SN, USN



"Let go forward"

the total number of pro pay awards that can be awarded to ETs as a result of the May exams. (Remember, that the biggest share of these awards will go to second and third class petty officers.) Additional awards may also be made to compensate for personnel that have been discharged or had their pro pay revoked.

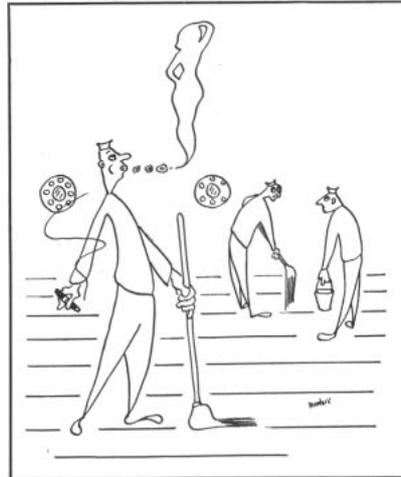
You can apply this same procedure to all other ratings. In some cases, however, you will notice that the authorized figures in Table One are larger than the allocations for FY61 in Table Two. In these instances, the only awards that will be granted during the next fiscal year will be to fill any vacancies created by personnel leaving the service or by proficiency pay revocations.

It must be stressed that 70 per cent of all pro pay awards will go to second and third class petty officers serving in the 40 critical ratings; 15 per cent to those in pay grades E-6 and E-7 of the critical ratings, and the remaining 15 per cent to recruiters and personnel in all pay grades of the 23 outstanding effectiveness ratings.

The *critical ratings*, indicated in Tables One and Two by an asterisk (*), are defined for pro pay purposes, as rates (pay grade E-4 through E-7) which:

- Require long periods of spe-

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L. Murdock, SMSN, USN



cialized formal schooling or in-service training.

- Require special technical or leadership aptitudes.
- Have a first term reenlistment rate which is insufficient to maintain the strength of the rating at or near the rating requirements.
- Have a shortage of career petty officers as related to requirements.

It should be noted that the critical ratings are not the same for FY61 as they were for the last examining period. Ratings declared critical for FY61 that were not on the FY60 list include MN and AB; while GF,

PH, DT, MA and AM were included in last year's list, but are not among the critical ratings for FY61.

The *outstanding effectiveness rates* (E-4 through E-7) are those rates which do not meet the criteria mentioned for the critical ratings.

Career personnel who pass the pro pay examinations will be first in line to receive the pro pay awards. The remaining allocations will go to the non-career personnel who pass the exams and come within the set allocations. (For the purpose of pro pay, *career personnel are those who have served, or are obligated to serve seven years' active duty.*)

Personnel being recommended for proficiency pay should be evaluated with personnel in the same rating and pay grade. It is considered that the understandable tendency to evaluate second and third class POs with senior petty officers, in terms of results achieved, may contribute to the insufficient number of recommendations at the second and third class level.

To be eligible for proficiency pay, you must be serving in a billet requiring the technical skill of your rate, or special skill when that skill has been designated as eligible for pro pay, and:

- Be recommended by your commanding officer.
- Be serving in pay grade E-4 through E-7. (Master and Senior

TABLE ONE

Here's a breakdown of the number of pro pay awards that were allocated for Fiscal Year 1960 and the actual number awarded as a result of the No-

vember 1960 exams. The asterisk (*) denotes critical ratings. For an idea of what your chances are in the coming exam—turn to the next page.

RATE	QUOTA ORIGINALLY AUTHORIZED	NO. WHO RECEIVED PRO PAY	RATE	QUOTA ORIGINALLY AUTHORIZED	NO. WHO RECEIVED PRO PAY	RATE	QUOTA ORIGINALLY AUTHORIZED	NO. WHO RECEIVED PRO PAY	RATE	QUOTA ORIGINALLY AUTHORIZED	NO. WHO RECEIVED PRO PAY
AB	128	125	CS	476	476	*IM	39	32	*QM	574	507
*AC	429	423	*CT	869	869	*JO	134	58	*RD	3413	792
AD	923	921	DC	154	154	*LI	70	69	*RM	3795	1478
*AE	1076	1069	DK	94	94	*MA	119	119	SD	319	306
*AG	474	261	*DM	75	65	*ML	28	17	*SF	994	661
AK	123	123	*DT	209	207	*MM	2907	1400	SH	213	213
*AM	1475	1475	*EM	2224	1399	MN	31	31	SK	381	381
AO	220	219	EN	510	510	*MR	431	239	*SM	553	376
*AQ	333	328	EO	69	69	*MU	301	102	*SO	1747	585
*AT	2957	1917	*ET	2932	1295	*NW	229	146	*SV	50	10
BM	642	640	*FT	2103	766	*OM	74	29	*SW	61	46
*BR	61	23	*GF	102	102	*PH	261	261	*TD	284	282
*BT	1260	713	GM	384	384	*PM	36	10	*TM	386	375
*BU	364	173	*GS	340	132	PN	219	219	*UT	102	89
*CE	132	65	HM	629	629	PR	67	67	YN	608	608
CM	44	44	*IC	1260	482	*PT	29	18	Recruiters	87	87

TABLE TWO

Asterisk (*) denotes critical ratings.

PROPOSED PRO PAY			PROPOSED PRO PAY			PROPOSED PRO PAY			PROPOSED PRO PAY		
RATE	APPROX. PETTY OFFICER STRENGTH	ALLOCA-TIONS FOR FISCAL YEAR 1961	RATE	APPROX. PETTY OFFICER STRENGTH	ALLOCA-TIONS FOR FISCAL YEAR 1961	RATE	APPROX. PETTY OFFICER STRENGTH	ALLOCA-TIONS FOR FISCAL YEAR 1961	RATE	APPROX. PETTY OFFICER STRENGTH	ALLOCA-TIONS FOR FISCAL YEAR 1961
*AB	3200	632	CS	11,000	569	*IM	300	48	*QM	4150	1421
*AC	3200	467	*CT	4700	1140	*JO	500	201	*RD	5700	3288
AD	20,000	708	DC	3500	153	*LI	450	67	*RM	12,200	6233
*AE	6750	1084	DK	2200	130	MA	1000	62	SD	7200	94
*AG	1800	512	*DM	600	148	*ML	200	9	*SF	7100	993
AK	3100	177	DT	2100	123	*MM	14,200	4316	SH	4900	258
AM	11,000	693	*EM	11,300	2634	*MN	700	119	SK	8900	539
*AO	4900	244	EN	12,000	716	*MR	2100	546	*SM	3500	1830
AQ	1700	525	EO	1700	101	*MU	975	408	*SO	3300	1906
*AT	10,500	4217	*ET	8500	4759	*NW	800	309	*SV	150	48
BM	14,600	584	*FT	5700	993	*OM	225	132	*SW	500	81
*BR	175	74	GF	650	45	PH	2400	144	*TD	1600	490
*BT	9700	1711	GM	8500	517	*PM	135	43	*TM	3500	1123
*BU	1500	286	*GS	950	441	PN	5400	311	*UT	800	130
*CE	850	193	HM	14,900	807	PR	1400	90	YN	13,000	804
CM	950	59	*IC	3550	1892	*PT	125	44	Recruiters	2000	100

Chief Petty Officers and non-rated men are not eligible for pro pay.)

• Have a minimum of six months' continuous active service immediately before the final eligibility date established for the proficiency examination in which participating. (The terminal eligibility date for the May exams is 16 Jul 1960.)

• Pass the Navy-wide proficiency examination with a sufficiently high score, so that, together with your performance factor you will have a pro pay multiple sufficiently high to place you within the pro pay allocations for your rate or skill.

Personnel who were awarded pro pay as a result of the November 1959 examinations *should not* be recommended to participate in the May 1960 examinations.

Commands should submit a completed NavPers 624 to the Naval Examining Center, Great Lakes, Ill., on or before 1 Apr 1960, for all persons being recommended to take the pro pay exams in May. Details of the forthcoming pro pay exams and procedures to be followed were announced in BuPers Notice 1418.

List of New and Discontinued Navy Correspondence Courses

Two new correspondence courses are now available, and seven others have been discontinued by the Correspondence Course Center.

Enlisted Correspondence Courses for active duty personnel will be

administered (with certain exceptions) by your local command.

Your division officer will advise you if courses are suitable to your rate and training program. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center.

Personnel on inactive duty will have courses handled by the Center.

NEW COURSES

Title	NavPers Number
Photographer's Mate 2	91493
Electronics Administration and Supply, Officers	10926-A

(These courses may be taken for repeat Naval Reserve credit.)

DISCONTINUED COURSES

Title	NavPers Number
Aircraft Welding	91617-C
Aircraft Hydraulics	91624-B
Aircraft Instruments	91627-1B
Aircraft Fuel Systems	91630-1B
Aircraft Propellers	91631-1D
Aviation Storekeeper, Vol. I	91651-1C
Aviation Storekeeper, Vol. II	91652-B

ANSWERS TO QUIZ AWEIGH

1. (a) CVHA. This is an amphibious ship.
 2. (c) Escort Vessel.
 3. (b) Patrol Vessel. (Bet you thought it was a warship.)
 4. (c) Minesweeping Boat.
 5. (c) Service craft. (Stumped again?)
 - 6 (a) AP.
 7. (b) "T."
- Quiz Aweigh is on page 43.

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

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases.

Girl's Town (1439); Melodrama: Mamie Van Doran, Mel Torme.

A Dog's Best Friend (1440); Western: Bill Williams, Marcia Henderson.

Cast a Long Shadow (1441); Western: Audie Murphy.

4-D Man (1442); Melodrama: Robert Lansing, Lee Meriwether.

Hound Dog Man (1443) (C) (WS); Melodrama: Fabian, Carol Lynley.

The House of the Seven Hawks (1444); Melodrama: Robert Taylor, Nicole Maurey.

The Crimson Kimono (1445); Drama: Victoria Shaw, Glenn Corbett.

The Mouse That Roared (1446); (C); Comedy: Peter Sellers, Jean Seberg.

Operation Petticoat (1447) (C); Comedy: Cary Grant, Tony Curtis.

A Summer Place (1448) (C); Drama: Richard Egan, Dorothy McGuire.

Mission of Danger (1449) (C); Melodrama: Keith Larsen.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 69—Announced approval by the President of the reports of selection boards which recommended staff corps officers for promotion to the grade of lieutenant commander, Medical Corps; Dental Corps; Nurse Corps; Medical Service Corps; Supply Corps; Chaplain Corps; Civil Engineer Corps; and lieutenant, Civil Engineer Corps; Chaplain Corps; Supply Corps; Nurse Corps and Medical Service Corps.

No. 70—Announced that selection boards to recommend USN and USNR warrant officers for promotion in Fiscal Year 1961 will convene in May.

No. 1 (1960)—Announced extension of NavComp Inst. 7220.16A to 1 Oct 1959.

Instructions

No. 1080.45—Tells how to use the enlisted personnel diary system to order certain adjustments to the enlisted military pay record.

No. 1120.13A—Describes the need and opportunity for career officers from NROTC and Reserve program sources.

No. 1210.10—Sets forth general procedures whereby officers of the line, restricted in the performance of duties, may apply for redesignation to line, unrestricted in the performance of duties.

No. 1301.34—Introduces the Officer Data Card (NavPers 2626) and provides instructions for the verification of the ODC and submission of corrective information.

No. 1540.39—Describes the plans for functional-type training for Limited Duty Officers.

No. 1800.1A—Discusses policy and procedures governing temporary officers of the grades of ensign and above who have or will have twice failed of selection for temporary promotion to the next higher grade.

No. 4600.1A—Describes a revision to the established system of estimating personnel travel costs resulting from the changes of home ports and home yards of ships and permanent duty stations of aviation and certain miscellaneous units.

Notices

No. 1520 (30 December)—Requested applications for Navy spon-

sorship in the December 1960 annual competition for Rhodes Scholarship.

No. 1910 (30 December)—Modified instructions concerning Reserve obligations to be given enlisted men upon release from active duty and return or transfer to Ready Reserve.

No. 1306 (31 December)—Announced the sea-tour commencement cut-off dates to establish the eligibility of enlisted personnel for Seavey segment two.

No. 1531 (13 January)—Requested nomination of candidates for assignment to the U. S. Naval Preparatory School, Bainbridge, Md.

WHAT'S IN A NAME

Albemarle

Albemarle is a distinctive name, and one that is known throughout the world.

In the United States there is a city of Albemarle and an Albemarle Sound in North Carolina, an Albemarle, La., Albemarle and Albemarle Point, S. C., and a county of Albemarle in Virginia.

In Ecuador there is an Albemarle Point, and in the Pacific Ocean there is an island in the Galapagos Island group named Albemarle. It is located about 650 miles due west of Ecuador.

Albemarle, in the United States Navy, is a ship. Currently it is *uss Albemarle* (AV 5), home-based at Norfolk, Va. She is named for Albemarle Sound, N. C.

The first *Albemarle* was a schooner which was captured off Pantego Creek, N. C., on 25 Mar 1862. This ship was purchased by the U. S. Navy from the New York Prize Court in May 1863.

The schooner was used as a supply ship in the North Atlantic Blockading Squadron. She was sold in October 1865.

The second *Albemarle* was a Confederate ironclad steamer, which was built at Edwards Ferry, N. C., and commissioned in the Confederate States Navy in April 1864.

Her first battle was against Union forces off Plymouth, N. C., during that same month. She sank the Union ship *Southfield* by ramming and then disabled *Miami*. The next day *Plymouth* fell to the Confederates.

The following month *Albemarle*, together with *css Bombshell*, again tangled with the Union naval forces. This time the two ships were surrounded by nine northern ships. After a three-hour battle, *Bombshell* was captured. *Albemarle* disabled one Union ship and damaged several others before she escaped back to *Plymouth* for repairs.

In October 1864, Union Lieutenant W. B. Cushing went up the Roanoke River in a torpedo boat and sank *Albemarle*.

After the Union recaptured *Plymouth*, *Albemarle* was raised and towed to Norfolk, Va. She was purchased by the U. S. Navy in 1865 and placed in service. She was sold in 1867.

The third and current *uss Albemarle* (AV 5) was launched in 1940. On 20 December of that year, the ship was commissioned and assigned to the Atlantic Fleet. During 1941 she acted as advance base tender for seaplanes at Argentina, Newfoundland.

Then, until July 1945, she transported aeronautical cargo and personnel to Iceland, England, North Africa, Bermuda, and the islands of the Caribbean.

After World War II, she was reassigned to the Pacific Fleet and used as a troop ship to get U. S. troops home. Routine assignments in both Fleets followed until August 1950 when the ship was placed in the Reserve Fleet at New York.

In February 1956, *Albemarle* was moved to the Philadelphia Naval Shipyard for modernization. She was recommissioned on 21 Oct 1957, and is currently operating in the Atlantic Fleet.



Pointers On How to File Your Federal Income Tax Returns

IF YOU HAVEN'T yet submitted your income tax returns for 1959, you'd better pull yourself together and get at it. By the time you read this, the 15 April deadline will be rounding that last corner.

Maybe you're one of the early birds who have already sent in their returns. However, if you haven't, the information below will be of some help to you. If this summary doesn't cover any of the problems that have been delaying you, a copy of *Federal Income Tax Information For Service Personnel, 1960 Edition*, issued by the Office of the Judge Advocate General, should clear the air. You'll find a copy in your Disbursing Office or Legal Assistance Office. You'll find personal help there, too.

A few changes have been made since the earlier roundup of Federal income tax information appeared in the March 1958 issue of ALL HANDS.

Here's a brief summary of these changes:

Travel Allowances and Expenses—Unless you made money while traveling for the Navy, or want to claim excess expenses, you will no longer be required to report mileage and per diem allowances—all you need to do is answer "yes" to the questions on page one of form 1040 or 1040W or check the appropriate box on form 1040A. You should continue to keep a record of allowances and expenses, however, so that you will know where you stand at the end of the year.

Educational Expenses—If you are attending night school the amount paid by you for tuition and books is deductible on page two of the income tax return form 1040 if the education is undertaken primarily for the purpose of maintaining or improving present skills, or meeting express requirements of your employer. Expenses are not deductible, however, where education is undertaken primarily for advancement, new position, or fulfilling educational aspirations.

Disability retired pay "sick pay" exclusion—Members retired for physical disability resulting from active service may exclude up to \$100 per week of the portion of their retired pay not otherwise excluded on the

basis of percentage of disability until they reach retirement age. For this purpose, retirement age has been defined as the time when service would have been completed had a member continued on active duty, or age as indicated below:

Enlisted—30 years service regardless of age.

Warrant Officers, Men—30 years service or age 62 with 20 years

service, whichever is earlier.

Warrant Officers, Women—30 years service or age 55 with 20 years service, whichever is earlier.

Commissioned Officers, Men—40 years service or age 62, whichever is earlier.

Commissioned Officers, Nurses—30 years service or age 55, whichever is earlier, for LCDRs and above at time of retirement for disability; 20 years service or age 50, whichever is later, for below LCDR at time of retirement for disability.

Commissioned Officers, Others, Women—30 years service or age 55, whichever is earlier, for CDRs and above, at time of retirement for disability; age 50 for below CDR.

Further technical details may be found in paragraph 19(a) and 19(n) of the 1960 edition of the JAG pamphlet.

Form 1040A—The income ceiling on the use of form 1040A has been doubled—it may be used to report income of less than \$10,000 consisting entirely of wages reported on forms W-2 and not more than \$200 total of dividends, interest and other wages not subject to withholding. You may figure your own tax on income under \$5000, or have the Internal Revenue Service compute it, but you must figure your own tax on income of \$5000 or over. When you figure the tax you must pay the balance due when filing the return.

Form 1040W—Form 1040W is a new form which may be used by taxpayers whose income consists of salary and wages, regardless of amounts, and not more than \$200 in dividends and interest. If you have other items of income, you must file on the form 1040. Form 1040W is a streamlined version of form 1040 for taxpayers who cannot use form 1040A because they itemize deductions, claim the sick pay exclusion, have \$10,000 or over of income, claim credit for estimated tax payments, or claim other deductions, exclusions and credits not available on form 1040A.

Waiver of Retired Pay—Reservists, as well as Regular retired members, may now waive retired pay in favor of a nontaxable VA payment.

Exemptions—A taxpayer may claim

Assistant SecNav Jackson Discusses Moral Leadership

The following thoughts on Moral Leadership were recently expressed by the Honorable Richard Jackson, Assistant Secretary of the Navy (Personnel and Reserve Forces):

"I have been asked why we often say Moral Leadership where others expect us to say Command Leadership, Military Leadership, or Managerial Leadership.

"All these types of leadership can be very effective, but they can work for evil, in the hands of evil men, as they can work for decency and justice in the hands of good men.

"The difference between the two kinds of leader lies in the fact that one type is moved by ruthless, selfish and deceitful desires to aggrandize himself and his lieutenants at the expense of all mankind outside of his group of followers. Members of the latter group, on the other hand, use their leadership qualities to move men toward a greater sense of responsibility, honor, dignity and self-respect, to the end that, for all men, the world might be a better place to live in.

"Leadership—Naval Leadership—is nothing, therefore, unless it be Moral Leadership, and only by stressing this most important attribute of leadership can we make all hands aware that leadership has high and noble objectives toward which all may strive, and in the striving, make the Navy a better instrument to accomplish the aims of our nation's policy."

deduction for the exemption of a wife (or husband) only as a spouse, and not also as a dependent member of his household. No dependency exemption is allowed for a person living with the taxpayer where the relationship between them is in violation of local law. Exemption for an adopted nonresident alien child may be claimed if, for the taxable year, he resides in a citizen taxpayer's home as a member of his household.

Medical and Dental Expenses— Under a new special rule, the maximum deduction for medical expenses has been increased to \$15,000 on a separate return for a disabled taxpayer 65 or older, or his disabled spouse 65 or older who does not file a separate return, and to \$30,000 if both are disabled, 65 or older, and file a joint return. The maximum expense to be taken into account for each is limited to \$15,000. The regular limitations apply to the allowable expenses of a dependent or a nonqualifying spouse. Proof of disability is required.

"Hump Act" Payments— The lump-sum payment of \$2000 received by Navy and Marine officers not recommended for continuation on the active duty list under the so-called "Hump Act" must be included in full in the gross income for the year in which the payment was received.

Adopted Children— Now you may claim the exemption deduction for a child placed with you by an authorized placement agency for legal adoption (not for temporary custody) if the child is a member of your household. The former requirement that the child be a member of your household for an entire year has been removed.

Alimony and Separate Maintenance— Payments made under a decree of divorce or separate maintenance by a husband to his wife or former wife, which are to be paid over a period of less than 10 years, but which are subject to the contingency of the death of either spouse, the remarriage of the former wife, or a change in economic status of either spouse, qualify as periodic payments provided the payments are in the nature of alimony or an allowance for support.

Such payments are included in the gross income of the wife and are

All Navy Cartoon Contest
Ronald W. Thomas, SA, USN



"That guy is all sail and no anchor."

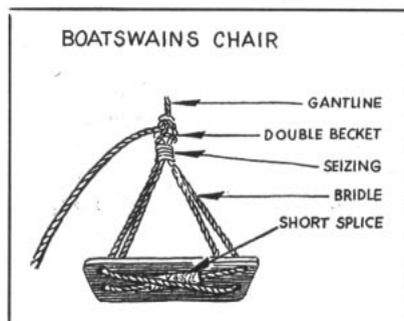
deductible by the husband. This is a departure from the former rule that installments of lump-sum payments must be payable for more than 10 years.

SO MUCH FOR the new material. Here are the main points you should know to file a correct return. It is followed by a schedule of tax withholdings based on your monthly income and number of exemptions claimed.

• **Address—** Be sure that your complete mailing address is on the return. It is most important that you furnish your name, rank or rating, branch of service, service serial number, and your permanent home address if you have one. If you have none and the ship is your only home, your address must include the name of the ship as well as the number. If you are based at an overseas shore station, your address must include the name of the station and Navy number.

• **Who Must File—** Practically every individual citizen, single or married (including minors), whose

Grains of Salt—



gross income is \$600 or more must file. There are certain exceptions based on old age and self-employment; these may be found in the JAG pamphlet.

• **When to File—** Income tax returns based on the calendar year must be filed on or before 15 April. However, if you are living or traveling outside the U. S., you have until 15 June to file your return (but you will be charged interest on the unpaid tax). In addition, the Director of Internal Revenue for the district in which you normally file your returns may upon application on form 2688 grant an extension of as much as six months (more if you are abroad).

• **How to Prepare Returns—** Broadly speaking, your income tax is based upon your "gross income" minus "business expenses" and "allowable deductions" (including personal exemptions), multiplied by the tax rates and minus "credits." In other words, certain specified expenses are subtracted from gross income to find "adjusted gross income"; deductions are subtracted from adjusted gross income to find "taxable" income; and the appropriate tax rate is applied to the taxable income to find the amount of tax you owe. Credits for the taxes withheld by your disbursing officer, payments on estimated tax—or for retirement income credit and so forth—are then subtracted from the tax you owe. If the total amount withheld is smaller than the amount you owe, you must pay the difference; if the amount withheld is larger than the amount of your tax—you'll get a refund.

Income That Must Be Reported

• **Gross Income—** This includes gains, profits and income derived from salaries, wages, or compensation for personal service—in short, money received from almost any source. The following items from naval sources, to the extent that they are not reduced by allowable "business expenses," should be reported as "gross income":

• Active duty pay including incentive and special pay such as "sea pay" and flight skins."

• Retired pay if retired for other than physical disability resulting from active service.

- Retainer pay of enlisted members transferred to the Fleet Reserve.

- Retired pay of enlisted members transferred to the retired list for other than physical disability resulting from active service.

- Pay of all midshipmen and NavCads, and retainer pay of \$50 and \$100 per month for NROTC and Naval Aviation College Program enrollees.

- Compensation for employment in officers' clubs, messes, station theatres, etc.

- Interest on Navy Savings Deposits and on Armed Forces Leave Bonds or leave payments.

- Lump sum payment received by officers upon honorable discharge or complete separation other than disability severance pay.

- Lump sum payment of \$2,000 to officers retired because not recommended for continuation on the active list under the "Hump Act" (Public Law 86-155).

- Mileage or per diem in excess of expenses.

Navy Income That Need Not Be Reported

The following items received from the Navy are excluded from "gross income" and need not be reported:

- Basic allowance for quarters, including cash difference for inadequate quarters, heat and light furnished in kind.

- Basic allowance for subsistence.

- Cost to government for transportation of dependents and household goods.

- Rations furnished in kind to enlisted men.

- Uniform gratuity or clothing allowance for officer and enlisted.

- Retired pay of persons retired before 1 Oct 1949 for physical disability resulting from active service and who are receiving pay under laws in effect before 1 Oct 1949.

- Disability severance pay and disability retired pay computed on percentage of disability, received for separation or retirement after 30 Sep 1949 under the Career Compensation Act of 1949.

- Uniforms furnished in kind to enlisted men.

- Death gratuities.

- Personal money allowances received by fleet admirals, admirals and vice admirals.

All Navy Cartoon Contest Alfred B. Castro, SA, USN



"Just a trim, please."

- Money received by naval attaches for entertaining and exceptional purposes, if expended solely in connection with official duties.

- Mustering out pay.

- State bonus payments for services rendered to the United States.

- Amounts paid to or on behalf of veterans under the WW II and Korean GI Bills.

Deductible Items

Adjusted Gross Income—Deducting any applicable items in the following list from your gross income

Naval Fighting Ships

The first book of a multi-volume *Dictionary of American Naval Fighting Ships* has been published by the Office of the Chief of Naval Operations. The series will cover the 10,000 plus Navy ships that have served the United States.

Research for, and production of the series is a project of the Naval History Division. The listing for each ship in the alphabetically arranged dictionary includes, where known, the characteristics of the ship, plus historical data covering the ship's career.

Volume one, covering ships having names beginning with the letters A and B, also includes appendices on all battleships, cruisers, submarines (including tenders and rescue vessels), torpedo boats, destroyers and escort vessels. The book, which is priced at \$3.00, is for sale by the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

will give you your "adjusted gross income." The following are deductible items.

- Mess bills afloat—An officer with or without dependents who is assigned permanent duty afloat, may deduct mess bills for any periods during which his ship is away from its home port for longer than an ordinary work day. The same principle applies to air personnel away from a squadron's home base.

- Travel expense—The excess expenses may be deducted if you are traveling in a mileage or per diem status. Form 2106 may be used for this purpose.

- Transportation expenses may be deducted by Reserve personnel if incurred while performing authorized drills under competent orders, even if they do not receive reimbursement for such travel.

- Expenses attributable to rents and royalties are deductible.

- Losses from sale or exchange of business property are deductible items in computing taxable income.

- Deductions from adjusted gross income—Once you have found your adjusted gross income you may make deductions for the following items to which you are entitled. You do this only if you are filing the long form (Form 1040) in which you itemize your deductions. If you are filing the Short Form 1040 or 1040A you will receive a standard and automatic deduction of about 10 per cent of the adjusted gross income.

- Contributions paid during the taxable year for exclusive public use (churches, United Givers Fund, Red Cross, Navy Relief, USO, etc.).

- Interest on personal indebtedness, such as mortgage on real estate or, under certain circumstances and to a limited extent, carrying charges on installment purchases of personal property.

- As a general rule, state and local taxes are deductible by the person upon whom they are imposed by law. However, federal excise taxes (luxury taxes), federal income and certain foreign taxes are not deductible.

- During periods of illness or hospitalization you may (under certain circumstances) be entitled to deduct your pay (up to a total of \$100 weekly). To support a claim for this exclusion, however, you

should furnish a statement from the attending physician, the hospital, the employer, or other acceptable evidence of absence, illness, and rate of payment. You may not deduct the first seven calendar days of such a period unless the absence is a result of injury or you are hospitalized at least one day.

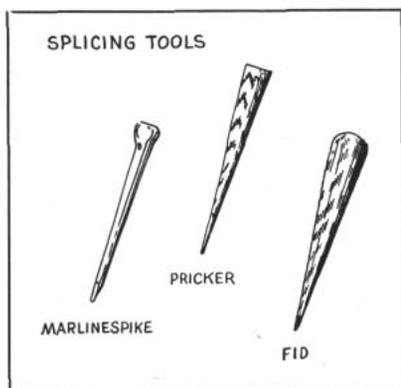
- Child care, a deduction limited to \$600, is allowed working women or widowers, as well as men who are legally separated or divorced, for the expense of caring for certain of their dependents in order that the taxpayer may be gainfully employed. A married woman may claim the deduction only if she files a joint return with her husband. Then the \$600 is reduced by the amount of their joint income over \$4500.

- Losses. For example, a loss occasioned by damage to your own automobile is deductible to the extent that it is not covered by insurance, unless it is the result of a willful negligence on your part.

- Miscellaneous deductible items include uniform equipment (insignia of rank, corps, etc.); amount of re-enlistment bonus refunded by reason of termination of enlistment; alimony payments, if included in the wife's gross income; dues to professional societies, etc.

Items which are not deductible from your adjusted gross income include: Personal living or family expenses other than the exceptions noted above; cost of moving and shipping household goods; cost of transportation of dependents; premiums paid on life insurance policies; expenses of visiting home while on furlough, leave or liberty; and amounts paid for U. S. Savings Bonds.

Grains of Salt—



David J. Majchrzak, DN, USN



"I'd just like to tighten up my muscles."

Your Exemptions

Exemptions for you and your dependents are treated as deductions from adjusted gross income in arriving at "taxable income." The amount of exemption allowed for each dependent is \$600 and exemptions are allowed for the following:

- You, the taxpayer.
- Your spouse.
- Each "dependent." You can claim credit only for persons who meet all of the dependency requirements listed on the instructions accompanying Forms 1040, 1040W and 1040A.

An individual receiving support from two or more persons, none of whom furnishes more than half, may be claimed as a dependent under certain circumstances. The conditions are listed in the tax instructions.

Citizens of foreign countries will not qualify as dependents unless they are residents of either the U. S., Canada, Mexico, Canal Zone or the Republic of Panama.

A child born or legally adopted in the Philippine Islands before 1 Jan 1956 may be claimed as your dependent if you were a member of the U. S. armed forces at the time the child was born or adopted, and providing the child is a resident of the Philippine Islands during the taxable year.

A last word of warning! If you have not already filed your return for 1959, get busy. There are penalties (some severe) for not filing and if you do not send in your return you will not collect any refund which may be due you.

Open Rates Listed for Reservists Requesting Transfer to Regular Navy

Enlisted Naval Reservists serving on active duty now have the opportunity to go regular in more than 100 different rates.

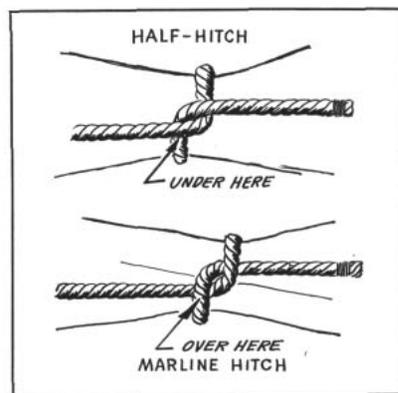
A recent change to BuPers Inst. 1130.4F, which details procedures for Naval Reserve personnel serving on active duty to enlist in the Regular Navy, brought up to date the list of rates open to Reservists.

Change three to BuPers Inst. 1130.4F announced that 26 additional rates were now open, while 16 others were deleted. All but four of the deletions were general apprenticeships in pay grades E-1, E-2 and E-3.

The following rates are the open rates in which active duty Reservists may enlist in the Regular Navy at the expiration of their active duty obligation:

QM2, 3	MR1, 2
SMC, 1, 2, 3	BT2, 3
RD1, 2, 3	BRC, 1
SOC, 1, 2, 3	EM1, 2, 3
TM2, 3	ICC, 1, 2, 3
GS2, 3	SF3
FT2, 3	SVC, 1, 2, 3
NW2, 3	CEC
MN3	BU2, 3
ETC, 1, 2, 3	SW2, 3
OM2, 3	AD3
CT1, 2, 3	AT1, 2, 3
YN3	AQ3
MA2, 3	AC3
SK3	PR2, 3
RM1, 2, 3	AG1, 2, 3
JOC, 1, 2, 3	TD3
DM1, 2	PTC, 1, 2, 3
MUC, 1, 2, 3	AN, AA, AR
MM1, 2, 3	SN, SA, SR
EN2, 3	TN, TA, TR

Grains of Salt—



Roundup of State Income Tax Laws and Rules for Servicemen

IF YOU'VE READ the preceding pages, you are now more familiar with the regulations pertaining to federal income taxes, particularly as they apply to the Navymen on active duty. It should be of help in understanding your rights and liabilities under federal income tax laws.

At the same time, certain states, territories and possessions of the United States also have their own income tax laws under which you may have liabilities in addition to the federal income tax. Below, you will find a summary of the requirements of the local income tax laws, as prepared by the Office of the Judge Advocate General. It replaces the summary presented in the March 1958 issue of ALL HANDS.

You should note, that *unless your state makes a special exception*, members of the armed forces are not excused from state and local income taxes merely because they are on active duty.

Generally speaking, your liability for state and local income and personal property taxes (but not real property taxes such as on your home) is determined on the basis of the laws of your domicile or legal residence, sometimes referred to as your home state or the state of which you are a citizen or inhabitant.

Most state taxes are based on actual residence or presence in the jurisdiction and for this reason the Soldiers' and Sailors' Civil Relief Act is important to you. Although it protects you from taxation by a state of which you are not a resident, it does NOT relieve you from liability for taxes to your home state. There is no exemption by reason of being in the naval or military service unless your home state law provides special benefits for you.

Active service personnel are protected to the extent provided by the Soldiers' and Sailors' Civil Relief Act. This Act provides that, for the purpose of taxation of your individual income and personal property, including your automobile, if you are absent from your place of legal residence or domicile solely by reason of compliance with military or naval orders, you will not be considered to have become a resident of any other state or possession of the United States while so absent.

In this situation your active service pay and personal property are exempt from taxation in the state where you are serving. So is your automobile, if the license, fee, or excise imposed by your home state is paid.

There is no exemption under the

Act from taxation of retired and re-tainer pay; the income, property, or automobile of your wife; or income from a business, rental property or other source, such as part-time employment, in the state in which you are living by reason of active duty orders.

In many cases, tax authorities have taken the position that a serviceman has abandoned his original domicile when there is a showing that the right to vote in his home state has not been exercised and that a home-state's income taxes, if any, have not been paid.

Because of this, it is much easier to substantiate your domicile in your home state if the required taxes have been paid, your voting privilege has been exercised and other ties to the home state, such as automobile license plates and operator's permit have been kept current.

Below you will find a summary of the salient features of the income tax laws for the calendar year 1959 of the states and possessions of the United States. It primarily indicates the requirements for the filing of income tax returns by servicemen who are residents of jurisdictions having income tax laws; personal exemptions and tax credits allowed; due dates for filing and paying taxes.

SUMMARY OF INCOME-TAX LAWS OF STATES AND POSSESSIONS OF THE UNITED STATES

- NOTE: 1. "Married couple" or "married" as used in this summary means husband and wife living together.
2. A married service man or woman is considered to be living with his or her spouse when separated only by reason of military orders.
3. "*" indicates provisions for declaration and payment of estimated taxes.
4. The following states do not impose individual income taxes: CONNECTICUT, FLORIDA, ILLINOIS, MAINE, MICHIGAN, NEBRASKA, NEVADA, NEW JERSEY, OHIO, PENNSYLVANIA, RHODE ISLAND, SOUTH DAKOTA, TEXAS, WASHINGTON, WEST VIRGINIA, and WYOMING.

Amount, or More, of Income Which Requires Resident to File Returns	Personal Exemptions and Tax Credits	Due Date for Return and Payments	Title and Address of Taxing Authority	Exclusions and Deferrals for United States Armed Forces Personnel
*ALABAMA: Net income of: \$1500 if single, \$3000 if married or head of family.	\$1500 if single, \$3000 if married or head of family, \$300 for each dependent.	Return due 15 April. Payment with return.	State Department of Revenue, Income Tax Division, Montgomery 2, Ala.	Members outside continental United States may defer filing until 30 days after they return to the U. S.
*ALASKA: Gross income of \$600 from sources within the states.	\$600 for taxpayer, \$600 for spouse, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind; age 65 or older.	Return due 15 April. Payment with return.	Department of Revenue, Alaska Office Building, Juneau, Alaska.	All active-service pay exempt after 1950. Members may defer paying until six months after discharge if ability to pay is impaired by reason of military or naval service.

Amount, or More, of Income Which Requires Resident to File Returns	Personal Exemptions and Tax Credits	Due Date for Return and Payments	Title and Address of Taxing Authority	Exclusions and Deferments for United States Armed Forces Personnel
ARIZONA:				
Net income of: \$1000 if single, \$2000 if married. Gross income of \$5000.	\$1000 if single, \$2000 if married or head of household, \$600 for each dependent, \$500 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return or in three equal installments.	Arizona State Tax Commission, Income Tax Division, State House, Phoenix, Ariz.	\$1000 active-service pay is exempt. Members outside continental United States may defer filing and paying, without interest or penalty, until 180 days after release or termination of present emergency, whichever is earlier.
ARKANSAS:				
Gross income of: \$1750 if single or separated from spouse, \$3500 if married or head of family.	Tax credit of: \$17.50 if single, \$35 if married or head of a family, \$6 for each dependent.	Return due 15 May. Payment with return or in two equal installments.	State of Arkansas, Department of Revenue, Little Rock, Ark.	All active-service pay excluded.
CALIFORNIA:				
Net income of: \$1500 if single or head of household, \$3000 if married.	\$1500 if single, \$3000 if married or head of household, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return or, if over \$50, in three installments with first payment not less than \$50.	State of California Franchise Tax Board, 1025 P Street, Sacramento 14, Calif.	\$1000 active service pay and all mustering-out and terminal leave payments received after 1 Jul 1952 are exempt. Filing and paying deferred without penalty or interest until 180 days after return to the U.S. from duty outside continental U.S.
*COLORADO:				
Gross income of \$750.	\$750 for taxpayer, \$750 for spouse, \$750 for each dependent, \$750 additional for taxpayer and spouse if blind; age 65 or older.	Return due 15 April. Payment with return.	State of Colorado, Department of Revenue, State Capitol Annex, Denver 2, Colo.	\$2000 of active or reserve duty pay excluded during war or national emergency; \$1000 during other times. (\$2000 applies in 1959) Returns and payment of tax deferred without penalty or interest until one year after separation.
DELAWARE:				
Gross income of: \$600 if single or separated from spouse, \$1200 combined gross income of married couple.	\$600 for taxpayer, \$600 for spouse, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind; age 65 or older.	Return due 30 April. Payment with return or in installments if tax exceeds \$5.	State of Delaware, State Tax Department, 843 King Street, Wilmington 99, Del.	Deferment for filing and paying may be granted, upon application, until six months after discharge. A domiciliary who maintains no permanent abode in the State, but who maintains one elsewhere, and who spends no more than 30 days of the year within the state, is not a "resident" for income tax purposes.
*DIST. OF COLUMBIA:				
Gross income in excess of: \$1000 if single or separated from spouse, \$2000 combined income of married couple.	\$1000 if single or separated from spouse, \$2000 if married, \$1500 if head of family, \$500 for each dependent, \$500 additional for taxpayer and spouse if blind; age 65 or older.	Return due 15 April. Payment with return.	District of Columbia, Finance Office, Revenue Division, Room 2025, Municipal Center, 300 Indiana Ave., N.W., Washington 1, D. C.	Deferment for filing or paying granted members outside the United States until six months after return to the U. S.

THE BULLETIN BOARD

<i>Amount, or More, of Income Which Requires Resident to File Returns</i>	<i>Personal Exemptions and Tax Credits</i>	<i>Due Date for Return and Payments</i>	<i>Title and Address of Taxing Authority</i>	<i>Exclusions and Deferrals for United States Armed Forces Personnel</i>
*GEORGIA:				
Gross income of: \$1500 if single or separated from spouse, \$3000 combined gross income of married couple.	\$1500 if single, \$3000 if married or head of family, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind, age 65 or older.	Return due 15 April. Payment with return or in three equal installments if tax exceeds \$30.	Department of Revenue, Income Tax Unit, 502 State Office Bldg., Atlanta 3, Georgia.	Deferment for filing or paying without penalty or interest granted members outside continental U. S. until six months after return to the U. S.
*GUAM:				
Same as Federal.	Same as Federal.	Same as Federal.	Division of Revenue and Taxation, Department of Finance, Government of Guam, Agana, Guam.	Same as Federal, however, as to service compensation, the Government of Guam in practice has not imposed the Guam income tax on individuals subject to the United States income tax.
*HAWAII:				
Gross income of \$400 (\$800 if 65 or older). Any amount from rents or a profession.	\$400 if single, \$400 for spouse, \$400 for each dependent, \$400 additional for taxpayer or spouse if 65, \$5000 in lieu of normal exemption for taxpayer if blind.	Net income tax: Return due 20 April. Payment with return.	State of Hawaii, Department of the Tax Commissioner, P.O. Box 259, Honolulu 9, Hawaii.	All service pay excluded. Members may defer paying, without interest or penalty, until six months after discharge if ability to pay is impaired by reason of service.
IDAHO:				
Gross income of \$600 (\$1200 if 65 or older).	\$600 for taxpayer, \$600 for spouse, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind; age 65 or older.	Return due 15 April. Payment with return or in two equal installments.	State of Idaho, Office of Tax Collector, Income Tax Division, State Capitol Building, Boise, Idaho.	Active service pay exempt if serving outside the State for the entire year. If outside the continental United States may defer filing and paying until six months after discharge.
INDIANA:				
Gross income in excess of \$1000. Joint returns not permitted.	\$1000 for each taxpayer.	Return and payment due 31 January; or quarterly if over \$25 any quarter.	Indiana Department of State Revenue, Gross Income Tax Division, 141 South Meridian Street, Indianapolis 13, Ind.	All active service pay is exempt. Returns and payment of tax deferred until six months after discharge or end of hostilities, whichever is earlier.
IOWA:				
Net income of: \$1500 if single or separated from spouse, \$2350 if married. Gross income of \$2500.	Tax credit of \$15 if single, \$30 if married or head of family, \$7.50 for each dependent.	Return due 30 April. Payment due with return or in two equal installments if tax is \$50 or more.	State Tax Commission, Income Tax Division, State Office Building, Des Moines 19, Iowa.	Same computations as for Federal return.
KANSAS:				
Net income of: \$600 if single or separated from spouse, \$1200 if married. (Plus age and blind exemptions.) Gross income of \$4000.	\$600 for taxpayer, \$600 for spouse, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind; age 65 or older.	Return due 15 April. Payment with return or in two equal installments if tax is more than \$200.	State of Kansas, Department of Revenue, Income Tax Division, State Office Building, Topeka, Kans.	\$1500 active service pay excluded from gross income until the termination of the present world crisis as determined by the Executive Council of the State.
*KENTUCKY:				
Gross income of \$700 (\$1400 if 65 or older).	Tax credit of: \$13 for taxpayer, \$13 for spouse, \$13 for each dependent, \$13 additional for taxpayer and spouse if 65 or blind.	Return due 15 April. Payment with return.	Commonwealth of Kentucky, Department of Revenue, Frankfort, Kentucky.	Same computations as for Federal return.

<i>Amount, or More, of Income Which Requires Resident to File Returns</i>	<i>Personal Exemptions and Tax Credits</i>	<i>Due Date for Return and Payments</i>	<i>Title and Address of Taxing Authority</i>	<i>Exclusions and Deferments for United States Armed Forces Personnel</i>
LOUISIANA: Net income of: \$2500 if single or separated from spouse, \$5000 if married. Gross income of \$6000 or more.	\$2500 if single, \$5000 if married or head of family, \$400 for each dependent.	Return due 15 May. Payment with return or in three equal installments.	State of Louisiana Department of Revenue, Baton Rouge 1, La.	None.
*MARYLAND: Gross income in excess of: \$800 if single, \$1600 if married.	\$800 if single, \$1600 if married, \$800 for each dependent, \$800 additional for taxpayer and spouse if blind; age 65 or older; also for dependents 65 or older.	Return due 15 April. Payment with return.	State of Maryland, Comptroller of the Treasury, Income Tax Division, Annapolis, Md.	\$1500 of active service pay excluded during time of war and prior to cessation of hostilities or while in a combat zone. (No exclusion in 1959.) Members outside continental United States may defer filing until three months after return to the U. S.
*MASSACHUSETTS: Earned income of \$2000. Other taxable income in any amount.	\$2000 for taxpayer against earned income, \$500 for spouse having income of \$2000 or less, \$400 for each dependent, \$2000 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return.	The Commonwealth of Massachusetts, Department of Corporations and Taxation, Income Tax Division, 40 Court Street, Boston 8, Mass.	Policy is to grant deferment for filing to those outside the States until return to the United States or six months after discharge, whichever occurs first.
MINNESOTA: Gross income in excess of: \$750 if single, \$1500 if married or head of household, or if combined income of married couple exceeds \$1500.	Tax credit of: \$10 if single; \$10 more if blind, \$30 if married or head of household, \$14 per dependent, \$15 additional for married taxpayer or spouse if blind, age 65 or older.	Return due 15 April. Payment with return or in two equal installments.	State of Minnesota Department of Taxation, Income Tax Division, 156 East 6th Street, St. Paul 1, Minn.	\$3000 active service pay excluded. Members of Armed Forces outside continental U. S. continuously for more than 90 days granted extension of time until six months after return to the U. S.
MISSISSIPPI: Net income in excess of personal exemptions. Gross income in excess of \$6000.	\$4000 if single, \$6000 if married or head of family.	Return due 15 April. Payment with return or in four equal installments.	State Tax Commission, Income Tax Division, Box 960. Jackson, Miss.	None.
MISSOURI: Gross income of: \$1200 if single, \$2400 if married or head of family.	\$1200 if single, \$2400 if married or head of family, \$400 for each dependent.	Return due 15 April. Payment with return.	State of Missouri, Department of Revenue, Income Tax Dept., P. O. Box 629, Jefferson City, Mo.	\$3000 of active service pay exempt after 1950. Director of Revenue may allow extension of time for filing without penalty or interest until one year after discharge.
*MONTANA: Net income of \$600 if single, \$1200 if married or head of family. Gross income of \$1200.	\$600 if single, \$1200 if married or head of family, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind, age 65 or older.	Return due 15 April. Payment with return.	State of Montana, Board of Equalization, State Capitol Building, Helena, Mont.	Filing and paying deferred until six months after discharge in cases of undue hardship caused by military service.
NEW HAMPSHIRE: Any amount of taxable interest or dividends. Joint returns not permitted.	\$600 for each tax payer.	Return due 1 May. Payment with return.	State Tax Commission, Interest and Dividends Division, Box 345, Concord, N. H.	None.

THE BULLETIN BOARD

Amount, or More, of Income Which Requires Resident to File Returns	Personal Exemptions and Tax Credits	Due Date for Return and Payments	Title and Address of Taxing Authority	Exclusions and Deferments for United States Armed Forces Personnel
NEW MEXICO:				
Gross income of: \$1500 if single, \$2500 if married.	\$1500 if single, \$2500 if married, \$200 for each dependent.	Return due 15 April. Payment with return or in four equal install- ments.	State of New Mexico, Bureau of Revenue, Income Tax Division, P. O. Box 451, Santa Fe, N. M.	None.
*NEW YORK:				
Combined net income and net capital gain of \$600 (\$1200 if 65 or older). Combined gross income and net capital gain of \$5000.	\$600 for taxpayer, \$600 for spouse, \$600 for each dependent, \$600 addi- tional for taxpayer and spouse if blind, age 65 or older.	Return due 15 April. Payment with return.	State of New York, Department of Taxation and Finance, Income Tax Bureau, Albany 1, N. Y.	Returns deferred for mem- bers continuously hospital- ized outside New York for injury in combat zone until six months after such hospi- talization. A domiciliary who maintains no perman- ent abode in the State, but who maintains one elsewhere, and who spends no more than 30 days of the year within the State, is not a "resident" for in- come tax purposes.
*NORTH CAROLINA:				
Gross income of: \$1000 if single or a married woman with separate income, \$2000 if a married man. Gross income from business or pro- fession in excess of personal exemption.	\$1000 if single or a mar- ried woman, \$2000 if married man or head of a household, \$2000 if widow or widower with minor child, \$300 for each dependent, \$1000 additional to blind tax- payer.	Return due on or before 15 April. Payment with return or in two equal installments if tax is over \$50; four equal install- ments if tax is more than \$400.	State of North Carolina, Department of Revenue, Individual Income Tax Division, Raleigh, North Carolina.	None.
NORTH DAKOTA:				
Net income of: \$600 if single or separated from spouse, \$1500 if married or head of household. Gross in- come of \$5000.	\$600 if single, \$1500 if married or head of household, \$600 for each dependent, \$600 addi- tional for taxpayer and spouse if blind, age 65 or older.	Return due 15 April. Payment with return or in installments if tax ex- ceeds \$100.	State of North Dakota, Office of Tax Commissioner State Capitol Building, Bismarck, N. D.	All active service pay is exempt. Deferment granted to members of Armed Forces until the 15th day of 6th month following discharge.
OHIO:				
No individual State income tax, but residents of some Ohio cities and municipalities may be liable for local income taxes.				
OKLAHOMA:				
Gross income of: \$1000 if single, \$2000 if married	\$1000 if single, \$2000 if married or head of family, \$500 for each dependent.	Return due 15 April. Payment with return.	Oklahoma Tax Commission, State of Oklahoma, Income Tax Division, Oklahoma City 5, Okla.	\$1500 of active service pay is excluded. Filing and paying by member outside the United States or hospi- talized in the U. S. de- ferred until 15th day of 3rd month following return or discharge from hospital.
OREGON:				
Net income in excess of personal exemp- tions.	\$600 if single or sep- arated, \$1200 if mar- ried, \$600 for each de- pendent plus \$1 credit for each \$100 of support furnished each, \$600 ad- ditional for taxpayer or spouse if blind plus credits of \$18 if blind and \$12 if age 65.	Return due 15 April. Payment with return or in installments if tax ex- ceeds \$25.	Oregon State Tax Commission, Income Division, 100 State Office Building, Salem, Ore.; or State Tax Commission, 1400 S.W. 5th Avenue, Portland 1, Ore.	\$3000 of active service pay is excluded. Returns and payment of tax de- ferred for 90 days after return to U. S. from period of duty exceeding 90 days outside continental United States.

<i>Amount, or More, of Income Which Requires Resident to File Returns</i>	<i>Personal Exemptions and Tax Credits</i>	<i>Due Date for Return and Payments</i>	<i>Title and Address of Taxing Authority</i>	<i>Exclusions and Deferments for United States Armed Forces Personnel</i>
PENNSYLVANIA:				
No individual income tax, but residents of some Pennsylvania cities and municipalities may be liable for local income taxes. Philadelphia exempts all military pay.				
*PUERTO RICO:				
Gross income in excess of: \$800 if single, separated from spouse or if head of family, \$2000 if married and living with spouse.	\$800 if single or separated from spouse, \$2000 if married or head of family, \$400 for each dependent.	Return due 15 April. Payment with return or in two equal installments where no declaration of estimated tax was elected.	Commonwealth of Puerto Rico, Department of the Treasury, Bureau of Income Tax, P. O. Box 9833, Santurce, Puerto Rico.	\$500 qualified special deduction for service in Korean conflict as member: (a) 65th Infantry Reg., or (b) any unit of U. S. Armed Forces, if bona fide resident of Puerto Rico.
SOUTH CAROLINA:				
Net income of: \$1000 if single or separated from spouse, \$1800 net aggregate income of married couple.	\$1000 if single, \$2000 if married or head of a household, \$400 for each dependent.	Return due 15 April. Payment with return or in installments if tax exceeds \$25.	South Carolina Tax Commission, Income Tax Division, Drawer 420, Columbia 1, S. C.	Same computations as for Federal return.
TENNESSEE:				
Income over \$25 from dividends and interest.	None, except income of blind persons is exempt.	Return due 15 April. Payment with return.	State of Tennessee, Department of Finance and Taxation, Income Tax Division, War Memorial Building, Nashville 3, Tenn.	None.
UTAH:				
Gross income of: \$600 if single or separated from spouse, \$1200 if married.	\$600 if single, \$1200 if married, \$600 for each dependent, \$600 additional for taxpayer and spouse if blind.	Return due 15 April. Payment with return.	State Tax Commission of Utah, 118 State Capitol, Salt Lake City 14, Utah.	If in foreign country 510 days of any 18 consecutive months may file as a non-resident for each taxable year while so absent for three months or more.
*VERMONT:				
Gross income of \$500 (\$1000 if 65 or older).	\$500 for taxpayer, \$500 for spouse, \$500 for each dependent, \$500 additional for taxpayer and spouse if blind, age 65 or older.	Return due 15 April. Payment with return.	Commissioner of Taxes, State Tax Department, Montpelier, Vt.	Same as Federal. Members serving an initial enlistment period may defer paying until six months after discharge if ability to pay is materially impaired by active service.
VIRGINIA:				
Gross income of: \$1000.	\$1000 for taxpayer, \$1000 for spouse, \$200 for each dependent plus \$800 to unmarried taxpayer who has a dependent father, mother, son, daughter, sister, or brother, \$600 additional for taxpayer and spouse if blind, age 65 or older.	Return due 1 May. Payment in full, with return, to Treasurer of county or city where return is filed.	Commissioner of Revenue of the county or city of which taxpayer is a resident.	None.
WISCONSIN:				
\$1400 combined net income of married couple. Gross income of \$600.	Tax credit of: \$7 if single, \$14 if married or head of family, \$7 for each dependent.	Return due 15 April. Payment with return or in installments if tax exceeds \$20.	State of Wisconsin, Department of Taxation, Room 1000, State Office Building, Madison 2, Wis., or Assessor of Income for county in which taxpayer resides.	\$1000 of active service or reserve pay excluded. Extension of time for filing granted to members on duty abroad until 15th day of 6th month following close of taxable year.

BOOKS

THEMES RANGE FROM WORLD WAR II TO THE MOON RACE

IF THE PRESENT publishing trend continues, only the Civil War will be able to compete with World War II coverage. Three more titles, one of which is fiction, are among those selected for review this month. Ask for them at your ship or station library.

In *The Liberation of the Philippines*, which is Vol. XIII of the History of U. S. Naval Operations in World War II, Samuel Eliot Morison continues his story of sea warfare with the amphibious operations for the liberation of the Philippines (under which come such names as Mindoro, Lingayen, Palawan, Zamboanga, Panay, Negros, Cebu, Corregidor and Mindanao). These half-forgotten far-off names come to life as Morison tells of the preliminary bombardments, the terrific toll of American lives taken by the Kamikaze Corps, the assaults over the beaches and the land fighting for these islands and for Manila. Of particular interest to Navymen is the chapter on the great typhoon of December 1944, in which three Navy ships went down and more than 800 lives were lost. Other chapters tell the story of the three amphibious assaults on Borneo by Australian troops covered by the U. S. Navy; of submarine operations in the southwest Pacific in 1945; and of Captain Milton Miles' U. S. Naval Group in China which fought the last naval battle of the war with sailing junks.

There were also quite a few Navymen on the beaches of Normandy on D-Day, 6 Jun 1944. Those who lived through that hard, long day can now get an excellent picture of the whole thing in *The Longest Day*, by Cornelius Ryan. Other books have been written on the subject but none have concentrated quite as much on the individual viewpoint of the men—Allies and Germans alike—who did the actual fighting. This one is based on material solicited from veterans—British, American, Canadian, French and German—and civilian survivors, and from German war diaries and Allied reports. The story takes you from the paratroopers, to the gliders, to the bombardments, to the many sections of the landings. On the German side it tells of the growing con-

fusion when relayed messages were not believed, impossible orders given and the little that was done was swept beneath the assembled might of the invasion forces. As Ryan says: "I believe I have told the story as it actually happened rather than as the generals or others thought it happened."

Coverage of our present "war" is somewhat different. *War for the Moon*, by Martin Caidin tells the story of the lunar probes of 1958 and 1959, which culminated in the payloads which went past the moon to orbit the sun as history's first artificial planets. The author traces the events of space exploration from the first American planning to the successful United States' launching of the Pioneer IV payload past the moon and into solar orbit in 1959. He discusses the problems that must be overcome before human beings can land on the surface of the moon and what we know of conditions there. *War for the Moon* is an account of one of the most important scientific programs in human history.

Another "war" book is *The Silent War in Tibet* by Lowell Thomas, Jr. This rather informal history of the Communist Chinese infiltration and conquest of this Buddhist mountain stronghold tells an appalling story of brutality and deceit on the part of the communists; loyalty and courage on the part of the Tibetans and the fourteenth Dalai Lama. Intermingled in the political aspects is an interesting account of an interesting people.

One more: *The Soviet Image of Future War*, by Raymond L. Garthoff, is somewhat on the technical side. Here, Dr. Garthoff discusses

Grains of Salt—



some of the most highly significant aspects of Soviet military writing and thinking. In doing so, he analyzes and presents his understanding of the many facets of their strategy. Included in this book are direct translations of some of the latest, highly important Soviet military writings. He discusses the Soviet views of the interrelationship of their economy and war-making capacity. He quotes authoritative sources and his conclusions are sobering. To quote one Soviet writer: "Under equal economic potentials, the military economic potential of the socialist country is greater than that of a capitalist country." The Soviet Union is convinced that it possesses a superior potential in economics and military strength.

A good escape from all this may be found in *Captain Cousteau's Underwater Treasury*, edited by Jacques-Yves Cousteau and James Dugan. This collection of articles and excerpts from books provides an excellent survey of what has been going on under the water for a long time. It reaches from the jungle to the polar regions, from coral reefs to tunneling under the Thames, from caves and lakes to wartime encounters, from pearls to insects, from free diving to bathysphere, and from mythology to salvage. It covers many subjects as well as a wide range in time, from experiences in diving in 1850, the first underwater photography, and the first military use of the submarine—in 1776. Navymen will be interested in the story of *Wahoo*, by CDR Edward L. Beach, and "Midget Attack on a Japanese Cruiser," by Ian Fraser.

Even fiction is not safe from the war theme this month. However, in *The War Lover*, by John Hersey, the approach is much different. The story is primarily concerned with the life and death of a Flying Fortress and its crew from its arrival in Great Britain until it was shot down over the Channel some five and one-half months later. However, the real story centers about the relationship of the crew members to one another and what war does to them. There's a mild love interest involved, but that's not the point of the title. Find out for yourself.

For a change of pace you might try *Best American Short Stories of 1959*, edited by Martha Foley and David Burnett. This includes yarns by 20 modern American writers.

CORAL SEA

the battle and the carrier



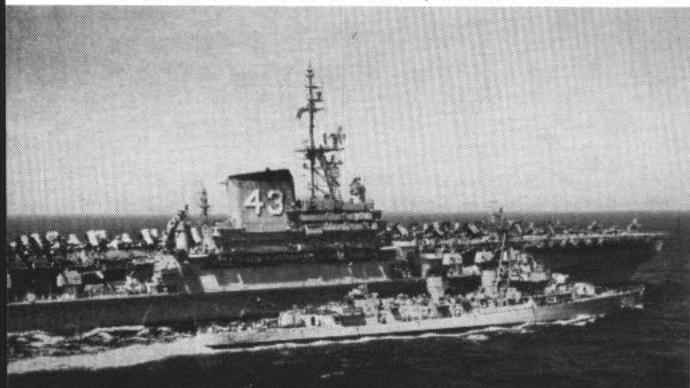
END OF ENEMY CARRIER—Navy planes send Japanese carrier Kyukaka toward the bottom during Battle of Coral Sea.

A few months ago, USS Coral Sea (CVA 43) was commissioned for the second time in her career. This event, a part of the Navy's long-range program for the modernization of ships built near the end of World War II, marked the end of two and one-half years of conversion of this ship.

The last of nine aircraft carrier conversions at the Puget Sound Naval Shipyard, Coral Sea joins the Pacific Fleet along with her sister ships, the converted carriers USS Midway (CVA 41) and USS Franklin D. Roosevelt (CVA 42).

This is the story of Coral Sea, the carrier, and of the changes that were made in her, and Coral Sea, the Battle, after which she was named. It is adapted from her ship's

NAMED FOR BATTLE—USS Coral Sea (CVA 43) fuels DDE while pulling tour of duty in the Mediterranean.



history and from reports appearing in her ship's newspaper, "Coral Sea Breeze."

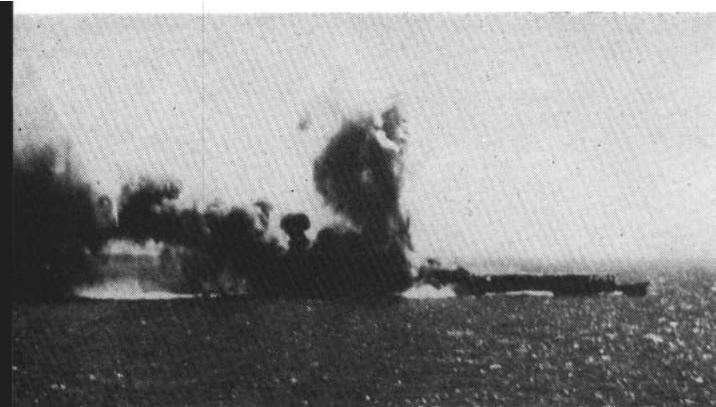
AT NOON, 15 Apr 1957, *Coral Sea* steamed into Puget Sound Naval Shipyard for the beginning of a two-and-one-half year conversion. Today, that conversion has been completed and the carrier is again commissioned in the service of the U. S. Navy.

Many changes have been made. Today, she is not only pretty, she is useful. Her angled deck is probably the most notable change. As with so many other carriers, it will make it possible to land planes with greater safety and makes it possible to launch and recover planes at the same time. Greater safety is assured with the new landing light assembly and the new arresting gear assembly. An extra catapult is on the angled part of the deck. Midships elevators have been removed and replaced with deck edge elevators.

The hull has been expanded four feet on each side. The bow has been closed in to form a hurricane-type bow. The old tripod mast was removed and replaced with a single mast suspended in the superstructure.

Modernized as Coral Sea may be, respect has been paid to ancient customs and traditions.

In Roman times, copper coins were placed in the mouths of the dead so they might pay their fare to Charon on the River Styx ferry. By placing a copper coin in the keel of the mast of a ship, the safe passage



BATTLE OF CORAL SEA was carrier duel. Left: Japanese carrier is hit. Rt: Sea is "shook" by strafing and bombs.

of all hands over the River was guaranteed if disaster should befall the vessel.

Another school of thought claims that a piece of silver, preferably a coin, placed under the mast will insure profitable voyages. Good luck will prevail on a ship protected with a coin under the mast.

During the original construction of Coral Sea, three copper coins were placed at each heel of the tripod mast. In 1957 the tripod was removed. The new single mast is not resting on its heel, but is suspended in the superstructure. Tradition could not be broken; therefore, three copper coins have been welded inside the mast at the base.

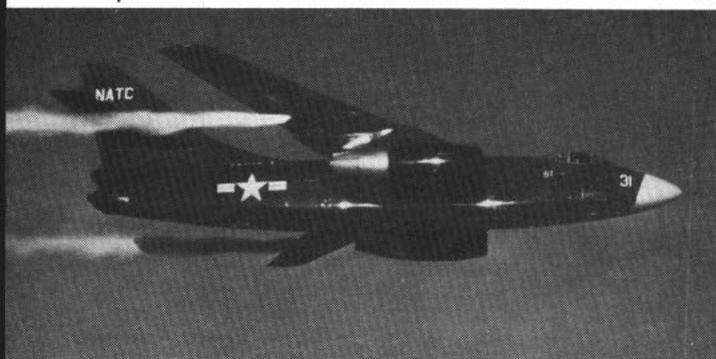
LIVING spaces have been modernized. The nerve center of the ship, Combat Information Center, is the most modern possible. Television aids have been installed to transfer information from Combat to other spaces.

The engineering spaces have been torn apart and reassembled. All working machinery has been overhauled and cleaned. Before conversion, the machinery of *Coral Sea* was as modern as in most of the Fleet. But it was

ON BOARD—Navy's battle-proven AD Skyraiders will be among the sleek jets aboard USS *Coral Sea* (CVA 43).



JET POWER—Twin-engine jet A3B Skywarriors will add punch to the modernized carrier when she sets to sea.



beginning to show signs of wear. Overhaul has brought good machinery back to good working order.

The landing lights fold into the deck, to reduce the danger of planes accidentally crashing into them. The lights are themselves a safety device, for they make it possible to land a plane with greater accuracy.

Five types of planes will be aboard.

The A3D *Sky Warrior*, a twin-engine jet two-seater will be used for high-level, high-speed attack, low-level attack, minelaying and photo reconnaissance.

The A4D *Skyhawk* is a single-seater light attack bomber. It is less than half the size of many U. S. jet fighters and yet it outperforms most fighters. It is so small that it does not need folding wings for stowage on a carrier. For a payload, this craft is capable of carrying more than its own weight in bombs.

The F3H *Demon* is an all-weather fighter type designed for carrier operation. This single seater plane carries the latest fighter weapons for air-to-air combat.

Used for several years by the Fleet, the AD *Skyraider* has proved itself as a dependable carrier-based aircraft. Power and maneuverability are the most important features of the ADs.

The fastest aircraft to be carried on board is the F8U *Crusader*, a single seater fighter. The maximum rated speed of this plane is well over 1000 miles per hour. Latest models of this craft will exceed twice the speed of sound. The plane carries the most versatile electronic equipment ever fitted into an aircraft. A hydraulic system controls the angle of attack of the wings to give efficient operation in flight, while safe landing speeds are obtained by increasing the angle of attack.

These planes will leave *Coral Sea* by three of the most modern catapults used in the Navy today. Two are located forward and the third on the angled deck. Each is equipped with an improved version of the wet accumulator, a major advance in catapult launching systems. Briefly, this is a large cylindrical pressure tank used to store the instantaneous punch needed for launching aircraft at very short intervals. Although the wet accumulator is an old concept used in shore-based power plants for peak loads, the improved version is an adaptation for launching aircraft.

Another new change on *Coral Sea* is the hydraulic bridle arresting gear, which works in conjunction with catapult launching. The cable that is used to attach a plane to the catapult is retrieved by this gear after the plane leaves the catapult.

The first plane was launched from an "aircraft carrier," USS *Birmingham*, 10 Nov 1910. *Birmingham* was not actually a carrier but a specially rigged heavy cruiser. The first ship designated as an aircraft carrier was the converted collier *Jupiter*. Her flight deck was

534 feet by 64 feet and her stacks were designed to fold down out of the way during operations. This ship was the first to have catapults.

CARRIERS HAVE COME a long way since the first days of carrier operations. They have frequently been compared to complete, self-contained cities and *Coral Sea* well fits this classification. All the innovations of the modern Navy have been incorporated in *Coral Sea* and many of the conveniences to be found in a city are to be found aboard.

Every large city has a radio station and *Coral Sea* is no exception. Four channels of music and news are piped throughout the ship. The music ranges from popular to classical. News broadcasts are recorded and played at regularly scheduled hours.

If illness should befall a citizen of the carrier, there are complete hospital and dental facilities—at no cost to the patient.

Shops that could normally be found on Main Street are also on board. There is a print shop, a butcher shop (with no cash registers), a shoe repair shop, barber shop, tailor shop, carpenter shop and a laundry.

A daily and a monthly newspaper is printed in the ship's own print shop. Distribution is free and the publications contain no paid advertising. Letters and money orders can be sent from the local post office. However, customers must buy stamps.

Soda fountains and soft drink machines provide a neighborly atmosphere.

For those athletically minded there are basketball and volleyball courts. There is also a conditioning room and a steam room.

Living standards are comparable to those of a shore-based naval facility. Gimmicks which will be found include: Personal bunk lights, writing desks, ironing boards, and four-man tables in the mess decks. Many working spaces are air-conditioned for comfort and a dry cleaning plant has been added to the laundry. A closed circuit television system has been installed for operational and entertainment purposes. While in port, TV can be picked up from shore stations and channeled throughout the ship for the entertainment of the crew. Underway, TV programs that have been put on film can be rerun. Live broadcasts are the ultimate aim of those operating the station.

Modern? Yes. But the old ways still keep cropping up. Sallying ship might be thought to be relegated to the days of sailing ships. Nevertheless, *Coral Sea* also indulged in this ancient maneuver.

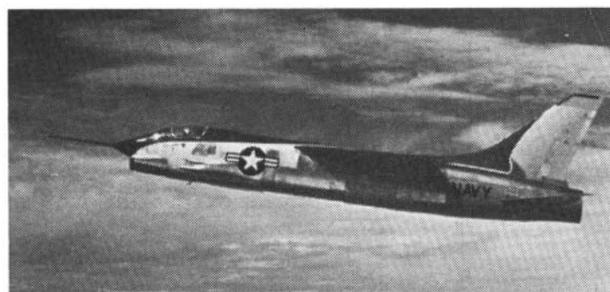
On the morning of 9 Jan 1960, all *Coral Sea* personnel reported to the ship for an inclining experiment. There were about 150 men available for the experiment—the entire nucleus crew minus those on watch and those on special work details.

The purpose was to determine the period of roll of the ship. The data gathered is to be used for computing certain quantities by the damage control section of the Engineering Department.

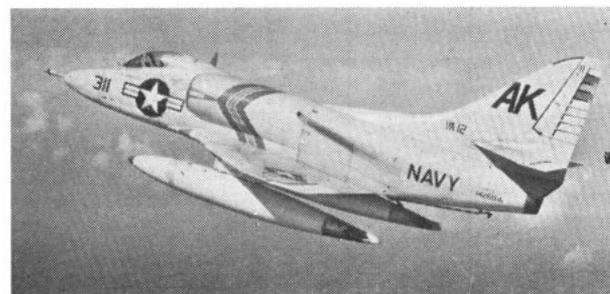
The only way to gather the data was to get the ship rolling and record the time for the ship to travel from maximum port inclination to maximum starboard inclination. To get the ship rolling enough to time the period of roll, the ship's personnel ran wind-sprints on the flight deck. By running from port to starboard and starboard to port several times, the ship was rolled enough to provide the necessary figures.



ANY TIME, ANY PLACE—F3H Demons will provide USS *Coral Sea* with all-weather protection during combat.



FASTEST FIGHTER—F8U Crusader fighters, capable of flying the speed of sound, will be fastest planes aboard.



BOMBS AWEIGH—The lightweight A4D Skyhawk attack bomber will carry potent payload off decks to targets.

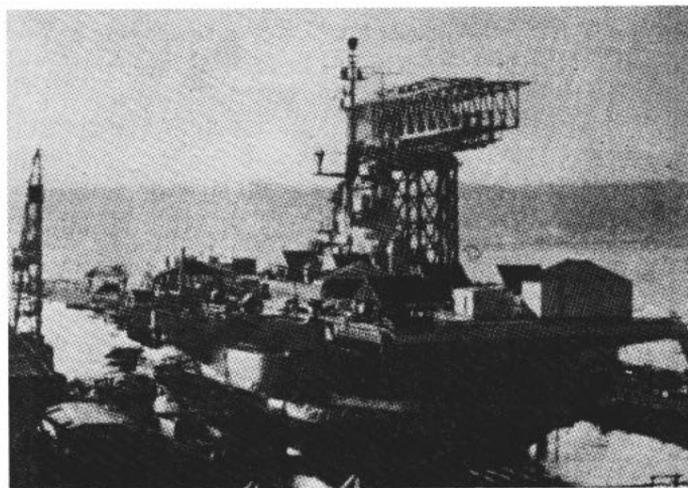
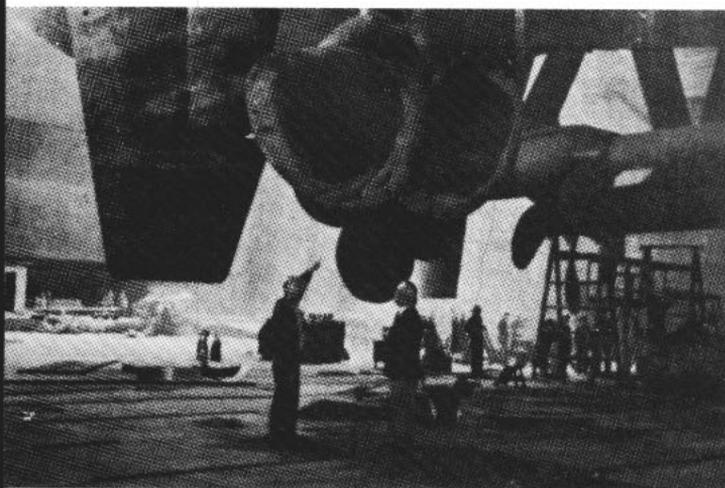
Coral Sea: The Battle

TWO SHIPS OF THE FLEET have been named to commemorate the Battle of Coral Sea, 4-8 May 1942.

The first major naval battle in history in which the damage done solely by opposing aircraft carrier planes, the Battle of Coral Sea was a prelude to the victory in the Battle of Midway and was a strategic victory for Task Force 17, built around the flagship carrier USS *Yorktown* (CV 5) and *Lexington* (CV 2).

The latter carrier sortied from Pearl Harbor as the flagship of Task Force 11 on 15 April and made rendezvous with the *Yorktown* force southwest of the New Hebrides Islands on 1 May.

At this time a powerful Japanese task force had been formed in the hope of winning control of the Coral Sea and cutting off Australia from the war. It was an invasion group of 11 transports which carried army troops and a naval landing force, screened by a destroyer squadron, and was to seize Port Moresby; a small invasion group which was to seize Tulagi and set up a seaplane



ON THE JOB — USS Coral Sea is seen in drydock at Puget Sound Naval Shipyard where it was modernized.

base; and a support group built around a seaplane carrier which was to establish a seaplane base in the Louisiades.

These enemy invasion groups were covered by a light carrier, *Shoho*; four heavy cruisers, and a destroyer; and a striking force of the Japanese aircraft carriers *Shokaku* and *Zuikaku*, screened by two heavy cruisers and six destroyers.

ON THE MORNING of 3 May, the *Yorktown* and *Lexington* task forces were some 100 miles apart and engaged in fueling operations. A few hours before midnight, RADM F. J. Fletcher, in command of Task Force 17, had received word that Australian-based planes had sighted enemy transports debarking troops at Tulagi. By daybreak of 4 May, he was in striking distance of Tulagi. Three attack groups departed *Yorktown* to strike at the invasion force. Their bomb and torpedo hits sank the Japanese destroyer *Kikuzuki*, three minesweepers, and four landing barges. Five enemy seaplanes were also destroyed and a number of vessels, including the destroyer *Yuzuki*, were damaged.

That same day, a cruiser and destroyer force (Task Force 44) joined the *Lexington* task force and on the morning of 6 May, all the forces were merged into a single task force (Task Force 17) under the tactical command of RADM Fletcher in *Yorktown*.

About daybreak of 7 May, an attack group of cruisers and destroyers were dispatched to the Louisiades to intercept any enemy attempt to move toward Port Moresby, then the carriers moved northward into the Coral Sea in search of the enemy covering forces.

About three hours later the Fleet oiler *USS Neosho* (AO 23) and her escort *USS Sims* (DD 409) were found by planes of the Japanese carrier force. After dodging bombs of two waves of aircraft totaling 25 enemy planes, they were attacked around noon by 36 dive bombers. *Sims* suffered three direct bomb hits, two of which exploded in her engine room, and sank stern first with great loss of life. Meantime, *Neosho* took seven direct hits and eight near misses and became a lifeless hulk.

She drifted before the wind until the afternoon of 11 May, when her 123 survivors were taken off by the destroyer *USS Henley* (DD 391) which scuttled *Neosho*. While *Neosho* and *Sims* were drawing off the planes of the Japanese carriers, aircraft from *Lexington* and *Yorktown* sank the light carrier *Shoho*.

ON THE AFTERNOON of 7 May, 27 bombers and torpedo planes were launched from the still unloaded Japanese heavy carriers *Shokaku* and *Zuikaku*. These planes made an unsuccessful search for the U. S. carriers and were returning home when they were intercepted by *Lexington* and *Yorktown* fighter planes. Nine Japanese planes were shot down in the ensuing dogfight.

As twilight descended, three of the enemy planes mistook *Yorktown* for their carrier, but managed to escape. Twenty minutes later, three others made the same mistake and one was shot down.

The major carrier battle began on the following morning when a *Lexington* search plane made contact on the Japanese striking force. Attack groups were immediately launched. In the first American attack of the war on a large Japanese carrier, *Shokaku* received two bomb hits from *Yorktown* planes which damaged the flight deck so that *Shokaku* could not launch planes, started furious gasoline fires, and destroyed her repair compartment for airplane motors. *Lexington* dive-bombers added another hit. The enemy carrier had 108 men killed and 40 wounded.

While the U. S. planes were attacking, *Yorktown* and *Lexington* prepared for a counterattack, for an intercepted message indicated that the Japanese knew the U. S. carriers' position. Shortly after 1100, the attack came. Seventeen enemy planes were shot down, but others broke through and launched torpedoes from both sides of *Lexington's* bow. Two torpedo hits on her port side were followed by a dive-bombing attack which scored three hits. At the end of the battle, she had a seven-degree list to port, three engineering spaces were partially flooded, several fires were started and her elevators were out of commission.

Meanwhile, *Yorktown* maneuvered to dodge eight torpedoes, and came under attack by dive-bombers. She evaded all but one bomb which penetrated her flight deck to kill or seriously injure 66 men. *Yorktown* brought all the fires under control and escaped with damages not enough to stop flight operations.

THE AIR BATTLE was over some 15 minutes before noon, and in little over an hour later, *Lexington* was on an even keel, three fires were out and the fourth under control. Her steering gear was intact, she was making 25 knots and conducting nearly normal flight operations. Her attack group returned and was landed.

At 1247 she was shaken by a heavy explosion caused by ignition of gasoline vapors below decks. Flames gradually spread aft and communications were lost as internal explosions became more frequent and the danger of torpedo warheads and bombs detonating seemed imminent.

At 1707 came the order to abandon ship. Men went over the side in orderly fashion and were picked up by nearby cruisers and destroyers. By the time the commanding officer, CAPT Frederick C. Sherman, the last man off the ship, was safely off, flames from *Lexington* were leaping hundreds of feet high. *USS Phelps* (DD 360) steamed within 1500 yards and fired two torpedoes into her hull to sink her.

Coral Sea has long been regarded as a tactical victory for the Japanese, but a strategic victory for the U. S. It had blunted the enemy's thrust toward Australia and turned them away from Port Moresby, their main objective. None of their warships would ever again pass the Louisiades in safety and Tulagi, the only objective attained by the Japanese, was canceled out by the landing of U. S. troops on 7-8 August.

One enemy carrier, *Shokaku*, was so damaged that she was out of action for the next two months, and *Zuikaku* suffered plane losses which kept her ineffective until June. Had these two carriers, with their pilots, been available for the carrier air battle of Midway, they might have supplied the margin necessary for a Japanese victory.

The first Coral Sea (CVE 57) was an escort aircraft



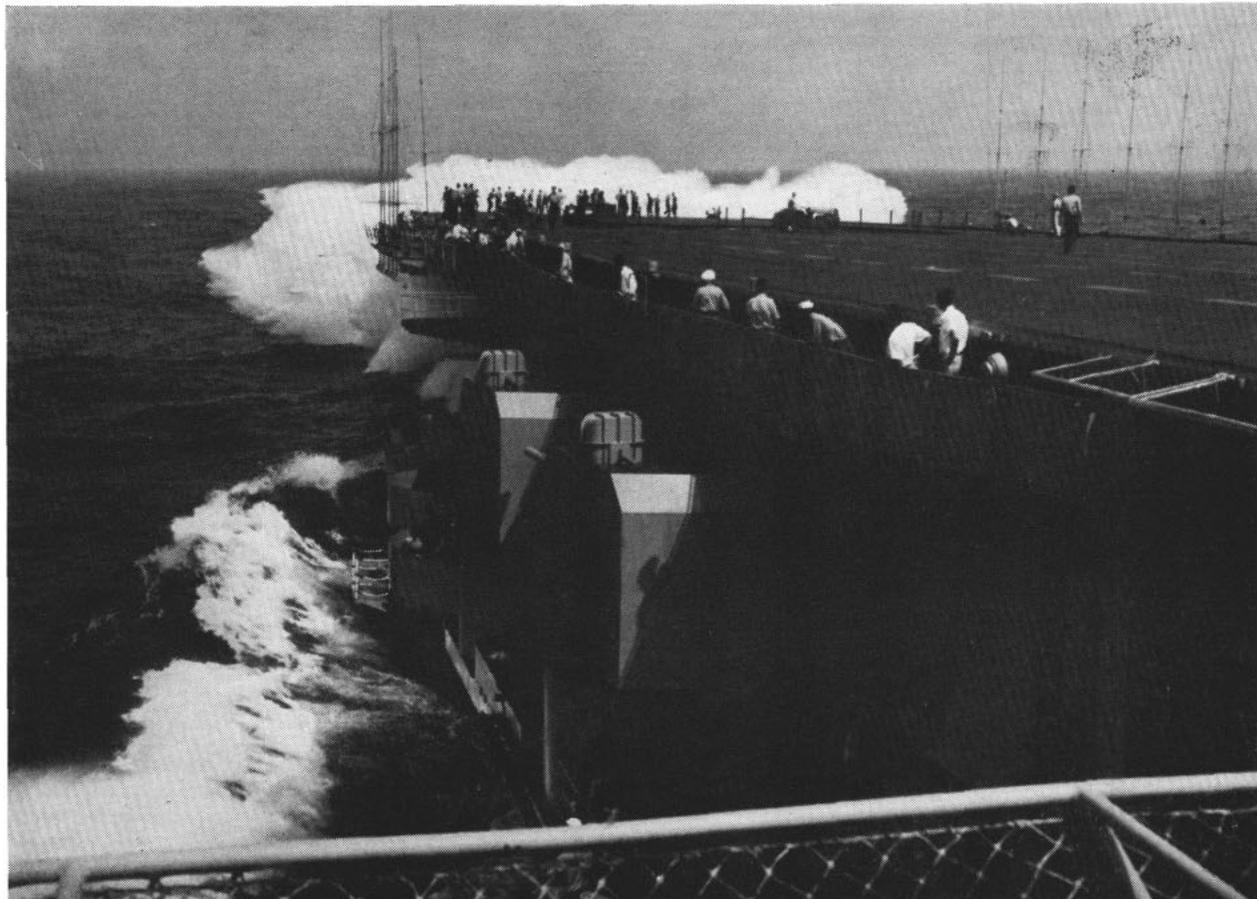
'NEW' SHIP—ADM J. S. Russell, Vice CNO, returns salute of CAPT J. S. Gray, carrier's skipper, at recommissioning.

carrier. Her original name of Alikula Bay was changed (during construction) on 1 Apr 1943, to Coral Sea. She was launched on 1 May, and placed in commission on 27 August. Her name was changed to Anzio effective 10 Oct 1944, and the name Coral Sea assigned to a heavy aircraft carrier under construction.

It is the second Coral Sea (CVA 43) which is now operating with the Fleet after her conversion job and recommissioning.

Launched in April 1946, she was commissioned in October 1947 and since that time until her conversion, her career has consisted of the ever-important routine of training, Sixth Fleet duty, overhaul, and more training.

NEW CLOSED-IN BOW will be appreciated by *Coral Sea* crew when the ship hits rough seas as on this 1949 cruise.



TAFFRAIL TALK

YOU WILL NOTE from our masthead that Vice Admiral William R. Smedberg, III, USN, is our new Chief of Naval Personnel. Here are a few items from his career to introduce him to ALL HANDS readers.

VADM Smedberg is the son of an Army brigadier general. A graduate of the Naval Academy class of '26, he has two sons in the naval service and a daughter married to a naval officer.

He has had a lengthy and varied sea-going career. He served in *uss New Mexico*, the destroyer *Mullany* and the cruiser *Northampton*. Then he became communications officer on a cruiser division staff and on the staff of Commander of the Cruiser Force, Battle Fleet.

From September 1939 to February 1942, VADM Smedberg served as aide to the Chief of Naval Operations, Admiral Stark. With the war on, he took command of the destroyer *Lansdowne*. *Lansdowne* got off to a good start by clobbering a German submarine, and ten days later sent another enemy sub to the bottom.

Some time later, while he was serving in the Pacific, his ship was subjected to a torpedo attack by a Japanese sub. Although it was during an ammo unloading operation, his ship successfully outmaneuvered the sub.

Reading through the citations, we see that VADM Smedberg did more than tangle with submarines. He commanded a ship that bombarded shore installations and beat off heavy air attacks during an invasion. His ship—in the midst of Japanese subs—rescued many Navymen from the sinking carrier, *uss Wasp*. He also served in support of landings at Saipan, Tinian, Guam, and the Battle of the Philippine Sea.

As captain of *uss Iowa* and commander of task elements of Fast Task Force 77, VADM Smedberg once again got into the shooting during the Korean conflict.

Here are a few more items of a crowded career. VADM Smedberg served as Chief of Staff to Commander Task Force 39 in WW II and later as Fleet Combat Intelligence Officer for Fleet Admiral E. J. King, USN.

He has commanded a destroyer division and squadron. He has been Chief of Staff of DesLant; Director of the Politico-Military Policy Division; and Superintendent of the Naval Academy. He was Commander of CruDesPac, and, before becoming Chief of Naval Personnel, he held two hats—Commander Second Fleet and Commander, Striking Fleet, Atlantic.

Among his decorations are the Silver Star, five Legions of Merit, Bronze Star, Commendation Ribbon and NUC. He received the Order of the British Empire. Incidentally, he is an expert with pistol and rifle.

VADM Smedberg was born in Arizona, went to school in Massachusetts, and calls Florida his home. That, briefly, is a quick summary.

And—this is goodbye to Admiral H. P. Smith, USN. Admiral Smith now becomes Commander in Chief, U. S. Naval Forces, Eastern Atlantic and Mediterranean (CINCNELM). Many far-reaching advances in the field of personnel were made during Admiral Smith's tour as Chief of Naval Personnel. We need not go into them; you have been helped in your career by means of these advances. We'll just say this: Admiral Smith is going to a top command to which he is qualified by reason of his distinguished naval career.

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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The Bureau should be kept informed of changes in the number of copies required.

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• AT RIGHT: EAR THIS — Jimmy Chatterton on deck to meet his dad, a crew member of *USS Bryce Canyon* (AD 36) returning to Long Beach from the Far East, finds his close proximity to welcoming band a little hard on the ears.



A BALANCED FLEET

