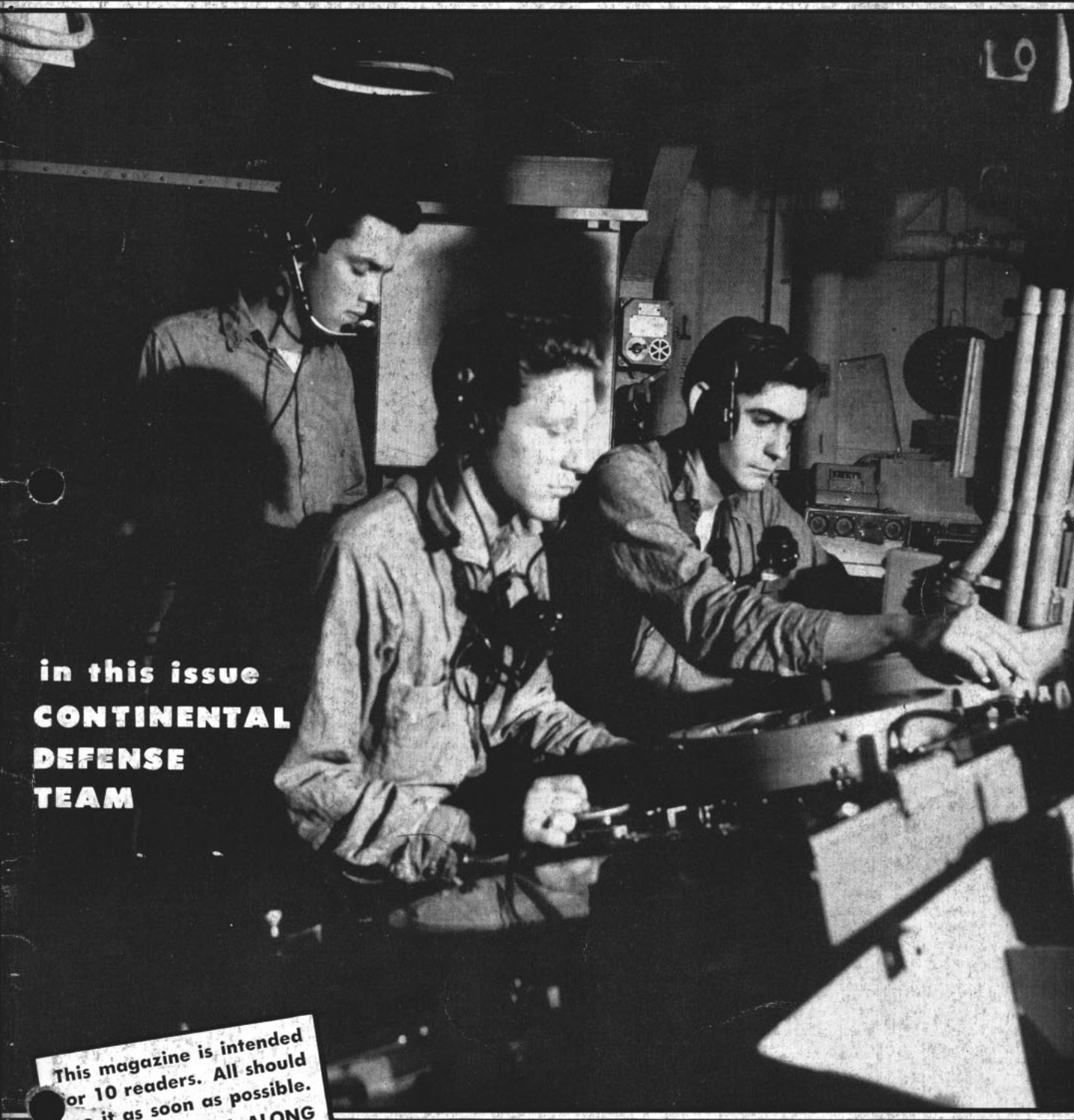
ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

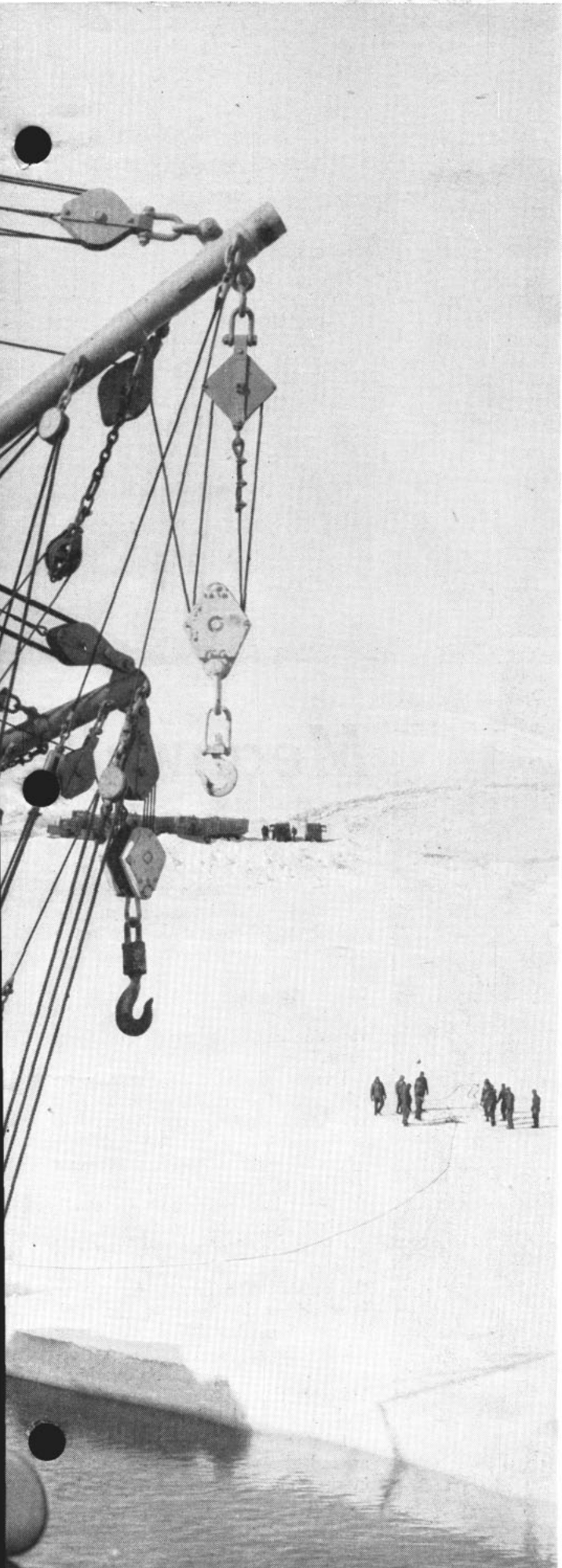


in this issue

CONTINENTAL DEFENSE TEAM

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

SEPTEMBER 1956



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SEPTEMBER 1956 NavPers-O NUMBER 475

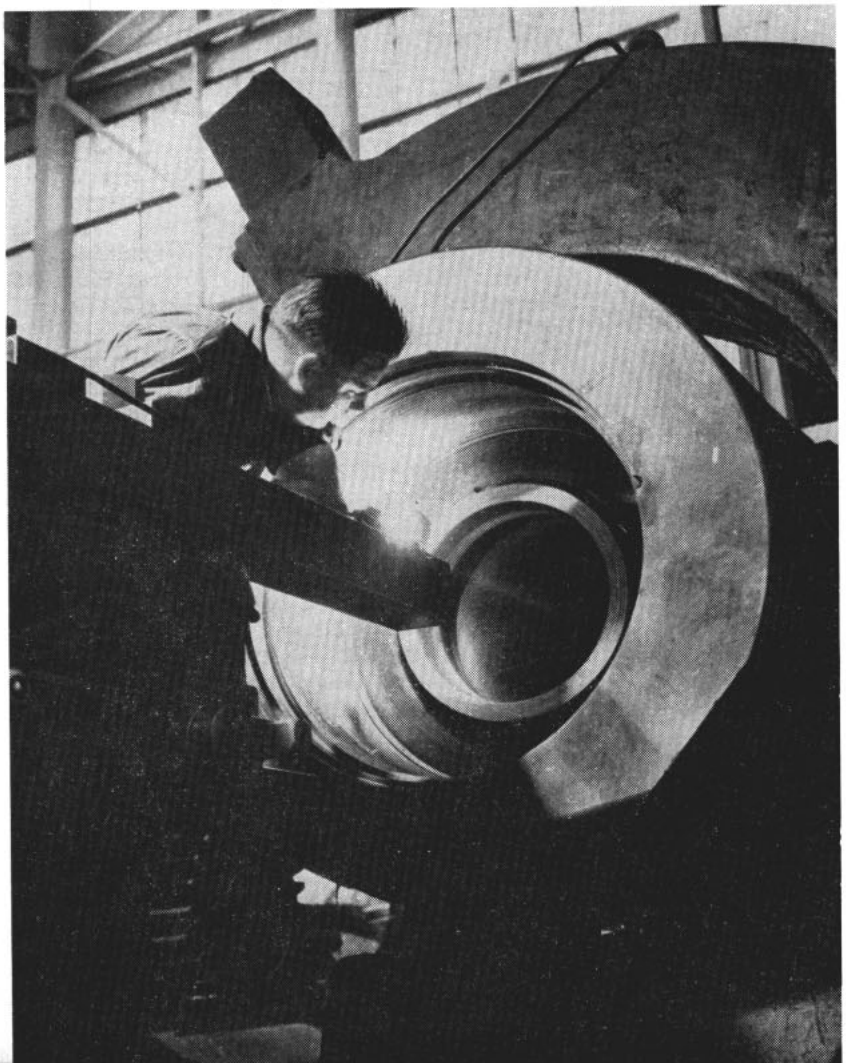
TABLE OF CONTENTS

● **FRONT COVER: ALERT FOR DANGER,** crew members of *USS Harveson* (DER 316) keep close watch on their early warning radar gear. DERs patrol Atlantic and Pacific as part of the nation's Continental Air Defense team.

● **AT LEFT: PENETRATION** of the Polar regions—both Arctic and Antarctic—on such projects as Operation Deepfreeze and DEW Line—in exploration, research and re-supplying—is a big job of the Navy today.

● **CREDITS:** All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

BIG GUNS OF BB do a big job destroying enemy shore installations in Korea. *Below:* Naval Gun Factory expert sets up worn out 16-inch gun for reline job.



Meanwhile,

BIG GUNS—of the 16-inch battleship size—are back on the floor of the Naval Gun Factory's Shop R-7 for the first major relining job handled by the shop in more than a decade. An indication of the size of the job now underway in the cavernous shop is given by the size of the guns themselves—roughly 66 feet in length and weighing in at 119 tons, give or take 500 pounds' variation caused by machining them "true."

Despite the size of the relining job and the number of smaller projects underway, the huge shop is deceptively quiet. The shrinkage pit, with its four vertical furnaces capable of handling any size gun the Navy has, makes no noise at all; a giant lathe chasing threads into the breech end of a worn liner and another lathe cutting down to size the outside of a forging for a new liner add a low roar to the high whine of smaller lathes machining smaller barrels and liners. An occasional racket from high overhead indicates the shifting of one of several giant overhead cranes.

Resting on blocks at various point around the shop are guns ranging in size from 3"50s and 3"70-caliber

FIERY BLASTS of heavy 16-inch shells wear down the rifling. *Below:* Gun crew secures muzzle against rain.

Back at the Gun Factory

liquid-cooled models, through 8" loose-lined guns and the 16-inchers. Some are in the shop for repair, some are so new that they haven't yet been to the proving ground for testing, and some—like the nine 16-inchers—have pulled plenty of duty in battle areas.

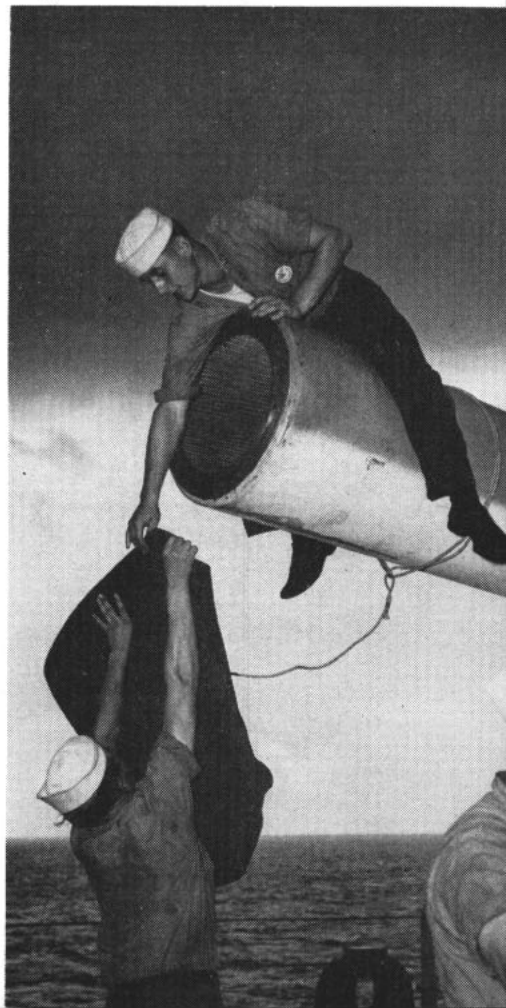
But to understand the relining process, you must first understand how the Navy's guns are built. Back in "wooden ship" days most guns were cast in one piece—and to make a gun stronger you simply made the walls thicker. In those days, a gun bore was considered excellent if it was less than half an inch out of true.

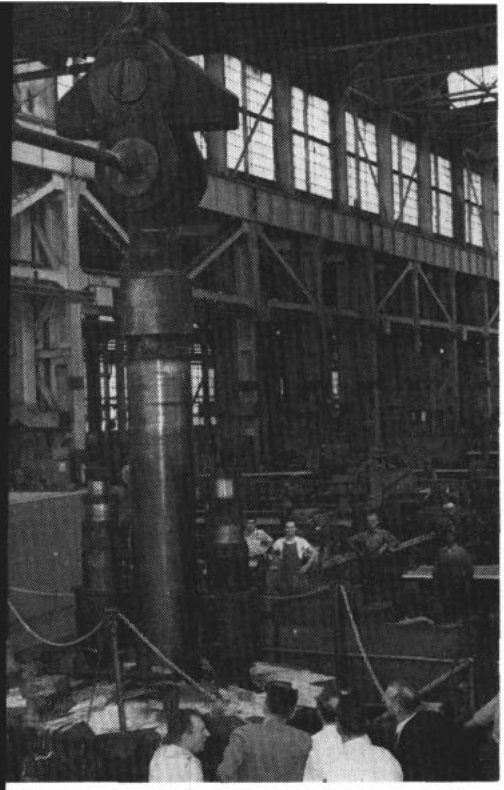
The following example of how crude things were can be found in the training course manual for GM3: James Watt's famed steam engine was considered a remarkable engineering achievement because the cylinder fitted to piston so closely that a shilling (a coin about the size of a quarter) couldn't be pushed between them at any point. Nowadays, of course, accuracy to the ten-thousandths of an inch is commonplace.

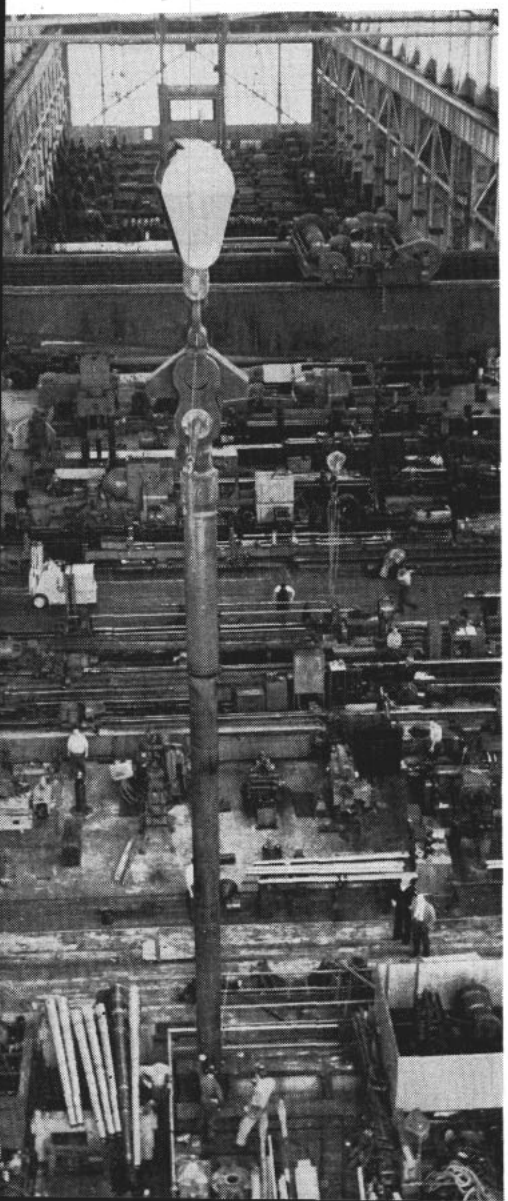
Early gun manufacturers in their search for greater range and accuracy not infrequently turned out guns too cumbersome to be moved into the desired position. Trial and error eventually led to the discovery that thicker metal doesn't necessarily add strength, but a new trick was applied in the latter part of the 19th century: they found that putting pressure on the outside of the barrel enabled a relatively light gun to withstand the sudden pressures of expanding powder gasses.

At first this was done by casting the gun tube, then a series of extremely tight fitting rings or jackets. These rings were heated and slipped over the gun tube, then allowed to contract. This put the gun's bore in compression.

About the beginning of World War I, it was found that the same effect could be had by taking a single steel gun tube whose bore was slightly smaller than the caliber desired, closing off both ends and filling it with hydraulic fluid under pressure high enough to enlarge the bore almost to the desired size. With the release of pressure, the outside of the gun tube tended to return to its original size, while the bore tended to maintain the increased size. These were called "self-hooping."





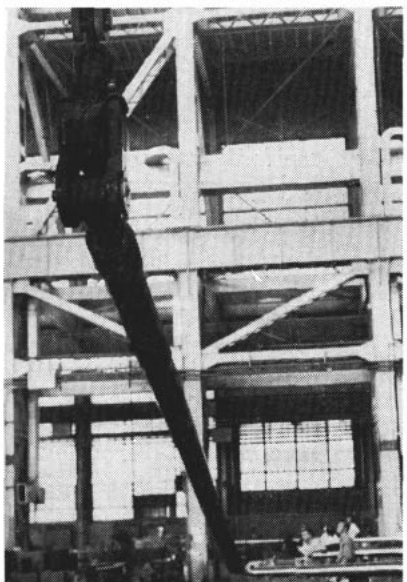


Such "monobloc" guns were comparatively easy to manufacture, were relatively inexpensive and light in weight; but when they wore out there wasn't much you could do except to scrap them. And when you got into large-caliber guns, the huge single forgings were altogether too difficult to nurse through the various steps necessary to turn out a decent gun. The erosion of the bore caused by repeated firing limits the accuracy life of the rifling in the Navy's present-day big guns to as little as 300 rounds. From the standpoint of cost you can't shoot your 16-incher 300 times, and then throw it away and trot out to the corner hardware store for a new one.

True, in your smaller guns you still replace the whole barrel when it becomes worn. In your larger guns, however, the part which is subjected to heavy wear (the rifling and bore) is replaceable without replacing the entire barrel. This is made possible by cutting the rifling into a "liner" which fits tightly into the gun tube, a process used in the Navy's present 16-inch guns, most of the eight-inchers and some of the five-inch guns.

These "built-up" guns have the liner as the inner layer, running the full length of the gun. The next layer is the "tube," which also runs the full length. Succeeding layers, on top of each other, are placed on the tube to strengthen the after part of the chase and the chamber itself, the sections where pressure from the burning powder charge is greatest. Each of these layers is shrunk over the layer beneath by much the same process as for hooped guns.

BIG PULL—*(Top to bottom)* Crane starts to pull liner from gun. Liner is almost out. Liner is lowered to deck.



The 16-inch guns currently "getting the works" in the Gun Factory's Building 153 were jerked off a battlewagon last year, being replaced by another set which were in storage. After relining and testing, these guns will also be put in storage to await another distress call from a battleship.

When a gun enters the shop for relining, it is first put on a giant lathe where it is carefully checked to determine if it is still "true," has not developed any droop while in use. Then the entire breech mechanism is removed, and cutting heads chase threads into the breech end of the liner. These threads accommodate the adapter or "plug" to which the overhead crane is attached in moving the gun from the lathe to the pit, and eventually will be used to lift the liner from the tube; similar threads in the muzzle end accommodate another plug to which a manifold with six fire hoses can be attached.

Next, the gun is moved by overhead crane to the "pit," which contains four giant electrical furnaces, each large enough to hold a barrel 66-odd feet in length in a vertical position. With the gun lowered into place and braced, the top of the furnace is sealed and the interior temperature raised to approximately 600 degrees. After the gun has been heated for some 40 hours, the crane is reattached to the lugs on the adapter plug, a pair of 500-ton hydraulic pressure jacks are placed between the top of the furnace and projections on the plug. Then, while six fire hoses shoot a stream of water through a manifold into the bore of the liner, the crane-jack arrangement exerts as much as 1000 tons of pressure to pull the liner from the tube.

The hydraulic jacks ordinarily do the "heavy work" in breaking the liner loose from the tube; with extremely tight liners, however, it is frequently necessary to use the combined power of the jacks and the overhead crane. If the liner still doesn't want to come free, the project is delayed for a few hours while the furnace temperature is built up close to the maximum 800 degrees. Usually, 250 to 300 tons pressure is sufficient to break a liner loose.

Once the liner has been pulled it is put aside on blocks to cool before being cut up for scrap.

When the tube itself has cooled it is removed from the pit before undergoing the next step—star-gag-

WHITEHATS machine off liners stretched by shellings. ***Right:*** **A Navyman polishes the breech of a 16-incher.**

ing the entire inner surface of the tube, with careful notation of all measurements being recorded on the Gun Record Shrinkage Sheet. These measurements are necessary so that a new liner may be machined to the dimensions necessary to fit the tube.

Meanwhile, a blank liner of special forged steel and of approximately 15" 50 bore has been roughed into its approximate shape. With the Gun Record Shrinkage Sheet as a guide, the outside of the new liner is carefully marked, then machined to fit the tube. When the liner is finished on the outside, the gun is returned to the pit and reheated. The liner, coated with graphite and filled with water, is dropped into place in the tube and held under 600 tons pressure until the entire assembly has cooled. The gun is then moved to a boring lathe, where the new liner is machined to the desired 16-inch bore.

During the boring the cut is very carefully examined, or "bore-searched," by means of a long-handled light and mirror arrangement shaped something like the little mirror the dentist uses in checking your teeth. Bore-searching detects any flaws developed or revealed by the boring process.

Next comes the machining of the chamber for the powder charge at the breech end of the bore. After chambering comes what is perhaps the most difficult part of the operation—rifling.

The right-hand rifling common to all Navy guns is cut into the 16-inch liner by a rifling head which has half as many cutting tools as the total number of cuts needed in the finished gun. The adjustable cutters literally shave the grooves into the hard steel liner, each cutter sheering away about half a thousandth of an inch of metal on each trip through the gun. Some 750 cuts are required to complete the first half of the grooves, and a similar number to complete the remainder of the gun's rifling.

Rifling is topped off by another session with the star gage, checking the grooves and lands for accuracy of cut, after the gun has been bore-lapped to remove any fouling obstructions. The star gage is a long hollow metal rod with a head which has three "points" 120 degrees apart. The spring-mounted points are linked to a scale at the other end of the rod. When the gage is adjusted to the proper diameter and inserted into the gun bore, the scale on the rear will give a very accurate measurement of the actual bore diameter inch by inch from breech to muzzle.

Several measurements at different angles cover the circumference of the gun, checking both the depth of grooves (or height of lands) and any inaccuracies in the rifling.

After lapping and successful star-gaging the gun is moved to the plating shop for a coat of chrome in the new bore.

Chrome, highly resistant to the extreme heat and pressure to which a gun is subjected, increases the service life of the new liner. As a final operation the breech mechanism is reinstalled on the gun.

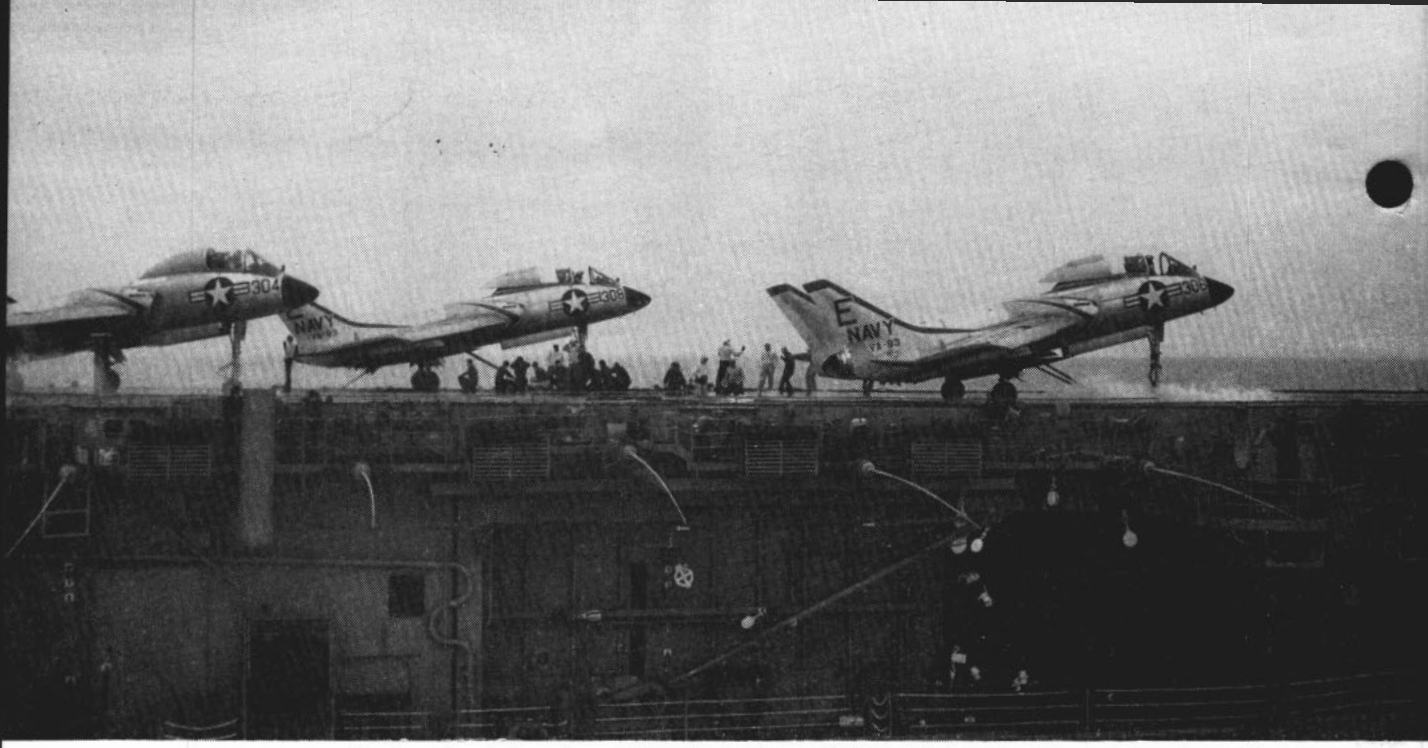
From the Gun Factory, the refurbished 16-incher is shipped to the Dahlgren (Va.) Proving Ground for careful testing, before being returned to the Gun Factory for storage. Dahlgren, in addition to testing the gun at a pressure approximately 15 per cent more than that of the normal service round, prepares data from which velocity loss of the gun can be obtained at any time, provided the amount of barrel erosion is known.

The entire relining process, as described here, sounds deceptively simple, but it isn't. The sheer weight of the guns and rough forgings makes them extremely tricky—and dangerous—to handle, even with the best of equipment.

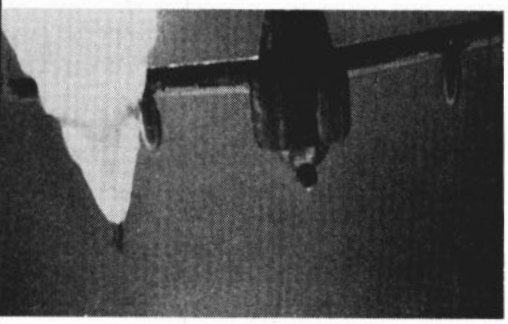
It's possible to run a rough-forged liner right down to the rifling stage before discovering a fatal flaw—that's why the rough-turned forgings are not accepted by the government until the finished gun has been proof-fired and has otherwise passed muster at the proving ground, the steel maker standing all costs for the tests.

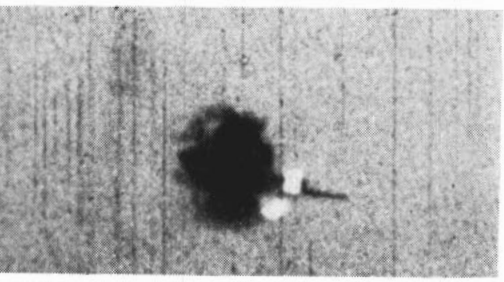
And many Naval Gun Factory employees with the necessary experience have retired or are otherwise being lost to the shop. So the relining will be slow, compared to World War II standards. Completion of the first gun—the "pilot," in a manner of speaking—can be expected to take approximately eight months; thereafter the guns will be finished off at the rate of one a month.

—Barney Baugh, J01, USN.



WITH *SPARROW I* tucked under their wings, F7U-3M *Cutlasses* of VA 83 perch on deck of *USS Intrepid* (CVA 11).





High-Flying Sparrows

BIRD WATCHERS along both coasts of the USA were startled when they first heard that the sparrow had taken to sea. However, the subject in question will never be listed by those who watch the ways of our feathered friends.

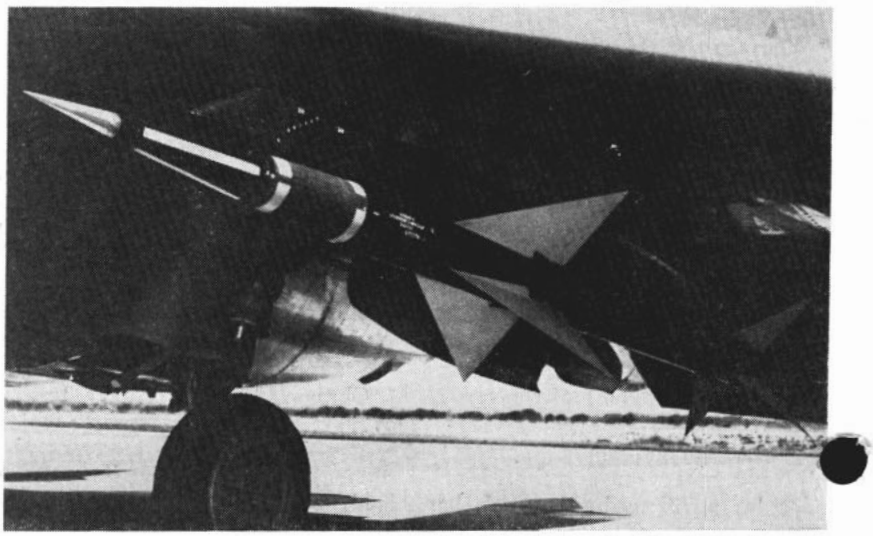
It is the Navy's air-to-air guided missile *Sparrow I* that has reached combat readiness and has been designated operational with the Fleet as well as within shore-based aircraft.

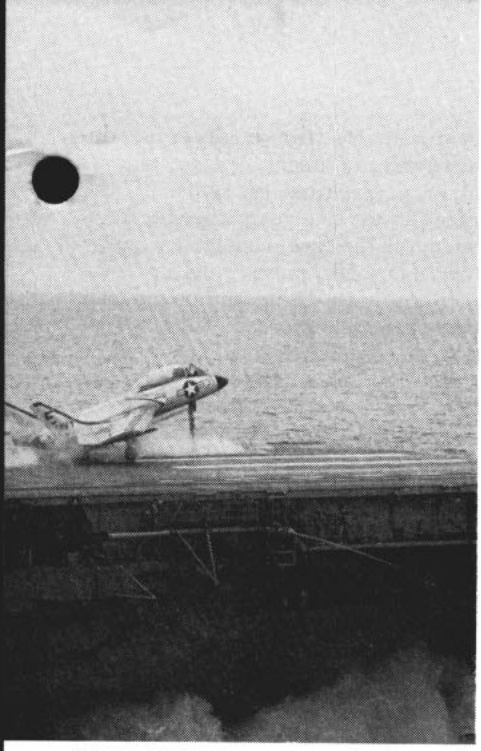
The supersonic missile has passed its test period with flying colors and is now in production.

The thin pointed body and sharp angular "wings" of *Sparrow I* bear little resemblance to the friendly little bird whose name it has borrowed. About the only thing they have in common is that they are both relatively smaller than most members of the bird or missile family.

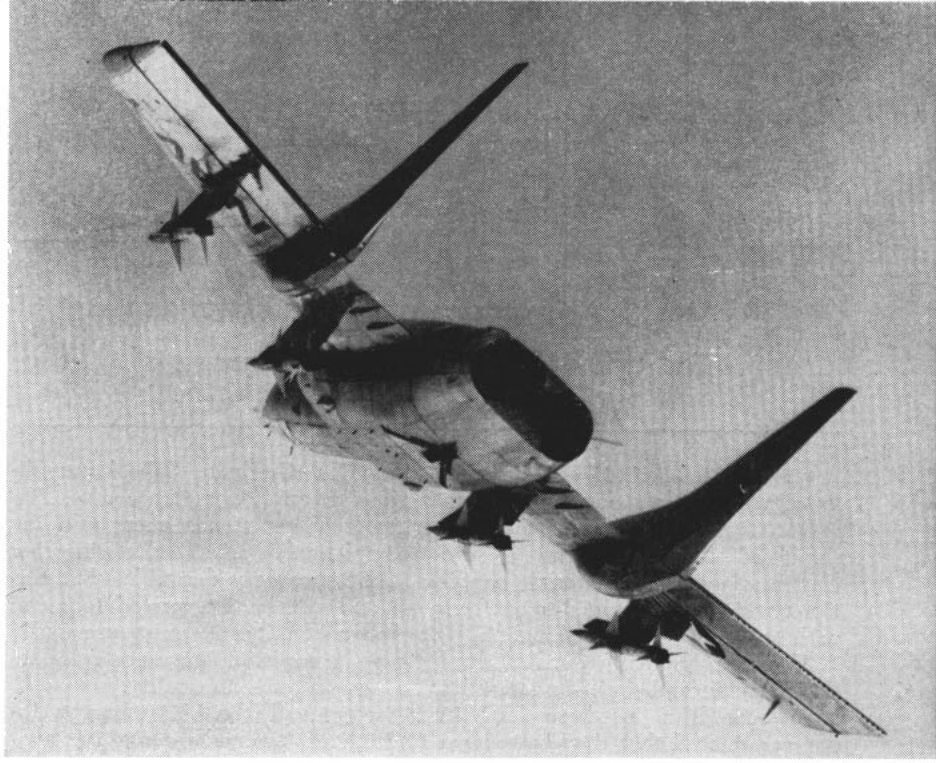
Attack Squadron 83 now serving on board uss *Intrepid* (CVA 11) with the Sixth Fleet in the Mediter-

AIR-TO-AIR—*Left:* Sequence shows *Sparrow* being launched and destroying a fast-flying target. *Below:* The new missile sits for portrait under wing.





SHE'S READY to catapult skyward.



Go to Sea

ranean was one of the first fighter groups to receive this new weapon. Pilots of the squadron were trained and qualified in firing *Sparrow I* from their fast F7U-3M *Cutlasses* before deploying from their home base at NAS Oceana. They were amazed at the missile's accuracy as they launched it against drone targets of both the reciprocating and jet type.

The little speedster has also proven to be effective when launched against other guided missiles.

The *Sparrow* is guided to its target by riding a radar beam transmitted by the launching plane. Guidance signals deflect the missile's wings and direct it to intercept the target even under evasive action.

In addition this Navy Air-to-Air guided missile can be launched singly or in rapid sequence.

Sparrow I is approximately 12 feet long and weighs about 300 pounds.

Its velocity is greater than 1500 miles per hour within a few seconds after launching.

Carried by the Navy's fast jets, like *Cutlasses* of VA 83, this supersonic missile permits an effective attack against high- or low-altitude targets. Whether attacking a lone plane or a group of planes, *Sparrow I* will ride its radar beam in to make straight for the bull's eye.

SPARROW IN FLIGHT—*Top: Cutlass* wings upward carrying *Sparrow I. Above:* VA 83 readies jet on starboard cat. *Below: Sparrow* packers sun in Med.

THE WORD

Frank, Authentic Advance Information On Policy—Straight from Headquarters

• **DAMAGE CONTROL**—The words, XRAY, YOKE, ZEBRA, DOG ZEBRA, WILLIAM, ABLE and BAKER, as titles for shipboard damage control closure classifications and material conditions, will not be changed to conform with the new phonetic alphabet.

Although originally derived from the phonetic alphabet, the old titles have now been used so long in damage control that they have been synonymous with the closure classifications and material conditions to which they apply. Therefore, under OpNav Inst. 9880.1, of 15 Jun 1956, the old designations will continue to be used in all written or spoken communications dealing with these aspects of damage control.

• **PG NUCLEAR TRAINING FOR OFFICERS** — A Nuclear Engineering (Advanced) course, conducted at the Massachusetts Institute of Technology, provides an opportunity for officers to enter the Navy's nuclear ship propulsion development program.

The course, which leads to the degree of Master of Science in Nuclear Engineering, covers a period of one full academic year, with two additional summer sessions. Among the subjects covered are nuclear physics, nuclear reactor theory and engineering, and advanced courses in heat transfer and materials.

Officers in the rank of lieutenant commander and lieutenant in the Regular Navy who have the necessary qualifications for admission to the MIT Graduate School are eligible to apply for this course. Engineering experience afloat and the completion of advanced engineering studies are very desirable—but this should not be interpreted to mean that an applicant must previously have completed any postgraduate course in order to qualify.

In general, the Massachusetts Institute of Technology requires that the prospective entrant to its graduate school have a Bachelor's Degree in engineering from a recognized college and also have a well above average academic record.

The course is not restricted to engineering duty officers but is open to line officers as well. However, selection for and assignment to the Nuclear Engineering (Advanced) Course leads to automatic designation as Engineering Duty Officer upon completion. Therefore, when submitting applications, candidates must include a request for such change of designator as part of their application.

In the past, duty assignments for nuclear engineering graduates have been to billets in the Atomic Energy Commission or the Bureau of Ships. Such assignments deal directly with the development of nuclear ship propulsion plants. This has often led to further assignment to one of the AEC field areas or to private and naval shipyards doing work on this program.

Postgraduates of the Nuclear Engineering (Advanced) Course have had the challenging opportunity to contribute to the engineering development of nuclear power and its early application to ships of the Fleet. In the five years since the keel-laying of the first nuclear submarine *Nautilus*, 15 more nuclear submarines have been authorized. Of these, seven are already in construction or completed. The first nuclear surface vessel, a guided missile carrier, has been authorized by Congress which has also authorized the advance procurement of the nuclear power plant for an aircraft carrier, to be included in a subsequent shipbuilding program.

Complete details on the Postgraduate Nuclear Training Course may be found in BuPers Inst. 1520.15C.

• **SHIP'S DECK LOGS**—A complete revision to the instructions on preparation and submission of ship's deck logs and changes in the Type B deck log format have been placed into effect as of 1 Jul 1956. The revisions, taking into account the ever increasing critical paper-work burden now imposed upon the forces afloat, have been made primarily to reduce the actual paper-work which must be accomplished without sacrificing the essential, historical and legal elements necessary for a complete ship's deck log.

The Type B deck log structure has been changed to permit the use of the same binder now used for the Type A deck log and includes the use of somewhat similar loose-leaf sheets.

The use of the Type B deck log has been extended to include submarines and all smaller ships with limited facilities and small complements and those ships whose duty assignments are restricted. This will simplify its administration and will not require typing as it is prepared in original handwriting with no copies. It should result in a decrease in the over-all cost of deck log maintenance.

FOOD FOR THOUGHT—Everybody has an appetite for ALL HANDS, so pass this copy on to nine other sailors.

• **WARRANT PROMOTIONS** — SecNav has approved the list of 1805 warrant officers selected for in-grade promotions.

Among the WOs and CWOs selected for promotion during the next 12 months are 1350 Regular Navy and 455 Reserve warrant officers—including Reservists on active and inactive duty.

The Secretary's approval marks the second group of in-grade warrant officer promotions to be effected by the Navy under the 1954 Warrant Officer Act.

Permanent promotions in the regular Navy included 319 to pay grade W-4 and 101 to W-3.

Temporary promotions in the regular Navy are scheduled for 441 to W-4, 364 to W-3 and 125 to W-2.

Reserve selections, including permanent and temporary, included 289 to W-4, 161 to W-3 and five to W-2.

To be eligible for promotion, W-1s must have three years in grade, W-2s and W-3s must have six years.

• **EDUCATION FOR DEPENDENTS** — Children of deceased Navymen who died while on active duty during World War I, World War II or the Korean conflict, or who died from injuries or disease resulting from those periods of wartime service, are now eligible to receive government grants to further their education.

The War Orphans' Educational Assistance Act of 1956 (P.L. 634) offers monthly schooling payments to eligible children similar to those made to veterans under the G.I. Bill. Payments under the new law begin 1 Oct 1956 and will be paid for a maximum of 36 months of schooling.

The educational assistance payments are made to eligible persons beginning on their 18th birthday, or upon completion of secondary schooling, whichever first occurs, and ending upon their 23rd birthday.

The law provides for payments to be made to certain students beyond the age of 23 so they may finish their schooling. This applies to students who were beyond the age of 18 when the law was enacted; when the death of the parent occurred after the student's 18th birthday; and when the start of education was delayed because the student was in service.

Government allowances of $110 a month are paid to students attending school full time; $80 for three-quarter time; and $50 for half-time attendance. The rate for "co-op" courses—alternating schooling and actual experience on a related job—is $90 a month.

Another important benefit of the new law is that it provides for payments of $110 a month for special restorative training for handicapped persons.

• **COMIC CARTOON CONTEST** — Entries are still being accepted for the second annual All-Navy Comic Cartoon Contest sponsored by the Chief of Naval Personnel. All naval personnel (and their dependents) are eligible to enter cartoons. There is no limit to the number of cartoons a person may enter.

Entries should be submitted via your commanding officer, to the Chief of Naval Personnel (Attn: Pers G11).

Deadline for submission of entries has been extended to 1 November. Originally the deadline had been 1 October.

To be suitable for judging, the gag or situation cartoon must have a Navy theme or background. Naturally, each cartoon must be in good taste and suitable for general consumption.

Other requirements are that all cartoons must be drawn in black ink on 8 x 10½-inch paper or illustration board. On the back of each entry, you must give the following:

Name, rank or rate, serial or file number, duty station, home town and home town newspaper, a brief statement certifying that the cartoon is original and the statement: "All claims to the attached entry are waived and I understand the Department of the Navy may use them as desired and that they will not be returned." It must be signed by you and then endorsed "Forwarded" by your commanding officer or his representative.

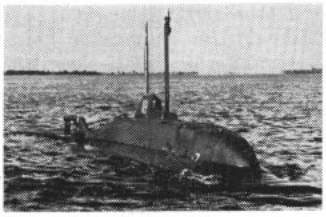
Dependents submitting entries in the comic cartoon contest follow the same procedure but must also add the name, rank/rate, and serial/file number of the Navyman.

Winners of the first five places in the contest will be awarded All-Navy championship trophies. Certificates will be awarded to those getting honorable mention. Winning cartoons will appear in ALL HANDS.

QUIZ AWEIGH

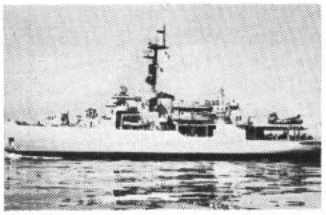
1. Take a close look at the above ship. It was originally laid down as a battlewagon and although she still carries the name of a state, she has been used as an experimental ship. Enough clues. She is the (a) *USS Indiana* (b) *USS Mississippi* (c) *USS Texas*.

2. This ship, which has been placed "in commission in reserve," had the designation of BB 41. Today she carries the designation AG 128. One of the oldest ships in the Navy, she was launched in (a) 1917 (b) 1901 (c) 1935.



3. This boat, one of the newest additions to the Submarine Navy, has the hull designation of (a) K-1 (b) T-2 (c) X-1.

4. This submarine is being used to test the harbor defense installations of our coastal ports. It has a displacement of 25 tons, is about 50 feet in length and carries a complement of (a) two officers and five men (b) one officer and four men (c) one officer and six men.



5. This ship has been in the news spotlight for the past several months. You should recognize it as the (a) *USS Glacier* (b) *USS Edisto* (c) *USS Boston*.

6. Considered to be a prototype in ice breaker construction, this ship is designed to (a) drive on top of the ice and crush it by sheer weight (b) ram through the obstruction by power from her engines (c) use her forward mounts to break up the ice.

You'll find the answers to this month's quiz on page 54.

LETTERS TO THE EDITOR

What about the AL Rating

SIR: As electronics division officer of a heavy attack squadron, I have several men who hold the aviation electronicsman rating (AL) but who are acting as combat aircrewmen in our AJ-2 *Savages*. They have heard rumors that the Navy intends to reactivate the AL rating, instead of enforcing the present requirement that ALs change their rate to AT. Can you give us any information on this subject? We would also like to know if ALs will be able to advance in their rating at any time in the near future.—W. B. C., LTJG, USN.

• *Rumors about reactivation of the AL rating are just that—so far. The Bureau has received recommendations that the AL rating be retained until a determination is made as to what rating should be responsible for equipment operation in multi-place aircraft. This recommendation has been referred to the Permanent Board for Review of the Enlisted Rating Structure. Unless a decision is made to the contrary, however, disestablishment of the AL rating will be carried out as planned.*

Should the AL rating be extended pending study of the "operator" problem, it is not anticipated that any further advancements in the AL rating will be authorized. As indicated in the Bureau directive governing the consolidation of the AL and AT ratings, it is desired that personnel in the AL rating qualify for and be changed to AT. The opportunity for advancement will exist in the AT rating.—ED.

Clean Sweep

SIR: We are intending to use the phrase, "Clean Sweep," as an illustration in a speech and would like to learn its origin. I understand, from talking to naval officers here, that the phrase and the custom of lashing a broom to the mast were explained in ALL HANDS about 10 years ago. Could you help us out?—P.C.R., Atlanta, Ga.

• *Yes, we can.*

The broom business was explained in ALL HANDS' *feature, "How Did It Start?" in the February* 1946 *issue. For your benefit and the edification of those short-sighted Navymen who didn't enlist in time to read it before, we reprint it here:*

Lashing the Broom

When Maarten Harpertszoon Tromp, a Dutch admiral, sailed forth to meet the fleet of Cromwell he ordered that brooms be lashed to the masts in a gesture to signify that he would sweep the English Channel of the British Navy. With that order the Dutch admiral initiated action which grew into a custom of the sea through the centuries. For many years the U. S. Navy hoisted brooms at the mastheads of the ships that won the battle efficiency pennants. In World War II, submarines continued the old practice and frequently hoisted a broom on the periscope upon their return to indicate that they had made a "clean sweep," that is, that they had sunk every enemy ship they had attacked.

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.

Allowances for CPOs

SIR: A number of men in our outfit claim that a CPO who has completed 20 years of active duty no longer counts (as far as vacancies are concerned) when advancements to chief are made. Thus, when 1000 CPOs reach 20 years, 1000 CPO vacancies are created, whether the chiefs retire or not. I say "NO." What say thou?—H.P.O., ADC, USN.

• *To thee we say yea. As long as A CPO continues on active duty with the Regular Establishment he is counted against the requirements — allowances for his rate.*—ED.

How Come That Hashmark?

SIR: Perhaps you can help me figure out the photograph on page 34 of the February issue of ALL HANDS. It shows CDR R. J. Lavery, at Yokosuka, Japan, inspecting Robert Peters, son of J. R. Peters, CE2. Robert seems a little short to have passed his physical, but that isn't what bothers me. The caption says he's two years old. Where did he get the hashmark?

I can only assume it's a "Kiddie Cruise" hashmark, but I thought they had been done away with.—F. J. P., RM1, USN.

• *The answer is simple: same place he got the uniform.*—ED.

Do Men Making WO Lose Bonus?

SIR: In July of 1955, I reenlisted for six years. Shortly thereafter, I applied for an appointment as a warrant officer.

I have been informed that in the event I am selected I will have to repay a large portion of my bonus. Is this true? I claim I will have to return none of it.—R.J.A., QMCA, USN.

• *You are correct. The acceptance of an appointment as warrant officer is not considered time lost for the purpose of repayment. Consequently, you will not have to repay any of your reenlistment bonus upon acceptance of such an appointment.*

Further information on this subject is available in the "Navy Comptroller Manual," para. 044070-4b.—ED.

Distinguished Unit Emblem

SIR: I have been unable to find any information as to whether the Army Distinguished Unit Emblem has ever been awarded to Navy units. Perhaps you can furnish me the following information:

1. Was Patrol Squadron 102 awarded the Distinguished Unit Emblem?
2. To whom can I write to establish my eligibility for the award?
3. Is there a cut-off date set on applications for the award?—R. A. C., CWO, USN.

• *Patrol Squadron 102 was awarded the Army Distinguished Unit Emblem for the period 7 Dec 1941 to 9 Apr 1942.*

If you think you rate this award, write to the Chief of Naval Personnel (Attn: Pers-E24) for determination of your eligibility. There is no cut-off date on applications for the award.—ED.

How Many Service Stripes?

SIR: "U. S. Navy Uniform Regulations," Chapter 12, Article 1203, paragraph 6(e) states that "enlisted personnel shall wear one service stripe for each full four years of service." However, one of our salty BM1s says that this should not exceed seven service stripes (28 years' service). I say that a man is entitled to and should wear one service stripe for each four years of service, that is, if he has 36 years' service he's entitled to wear nine service stripes. I believe I'm right. Who wins?—M. C. W., YN3, USN.

• *You do. In accordance with the "Uniform Regulations," one service stripe for each four years of service should be worn, and there's no restriction concerning the total number.*—ED.

Money Riding on the Books

SIR: An answer to a letter in your April 1956 issue, page 30, states that "all Navy personnel are paid in full on 30 June and 31 December so that unpaid amounts will not be carried forward to the new Military Pay Record. You are not, however, required to draw your pay at any time other than the end of these pay record periods."

Either that last sentence is misleading, or we've been following an incorrect pay procedure for a good long while.—R.W.H., DKC, USN.

• *The "Navy Comptroller Manual," in paragraph 044650, Section III, makes this statement: "If practicable, all Navy personnel will be paid in full on 30 June and 31 December so that unpaid amounts will not be carried forward to the new Military Pay Record (DD Form 113) opened for the subsequent pay record period."*

Many commanding officers have made —and continue to make—a very broad interpretation of the phrase "if practicable," thereby allowing men to let money ride on the books indefinitely.

While it is not mandatory that you draw all pay due you on 30 June and 31 December, it is highly desirable that you do so.—ED.

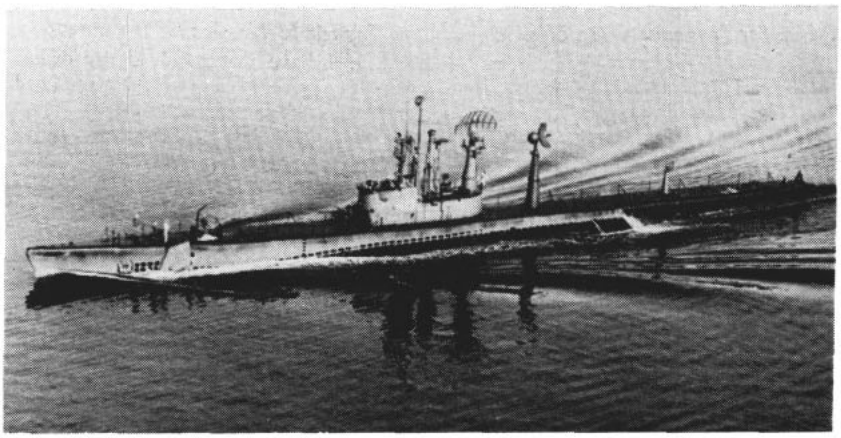
Transportation for Dependents, HHE

SIR: I am a PO3 who will soon have completed a four-year enlistment. I also served for a while in the National Guard. When I am discharged will I be able to send my household goods home at government expense and will I be allowed travel pay for my dependents? —C. E. S., QM3, USN.

• *You may, within certain limitations. "Joint Travel Regulations" (para.* 8001-1) *states that if you have completed more than four years of total service for pay purposes* before *the effective date of your orders for discharge, you will be allowed travel pay for your dependents and will be entitled to ship* 4500 *pounds, net weight, of household goods.*

If you were an E-4 on 31 *Mar* 1955 *and leave the Navy with* exactly *four years' total service (or through an early discharge, less than that amount), you will be allowed to ship home* 3000 *pounds of household goods, but will not receive travel pay for your dependents.*

In your case, it would appear the critical point is your National Guard service. If your hitch in the National Guard was creditable for pay purposes, you would have accumulated more than four years' total service. However, not all duty with National Guard units may be so considered. It is suggested that you submit an official request, via channels, to the Chief of Naval Personnel to find out if your National Guard service counts for pay purposes.—ED.



RADAR BELOW—*USS Tigrone* (SSR 419) is one of the Radar Picket Submarines converted from WW II Fleet type subs helping to watch for danger.

Dependent Stepchildren

SIR: I have two stepdaughters, ages nine and seven, for whom I am making a home. However, they are not entirely dependent on me, since my wife receives $25 a week toward their support.

How would I find out what benefits, such as BAQ, hospitalization and government transportation, I am entitled to get for them?—J.L.S., AMC, USN.

• *All naval benefits such as those you mentioned are based on a determination that your stepchildren are "in fact dependent" on you. This term is generally taken to mean 50 per cent dependent. However, in view of nonmonetary and intangible contributions which are naturally made when the stepchildren are members of your household, it is difficult to measure their expenses and their degree of dependency on you.*

To get an official determination in your case, for purposes of basic allowance for quarters, you should submit a BAQ application to the Family Allowance Activity, Cleveland 14, Ohio. To find out if your stepdaughters are eligible for government transportation or hospitalization you should write, via your commanding officer, to the Chief of Naval Personnel.

If your stepdaughters are not classified as eligible dependents, you may be authorized transportation for them to travel with your other dependents on a space-available basis.—ED.

Dependents Schools

SIR: I have just read the article, "An Education Abroad for Navy Juniors," in your July issue.

I notice that it did not mention the school at the Naval Station, Kodiak, Alaska, where I taught before joining the Navy. Can you tell me why this school was not included?—G. A. L., LTJG, USN(W).

• *The school at Kodiak was not mentioned because we were talking about educational facilities included in the Navy Overseas Dependents Schooling Program. Schools located on U. S. territory (such as Alaska) are not considered "overseas" schools. As a matter of fact, even though the school at Kodiak is located on the Naval Station, it is operated by the Territory of Alaska, and not by the Navy.*

Besides those in Alaska, other schools which do not come under the "overseas" heading are those on naval bases in the Continental United States, Hawaii, Puerto Rico, the Virgin Islands, Wake Island and Guam. These schools are administered by local school authorities or the base commander. The U. S. Commissioner of Education determines which shall have jurisdiction.

Thanks for reading the article and for pointing out something we probably should have explained in it.—ED.

Calk, Not Cork

SIR: I have argued that it is a Navy custom to pronounce the word,"calk" or "caulk" as CORK, and that this custom is similar to the Navy's pronunciation of "tackle" as TAYKLE.

However, Webster's New International Dictionary (Unabridged) does not list any such pronunciation as CORK. If, as assumed, this is a well-established custom, why doesn't the dictionary say so?—H. R. C. PHC, USN.

• *We're tickled to tackle your question, but unfortunately, your assumption is incorrect. This is not a well-established custom.*

Although "tackle" is now used by Navymen as either TACKLE *or* TAYKLE, *the authorities whom we queried on seagoing words, terms and phraseology, say they have not heard of* CORK *as a proper pronunciation for "calk," and that it is not accepted as naval usage.*

Furthermore, if you'll check the unabridged dictionary again under the various listings for "cork," you'll find that it calls this an erroneous usage of the word "calk."

Sorry we couldn't help you win.—ED.

Claim for Transportation of HHE

SIR: In 1945 I was assigned to FT "B" School in Washington, D. C. From there, I was ordered to shore duty in New Orleans, La. My furniture was moved by van to New Orleans, for which I had to pay $129.00 out of my pocket to the van company. Other men in my draft were reimbursed for their household effects shipment. I haven't been able to collect.

Do I still have a legal claim? If I do, how can I put in for payment?—H.L.H., FT1, USN.

• *Claims for reimbursement should be submitted on Standard Forms 1012 and 1012a to the Officer in Charge, Navy Regional Accounts Office (Code FF), Washington, 25, D. C. The claim should be supported by three certified copies of change of station orders and the bills for transportation and other services performed receipted as paid in full by the contractors who performed the services. You should also include your statement, in duplicate, giving the reasons why the services performed were arranged for by you rather than by or through a shipping officer.*—ED.

In Transit to Naples

SIR: I have just received my orders for duty in Naples, Italy. Naturally, I have a hundred and one questions about my next duty station. Here are some of the main ones I'd like information about. I'm on sea duty at the present time. Will the continuity of my sea duty be interrupted by my traveling across the U. S.? How much travel time will I be allowed and how much travel money will I get from San Francisco, Calif., to Washington, D. C.?

I will be eligible to take the examination for TE2 this August. Since I will be in a transit status when examination time comes around (I'll probably be in process at the Receiving Station, Washington, D. C.) will I be allowed to take the examination?

Does this processing in Washington include any sort of diplomatic schooling? Will I rate a clothing allowance for civilian clothes? Also, how long is the tour of duty in Naples and is it subject to extensions? — W.D.W., TE3, USN.

• *The continuity of your sea duty will not be broken by traveling through the U. S. in transit. The amount of travel time you will be allowed will depend on the type of transportation. If your travel is performed at government expense, you will receive no travel pay. However, if the travel is at your own expense, you'll receive* 6c *per mile.*

There will be no school or diplomatic training in Washington, D. C. Concerning examination for advancement, if you're in Washington at the time the exams for TE2 are given you will be allowed to participate.

The tour of duty in Naples is two years with a possible extension of one year. You will be quartered in barracks and may wear civilian clothes after working hours. There is no allowance given you for civilian clothing.—ED.

MSTS Space Available Travel

SIR: A visiting career appraisal team member informed one of our men that he will become eligible for space-available transportation via MSTS ships when he enters the Fleet Reserve. OpNav Inst. 4650.4, paragraph 3(2)(g) was cited as the authority.

Checking that reference I find it states "personnel on the retired lists of the Departments who are receiving retirement pay and who are not traveling pursuant to their retired orders are entitled to space-available transportation."

Since Fleet Reserve members are not actually retired, it would appear that they are not entitled to such transportation.—J.A.H., YN1 USN.

• *Your career appraisal teammate was correct. If you are a member of the Fleet Reserve, or are on the temporary disability list, and are receiving retirement or retainer pay, you and your dependents are eligible for transportation in ships of the Military Sea Transportation Service on a space-available basis. The travel rates vary and are applied to the cost of meals.*

You may not take more than one round trip per calendar year, however, and transportation of privately-owned autos is not authorized. Dependents are not eligible for passage unless accompanied by you.

Applications for MSTS transportation may be submitted to the Chief of Naval Personnel (Attn: Pers B3). The term "space-available" means space which might otherwise go unoccupied after all required travel has been accommodated, and normally, notification of a confirmed reservation cannot be made until four or five days before the sailing date. Arrangements for return space assignments must be made with the appropriate overseas command.

While MSTS ships sail to various Pacific destinations, Alaska, Newfoundland, Northern Europe, the Mediterranean and Caribbean areas, ships going to Northern Europe and the Med are not available for travel at this time due to limited space on these routes.—ED.

Development of Black Balls as Signals

SIR: Even the most nautical-minded officers and men in this *Oriskany*-class CVA are baffled by the use of "black balls" as signal devices, designating ships at anchor and so forth. Would you be so kind as to enlighten us on their origin and use?—K. M. H., Jr., HM2, USN.

• *Trying to track down the first use of "signal balls" would be an extremely difficult, if not impossible task, since marine signaling is at least as old as sailing itself. It is known, for example, that early Greek and Persian fleets used their sails for communication between the various ships—but they didn't leave us a detailed account of their signal orders.*

Day signals—flags, in particular—were in common use as early as the 13th century and by the early 17th century there were in existence signal codes which used flags, pennants and banners. Also under the category of day signals are what we call distant signals, for use during daylight hours when distance or other circumstances render the use of flag signals impossible or impractical (colors and patterns of flags are hard to determine with certainty for more than two or three miles).

These distant signals, as devised by the British for an international marine signal code in 1856 *(hence probably in use somewhat earlier), consisted of shapes to be used as substitutes for letter-denoting flags. The objects chosen for this purpose were a ball, a pennant and a square flag—or objects which would approach these shapes, such as a bucket, an oar and a shirt.*

In January 1901, *by international agreement, a new marine signal code went into effect, but it retained various shapes as distant signals—cones, balls, drums, a square flag and a pennant.*

Both the present-day U. S. "Inland Rules of the Road" (first adopted in 1897, *and since amended), and the revised "International Rules" which became effective* 1 *Jan* 1954, *use such shapes as "daymarks" or distant signals. To list a single instance, the "International Rules" provide that "Between sunrise and sunset every vessel when at anchor shall carry in the forepart of the vessel, where it can best be seen, one black ball not less than two feet in diameter." "Inland Rules" require display of the "anchor ball" for vessels of more than* 65 *feet in length when they are moored or anchored in a fairway or channel between sunrise and sunset.*

Black balls are also used to indicate such things as the following: (1) *a vessel which is not under command—two black balls not less than six feet apart in a vertical line; and* (2) *a vessel aground—three black balls in a vertical line one over the other and not less than six feet apart.*

A check of the "International" and the "Inland Rules" will reveal a number of other uses for balls, both black and varicolored.—ED.

Sea Pay in 1941?

SIR: In the answer to a letter in your May issue of ALL HANDS (page 24), you said there was no sea pay authorized for enlisted men in '41, as sea pay was discontinued in 1922 and not restored until the Pay Readjustment Act of 7 Mar 1942. I believe if you recheck your facts, you'll find that when sea pay was restored in '42 it was made retroactive to 7 Dec 1941.

Therefore, since the man who wrote you the letter had contended that sea pay was authorized in '41, I think you should have included that information in your answer.—G. S. W., YN2, USN.

• *You're right. Sea pay was made retroactive to 7 Dec 1941, under the act of '42, and we should have said so.*

This would have added a nice little technicality to our letter-writer's argument. He could claim that sea pay was authorized for at least part of '41, but his fellow debaters could argue that it wasn't actually authorized until the act took effect in '42.

Personally, we'd call it a draw.—ED.

Leave, Proceed and Travel Time

SIR: We have a question on the proper procedure for charging leave, proceed and travel time on a permanent change of station orders to enlisted personnel. Could you give us, for the three examples listed below, the proper formula for determining which is proceed time and which is travel time?

1. When the orders authorize four days' proceed time and three days' travel time, if the date detached is 1 August and the date for reporting to the new duty station is 3 August.

2. If the date detached is 1 August, the date of reporting to new duty station is 15 August, and the orders authorize four days' proceed and 12 days' travel time.

3. A man is detached on 31 January under orders which include four days' proceed and five days' travel time, but returns to his permanent duty station on 3 February, the return being directed by BuPers, the man's orders to be held in abeyance. In this case, how much proceed time and travel time should be authorized when orders are reexecuted?—J.J.M., PN1, USN.

• *According to the "BuPers Manual," Article C 5318(2), "Leave, proceed time, and travel time are charged in that order. However, only that portion of the period between stations which is not authorized as proceed and/or travel time is chargeable as leave."*

Where only proceed and travel time are involved, you would charge travel time first, then proceed time.

So the answers to your examples are:

1. 1 August is a day of duty; 2 and 3 August are days of travel time (two days). No proceed time is taken.

WHAT'S UP?—Radar Picket Destroyer *USS Everett F. Larson* (DDR 830) can tell. DDRs have early warning radar for long-range detection of aircraft.

2. 1 August is a day of duty; 2 and 3 August are proceed time (two days); 4 August through 15 August are counted as travel time—12 days.

3. Regardless of performance of any travel, the three days from 1 through 3 February should be considered as proceed time. When orders are reexecuted the man should be authorized one day proceed and five days' travel time.—ED.

Special Weapons School

SIR: I would like information on the Special Weapons School in Albuquerque, N. M. It's not listed in the regular school listings and I would like to put in for that school before my shore duty is up.—D.R.S., EMC, USN.

• *Personnel are ordered for training in Special Weapons when their particular rating is required in a Special Weapons Activity under the distribution control of the Bureau. A desire for duty in the Special Weapons Program may be indicated as a duty preference on your "shorvey" card, and will be given consideration if a need for your particular rating is required at the time you are considered available for transfer.*

The selection of enlisted personnel for duty in the Special Weapons Program is based on a careful screening of records. The minimum requirements for selection for the program and/or for assignment to technical instruction are: high school level education; GCT score of 50; excellent record of performance of duty and thorough experience in rating held; a good personal record; and thirty-six months' obligated service.—ED.

Cruise Book

SIR: I am a former member of USS *Tarawa* (CVA-40, now CVS). Where can I purchase cruise books published on this vessel since its recommissioning in 1951?

I would appreciate any further information you can give me on the preparation, financing, and distribution of these publications.—W.E.H., Saugus, Calif.

• *One cruise book of* Tarawa *covering 1951-52 was published. However, the chances are that there are no copies currently available. These books are not printed in unlimited numbers, but at the rate of, say, three for each man aboard—enough for himself, his family and a special friend. They are sold until they are gone and rarely, if ever, come out in a second printing. To find out if there is a cruise book available, you might write to the Personnel Officer of* Tarawa *(c/o FPO New York, N. Y.).*

Cruise books, incidentally, are an all-crew production. Men on board write the copy, furnish the photographs, design the layout, and provide for its financing. Commercial publishing firms print and bind the books.

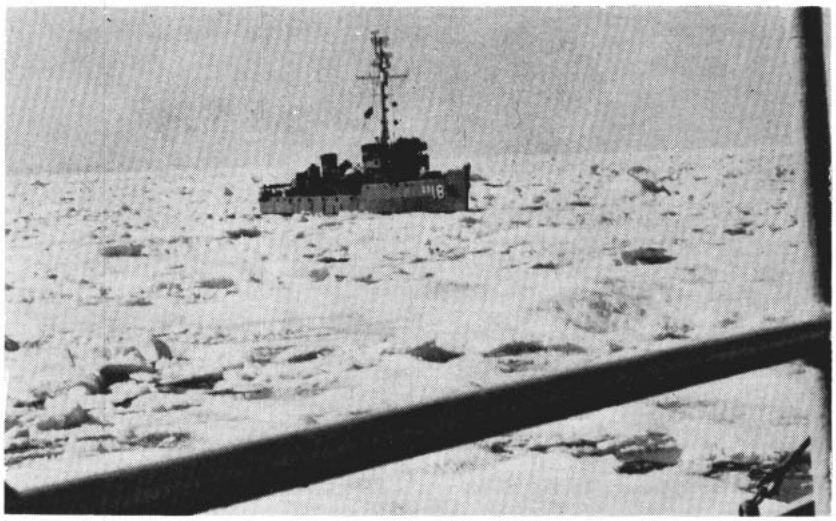
Distribution is made to crew members of some ships without charge, with the ship's store profits relied upon to meet the costs. Other ships use their ship's store profits to defray part of cost and make up the difference by charging a nominal fee for a copy.—ED.

Ship Reunions

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

• USS *San Juan* (CLAA 54)—A reunion will be held 13 October in New York City. For more details, write to Joe Roening, 55 Arnold Ave., Closter, N. J.

• USS *Cowanesque* (AO 79)—Former crew members and officers interested in holding a reunion with time and place to be decided by mutual consent, contact William S. Hodgetts, 29 Landing Street, Rochester 18, N. Y.



LITTLE SHIP with big job, *USS Requisite* (AGS 18), led the way for DEW Line supply ships charting safe course through ice-filled waters of unknown depths.

Requisite in DEW Line

SIR: In the past issues of ALL HANDS Magazine, it seems as though our ship has been left out in the publicity of the DEW Line Operation. USS *Requisite* (AGS 18), was the first ship to reach Shepherd Bay, the farthest point eastbound in this operation, and was the first ship in this operation to return Stateside.

Our primary mission was to chart a safe course through waters of unknown depths and relay this information to the Task Force.

While in the Arctic Region, we took samples of the mud and rock bottom, temperatures of the water, current readings and soundings.

Under the direction of an officer from the Navy Hydrographic Office in Washington, D. C., we also obtained much needed information to aid in future navigation in this area. Our ship, only 220 feet in length, encountered heavy ice barriers which caused much damage to our hull and frames.

Although one of the blades on our starboard screw was broken off by the ice, *Requisite* was able to return home safe.

Since our arrival in the States, the ship has been reinforced with new frames and skin and is preparing for another mission in the DEW Line Operation.—R.M., PH2, USN.

• ALL HANDS *always welcomes stories about ships and their operations. Your letter is the first information we have received about* Requisite. *Why don't you try your hand at writing a story about your ship's exploits in the Far North? We're more than happy to consider for publication all manuscripts and photographs submitted.*—ED.

Retesting

SIR: I came into the Navy on a four-year enlistment, which I have since extended for one year in order to get shore duty. Now I would like to ship over and attend submarine school, but I've run into a problem.

In order to attend submarine school one must have a combined ARI-MECH score of 100. If the GCT score is 55 or above, a waiver of one to five points may be given for the combined ARI-MECH. My GCT is 52, but my combined ARI-MECH score is only 86—14 points short—so the waiver wouldn't do me any good even if I could get it.

After checking my standing on the score requirement, the personnel officer here has refused to send my submarine school request to the Bureau. What I want to know is this: How can I get around that score requirement, so that the personnel officer will forward my request to the Bureau?—G.F.S., SO2, USN.

• *As the song says, "You can't get around it, you gotta come in at the door." So the thing for you to do is raise your scores (or try to raise them) by requesting to retake the Navy's Basic Test Battery.*

The following information must be contained in your request (which your personnel office can help you prepare):

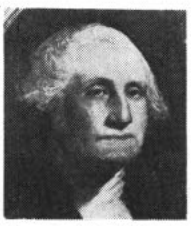
1. Purpose for which retesting is desired (in your case, to meet eligibility requirements for submarine school).

2. The date on which you were originally tested, and all classification test scores recorded in your service record as a result of that initial testing. Also, if you have previously been retested, that date and the recorded scores must be listed.

3. A rundown on the formal schooling completed before you first took the

Father or Not, COMO John Barry Holds Firm Place in U. S. Naval History

SIR: I have been rereading the article on "Men Who Made Naval History" in the December 1955 issue with considerable enjoyment and interest. It was a job that was well done, and one that has needed doing for some time. Customs and traditions are still among the most effective guides and motivation factors we have.


George Washington

The summary on John Barry, under his picture on page 32, was disappointing, however, Commodore Barry is known as the "Father of our Navy," but one would hardly suspect it from your writeup. It is my impression that Barry received Commission No. 1 in the Navy, so to state that he was one of the first men to be commissioned is misleading. He *was* the first. Also, being "instrumental in encouraging construction of naval vessels" would not qualify him for the title "Father of our Navy." No indeed, his courage and tactics, determination, tenacity of purpose and love of country were the attributes that endeared him to all. I also question the statement that he was the Navy's third commander-in-chief. — E. J. Shaughnessy, CDR (SC), USN.

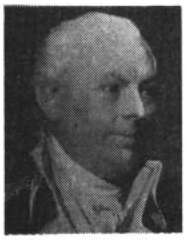
• *Commander, we do not begrudge Commodore Barry his "first," but we feel—quite properly, we think—that the Navy originated with the Continental Congress (to say nothing of the various state marines and Washington's little fleet). Therefore, we felt justified in calling Barry "one of the first men to be commissioned" and in not mentioning his claims to the title "Father of our Navy."* (But see page 39.)

Our source for the statement that Barry was the Navy's third commander-in-chief was Hamersly's Naval Encyclopedia, *published in Philadelphia in* 1881. *In the main, we have found Hamersly to be quite reliable, so perhaps we weren't sufficiently critical of the entry under Barry's name. Even so, Esek Hopkins was appointed commander-in-chief of a specific fleet (although not of "the fleet" in general) by Act of Congress of* 22 *Dec* 1775*—and we have already stated our position on the true beginnings of the Navy.*

In March of 1776, *John Barry was commissioned a captain in the Continental Navy. When a precedence list was issued in October* 1776, *Barry stood seven on the list of captains.*

Commodore Barry did hold Commission #1 after the Navy was reorganized in March 1794, *leaving little doubt about his relative standing at that time. However, the letter of notification written to Barry by Henry Knox (Then Secretary of War) on* 5 *Jun* 1794 *merely stated that "the President of the United States by and with the advice and consent of the Senate has appointed you to be a captain of one of the ships to be provided in pursuance of the act to provide a naval armament." Washington himself presented the commission to Barry on* 22 *Feb* 1797. *That commission (which may be seen at the Naval Academy Museum) appoints Barry "Captain in the Navy of the United States, and Commander of the Frigate called the* United States; *to take rank from the fourth day of June, one thousand seven hundred and ninety-four." So not only was Barry not third commander-in-chief, he was never commander-in-chief of the Navy.*

Note, however, that your unabridged Webster's Dictionary lists the military and naval definition of "commission" as "a certificate conferring military or naval rank and authority on officers above a certain rank." In the Journals of the Continental Congress for 2 *Dec* 1775 *you will find the Naval Committee authorized to "prepare a proper commission for the captains or commanders of the ships of war in the service of the United Colonies." The committee furnished its various naval boards with blank warrants and commissions, signed by the President of Congress, to be filled out by the board for each officer appointed, thus insuring that the validity of his title and rank could not be questioned.*


COMO John Barry

While it is true that Barry is generally accorded the title "Father of our Navy," it is also true that others have been accorded the same title. To cite a single instance, John Adams considered naval legislation enacted on 25 *Nov* 1775 *"the true origin and foundation of the American Navy." And Adams felt that he himself "had at least as great a share as any man living" in the foundation of that Navy. Yet when he was called "Father of the Navy" he saw fit to disclaim the fatherhood of anything except his own children. One can also make a very convincing case for assigning the title to George Washington.*

As you suggest, Barry's claim to the title appears to rest on his personal attributes and on his services in the training of future naval leaders. For instance, the influential Philadelphia magazine Port Folio *stated during the War of 1812 that "so many of the distinguished naval men of the present day commenced their career under Commodore Barry that he may justly be considered as the Father of our Navy."*


John Adams

And the report of Barry's funeral in the Aurora, *a Philadelphia newspaper, on* 17 *Sep* 1803, *would seem to bear this out:*

"Our infant Navy is also much indebted to his fostering care; it was ever his pride to establish its respectability in all quarters of the globe; and America may boast that most of the officers she now possesses were reared under her gallant Barry; and I trust, should that era arrive when it shall be necessary to exert her naval force, she will show that the bravery and experience of a Barry has descended to his children." (Barry called all of his officers his children.)

In short, if any one person deserved such a title, Barry is a leading candidate.

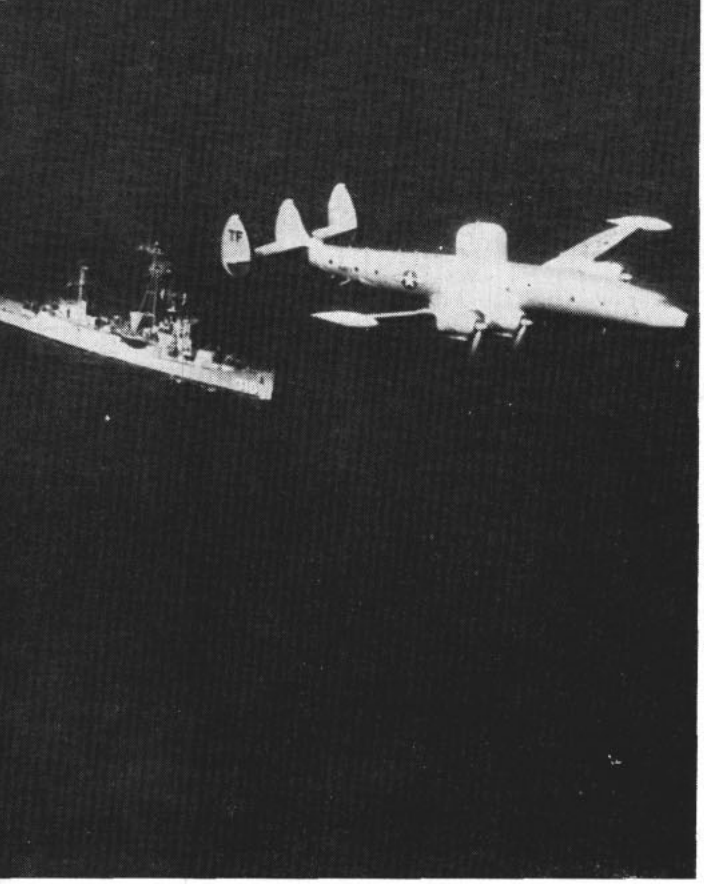
To top this off, here's an up-to-date note on the Commodore: Under appropriations authorized by the 77*th and* 80*th Congresses, a monument to Barry's memory has been designed and recently completed. The monument is the work of the eminent New York Sculptor, Wheeler Williams, and will be presented to the City of Wexford, in Barry's birthplace of County Wexford, Ireland. It was cast in Somerville, Mass., and has been transported to Ireland for unveiling this month. For more on John Barry see the article on page* 39.—ED.

test battery and the date such schooling was completed.

4. A list of the schooling and experience you have had since the date you first took the classification tests. This would include naval and civilian schooling taken, USAFI courses completed, other correspondence courses completed, on-the-job training, etc.

5. Other pertinent information concerning conditions under which previous testing was accomplished which would have a bearing on the request for retesting. An example of this would be a language difficulty.

Finally, if you initiate the request, your commanding officer's forwarding endorsement should indicate his evaluation of the merits of the request. This evaluation should be in basic request if command initiates request.—ED.



INTER-SERVICE TEAMWORK of CONAD protects nation. *Left:* Navy patrols sea. *Rt:* AF pilots scramble to intercept.

CONAD: An Inter-Service Team

"TWIG, this is Victor 2. Bogey 1, course 360, speed 400, angels 5. Bearing 060, range 90. Time 1950, Zulu."

A message like this one, passed from an airborne combat information center far out over the ocean to a Stateside air defense control center, may be the means of saving your life or the lives of your family.

Such transmissions are common occurrences aboard certain Navy planes nowadays—but so far the "bogeys" have been friendly planes, quickly identified from flight plans filed with CONAD, the nation's Continental Air Defense Command. These aerial watchdogs are WV-2 *Super Constellations,* outfitted with a mass of radar gear and assigned the monotonous—but highly important—job of extending our nation's defenses against sneak attack.

These flying radar installations are just one of the Navy's many contributions to a system which unites sailors, soldiers, airmen and civilians into an airtight defensive organization along North America's air frontiers.

This system of defense against surprise attack is the responsibility of the nation's youngest military organization, and it is an outstanding example of joint Army-Navy-Air Force and coordinated civilian effort.

CONAD's mission can be simply stated: "Defend the United States against air attack." Carrying out that mission, however, is a vastly complicated business. In brief, here's what each of the four main forces contribute to that mission:

• The Navy supplies and mans the radar picket escort vessels, ocean station radar ships and many of the WV-2 "Flying CICs" which form the seaward perimeter of the defense system. The Navy's Bureau of Yards and Docks is supervising construction of radar "islands" off the Atlantic coast, and Navymen and Navy ships break the Northern ice floes to supply the "Dew Line"—the Distant Early Warning Line of radar installations along the Arctic Circle. Navy fighter-interceptor planes are assigned to CONAD for duty and others can be made available on short notice.

• The Army's primary contribution to CONAD is the manning of antiaircraft installations and Nike missile batteries around our major cities and "critical" target areas.

• Civilian participation in the nation's defense system is represented by the Ground Observer Corps, made up of volunteers who scan the skies for low-flying aircraft and check to be certain that they are friendly.

• The Air Force, with its complete facilities for air warfare, supplies the basic organization for the Continental Air Defense system.

Before taking a look at the various elements which operate under CONAD, it might be wise to examine briefly the command structure of the "unified" organization.

Heading this new military force is Air Force General Earle E. Partridge who has operational control over all forces assigned to CONAD and is responsible directly to the Joint Chiefs of Staff. CONAD headquarters, at Ent Air Force Base, Colo., includes the chief of the Army's antiaircraft command, Lieutenant General Stanley Mickelson, and Rear Admiral Hugh H. Goodwin, who heads all Navy and Marine

ALERT SENDS Army *Nike* men into action. *Right:* Civilians in Ground Observer Corps form important part of defense.

Geared for Continental Defense

forces allotted to the air defense organization.

Then, the continent is divided into three defense regions, each with a joint air defense force under an Air Force commander who has the same operational control over the combined forces in his command that the chief officer of CONAD has over the whole. In turn, the three regions are divided into sixteen air divisions, each exercising control over all air defense units within its area.

These divisions either perform or supervise all measures necessary for adequate air defense—operation of radars and fighters, allocation of forces, implementation of security control plans and activation of warning networks. A control center in each division plots all interceptions and reports of hostile aircraft.

In carrying out its assigned mission, CONAD divides its operations into four distinct phases: 1) *detection,* 2) *identification,* 3) *interception* and 4) *destruction.*

Detection of all aircraft approaching the North American continent is of primary importance in accomplishing CONAD's objective. Volunteers in the Ground Observer Corps organization join with the artificial "eyes" of a huge radar network in performing this vital first function of CONAD. Long before the sky scanners of the Observer Corps go into action, however, radar will have spotted the intruders.

Perhaps the first warning will come from one of the following "fences" stretching across the northern continent:

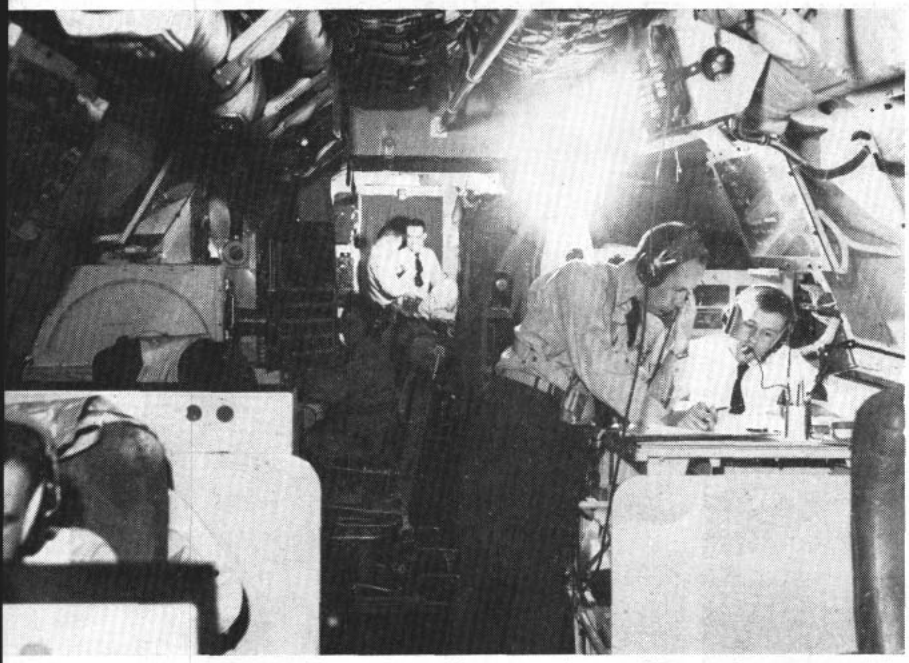
- DEW Line, which is the nickname for the Distant Early Warning Line of automatic, semi-automatic, and manned radar installations in operation or abuilding in the Far North. This line stretches from Cape Lisburne, Alaska, to Baffin Island, and (like its companion lines) is a joint project of the United States and Canada.
- Mid-Canada Line, also known as the McGill Fence, is a radar installation system stretching from coast to coast along the 55th parallel, just north of the settled territory of Canada. Canadian troops are manning this chain of semi-automatic and automatic radar stations.
- Pine Tree Line is the name applied to the main control and warning radar installation, which roughly parallels the U. S.-Canada border and is jointly operated.

Each of these radar "fences" has a different function. DEW Line shouts the first warning of approaching aircraft, alerting defense forces and providing the first information about the unidentified intruder.

The Mid-Canada Line furnishes a second set of data on direction, speed and altitude, enabling plotting centers across the continent and at CONAD headquarters to figure out what the enemy is most likely to do.

As the bogey comes within range of Pine Tree, along the U. S.-Canada border, radars are ready to start tracking the enemy craft as they begin converging on their target.

Extending these lines to seaward —covering the northern flanks of our continent as it were—are the Navy's radar escort picket vessels (DER) and ocean station radar vessels (YAGR), in addition to radar-equipped aircraft, lighter-than-air craft and "Texas Towers." The Navy's largest role in CONAD is to be found in this seaward exten-



NAVYMEN of WV-2 *Super Constellation*, airborne CIC, send message while on Atlantic patrol. Both Navy and AF keep watch with these planes.

sion of our nation's defenses.

Athwart the broad mid-ocean approaches of the Atlantic and Pacific are the lines of ships and planes ready to give early warning of possible bogeys. Closer inshore other ships and planes (plus Texas Towers in the Atlantic) provide a second set of references on approaching aircraft.

Perhaps the most unusual of the Navy's contributions to CONAD's chain of "eyes" are the YAGRs—the lumbering Liberty ship merchantmen of World War II which have been adapted to the service of detecting high, fast aircraft (see page 25). They share with DERs (see page 20) the mission of maintaining stations along the Atlantic and Pacific coasts, thereby extending the land "contiguous radar," and have been modified accordingly. Their wide, deep holds have become spacious areas for living, recreation and other special equipment requirements.

During their tours on station the DERs maintain constant contact with the nearest shore radar station, while scanning their radarscopes for anything that doesn't appear on prearranged flight plans of all commercial and military aircraft. Flashing a warning which will bring all-weather fighters from the nearest interceptor base is a matter of minutes.

"Flying CICs"—WV-2 *Super Constellations* well endowed with radar and other detection devices—will soon be on station as another part of the Navy's contribution to the nation's continental air defense network. These giant four-engined craft, each outfitted with the latest in airborne radar gear, are capable of picking up enemy aircraft at distances well over 100 miles. When flying "on station" at a height of 10,000 feet, the planes can cover in one sweep a surface area of 45,000 square miles.

These Super Connie CICs are manned by 26 men and have a dual mission in their early warning role: 1) to give an earlier warning of an enemy's sea or air approach than is possible by any other method; and 2) to track any targets and direct defending craft into position to destroy the invader. While performing their early warning duties the planes maintain contact with shoreside air defense control centers, reporting all contacts and the results of IFF signals. Similar planes are being operated by the Air Force.

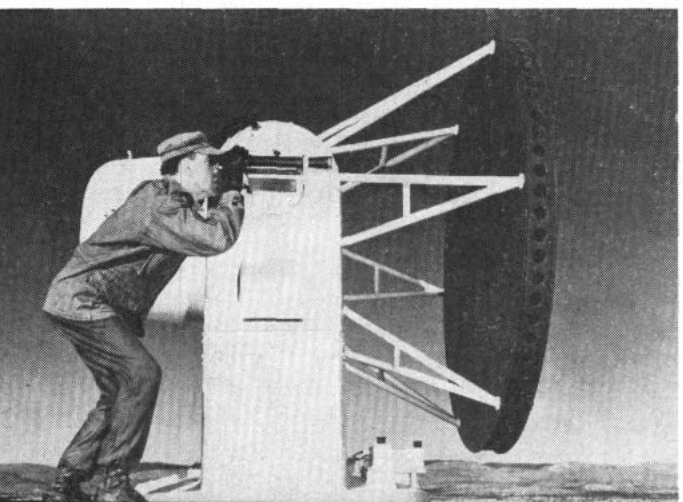
Also part of the seaward extension of the nation's radar defenses are the "Texas Towers" being built for the Air Force under supervision of the Navy's Bureau of Yards and Docks (see page 26). Named for offshore oil rigs along Texas' Gulf coast, these towers provide permanent early radar warning stations approximately 100 miles off the Atlantic coast.

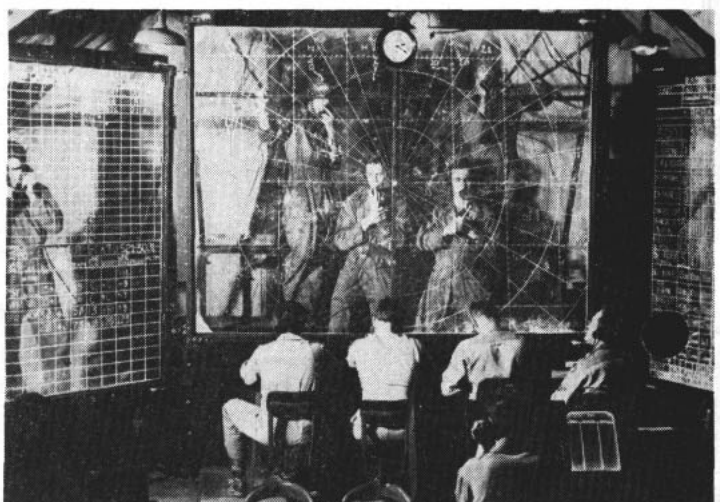
This giant net—the three radar fences and their seaward extensions, plus other radar installations inside the U. S.—gives CONAD good high altitude coverage over a large portion of the northern continent. A 24-hour "skywatch" maintained by volunteers of the Ground Observer Corps affords a widespread system of low-level detection within the U. S. itself.

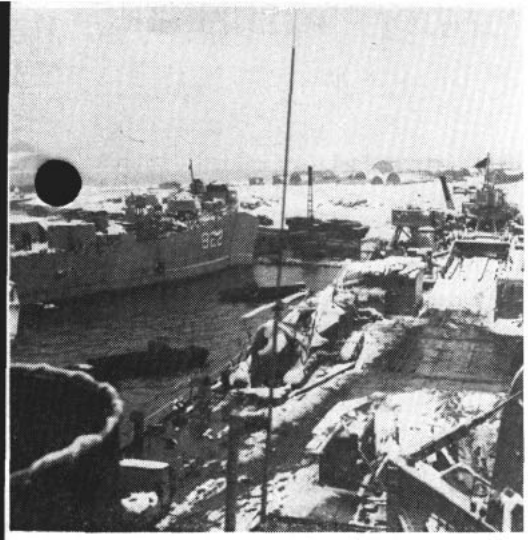
Identification, the second phase of CONAD's operation, is enormously complicated by the number of scheduled flights crossing our coasts and within the continent itself; this situation has been somewhat simplified, however, by placing most flights under a tight system of controls.

For this purpose three types of Air Defense Identification Zones (ADIZ) have been set up; 1) Inter-

ARMY MISSILE MAN checks radar before *Nike* firing. *Right:* AF ground intercept units like this direct planes to target.







DEW LINE—Navy ships bring in supplies during Arctic storm. *Right:* Members of CONAD team climb to radar station.

national Boundary ADIZ, along the Canada-U. S. border; 2) Coastal ADIZs along both coasts; and 3) Domestic ADIZs, around critical target areas within the United States. Planes which intend to enter or cross any of these areas are required to file flight plans in advance —plans which can be matched with radar tracks either to identify the plane or to set off a quick scramble by interceptors.

Further protection is provided by improved versions of electronic IFF, the World War II system of Identification Friend or Foe, and a system of fixed "air corridors" along which airlines are required to fly in accordance with prearranged flight plans.

Interception of unidentified or hostile aircraft is the duty of fast, all-weather jet fighter-interceptors, capable of intercepting and destroying a target while flying on instruments. When aircraft are spotted, but cannot be readily identified by other means, such planes as the F-86D *"Sabrejet,"* the F-89D *"Scorpion,"* the F-94C *"Starfire"* and the Navy's F3D *Skynight* take to the air for a visual inspection of the interloper. (A Navy fighter squadron of F3Ds, based at San Diego, is on immediate call from CONAD to handle intercepting duties.)

CONAD's combat-ready fighter force is strategically located throughout the country on bases within easy reach of critical target areas and our perimeter defense line. Fighters of other Air Force commands, the Navy and the Reserve Forces are available for emergency use. And during an emergency, the naval representative at CONAD headquarters will be able to call on fighter power at naval air stations or aboard carriers.

Destruction of any hostile aircraft would be carried out by the interceptor-fighter aircraft, or fire from the Army's antiaircraft installations, including the Nike missiles which now defend many of our more important cities and industrial areas. Aerial rockets and refined radar control give the fighter-interceptors a distinct advantage over attacking bombers, while Army's ack-ack command has added the new electronically-controlled *Skysweeper* cannon to its battery of weapons defending heavily populated areas and industrial sites.

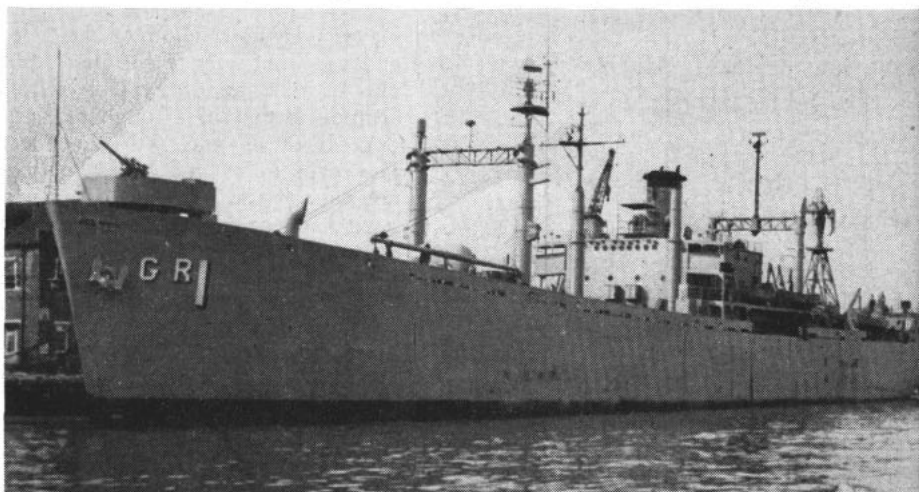
The CONAD organization, as well as its operational concepts and functions, have been built up on the supposition that simultaneous, widely diversified air attacks can be directed against any or all of the major targets within the United States at any given time—and that such attacks are likely to come from the north. Adoption of the motto "Be Prepared" in setting up adequate defenses against such attacks serves the double purpose of acting as a deterrent to attack, and of minimizing the inherent advantage of surprise if such an attack were undertaken.

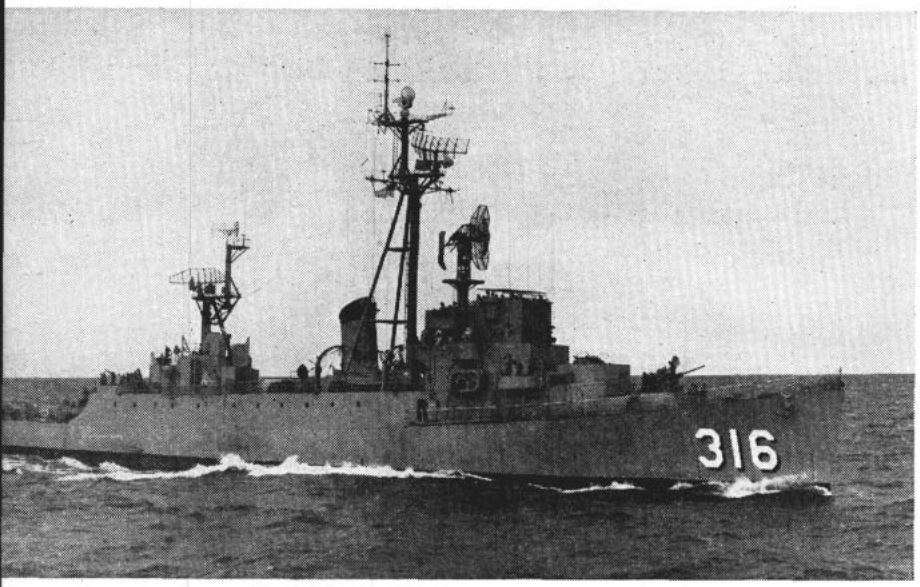
The final measure of protection is afforded by a system of communication and alerting procedures capable of passing warnings throughout the country in a matter of minutes. When it appears necessary, CONAD can announce a condition of air defense warning to the Federal Defense Administration. A similar but separate system has been set up to notify key military installations.

An additional warning condition, applicable only to the active air defense system, is Air Defense Readiness. Normally initiated as a result of suspicious patterns or actions of incoming unidentified aircraft, it is a means of placing all available air defense forces at maximum immediate operational capability. Another plan, called "SCAT," establishes procedures and instructions for security control of civil and non-tactical military air traffic during an emergency.

This gigantic and complicated web of defense is CONAD. And on the following pages you'll see more of the Navy's role in defense against air attack.—**Barney Baugh, JO1, USN.**

OCEAN LISTENING POSTS—YAGRs converted from WW II Liberty ships share with DERs mission of patrolling Atlantic and Pacific on lookout for danger.





ON GUARD—*USS Harveson* (DER 316), *USS Strickland* (DER 333) *patrol.*

RADAR PICKETS

"RADAR PICKET ESCORT VESSELS, at the present time, are the most important ships in the U. S. Navy."

That's quite a statement, but when quartermaster third class Roy A. Trotter and Jerry Halbrook, ET3, both crew members of *USS Harveson* (DER 316)—the first DE converted for radar picket duties—made the claim, they were not just "sounding-off." Both were speaking from experience and have good reasoning to back them up.

"After all," they say, "what other type of ship in the Navy today is actually performing its regular mission on a round-the-clock basis. Practically all other ships are engaged in peacetime training while we (the DERs) are more or less on a wartime basis, conducting our primary mission at all times."

Such opinions are shared by the majority of those who man the "eyes and ears" not only of the Fleet, but also of the nation. Typical of this attitude is that of a tough old sea-dog—boss of the Atlantic Fleet Destroyer Force and one who does not offer praise lightly. He said, "I have been in the Navy for many years but I'm still deeply impressed by the amazing spirit with which our men have taken over one of the most exacting and important of our peacetime jobs."

In making this statement, RADM John C. Daniel, USN, added, "I refer, of course, to the maintenance of our picket radar stations off our coastal waters. It is a real tribute to the officers and petty officers that, in spite of this monotonous, uncomfortable and sometimes dangerous duty, all hands remain tops in spirit and efficiency."

Who can speak with more knowledge or authority about the DERs and this type of duty than ComDesLant himself? He has been around for quite some time and knows them inside and out.

RADM Daniel first became acquainted with radar picket ships the hard way—off the coast of Okinawa near the end of World War II, when lonely little DEs with hastily improvised radar gear attempted to warn the Fleet of approaching Kamikazes and, at the same time, duck the swarms of enemy pilots bent on suicide. He earned a Navy Cross for duty as officer in command of a radar picket station unit at that time and his admiration of the tough little featherweights—and those who man them—remains undiminished to this day.

What's so precious about DERs and why should they be selected for this unusual praise from those who man them? Why are they different from other types of destroyer escorts and why do their crews take such pride in duty on board them?

DERs are basically DEs. In fact, they are former escort ships converted for radar picket duties. In addition to the conventional armament for action against hostile surface, undersea and air attacks, they are equipped with a large amount of the latest radar equipment which enables them to detect aircraft at long ranges.

These radar picket escort vessels, serving on lonely stations far out at sea in all kinds of weather, form an essential link in the Continental Air Defense Command system. They extend the nation's early detection seaward, far beyond the reaches of shore-based radar.

At present there are 18 DERs operating with the naval forces of the Continental Air Defense Command. Of these, six are assigned to the Pacific and 12 are in the Atlantic.

ON SEA PATROL

Six of the 12 East-Coast-based DERs of Escort Squadron 16, USS *Joyce* (DER 317), *Harveson* (DER 316), *Fessenden* (DER 142), *Otterstetter* (DER 244), *Kirkpatrick* (DER 318), and *Strickland* (DER 333), have been performing off-coast picket operations since 1952. They are the old timers—the first.

In 1955, Escort Squadron 18 was established as part of the Atlantic Fleet when six more DEs were converted to DERs to help elder brothers maintain station. They are: USS *Chambers* (DER 391), *Pillsbury* (DER 133), *Rhodes* (DER 384), *Calcaterra* (DER 390), *Wagner* (DER 539) and *Vandivier* (DER 540).

Maintaining recently established "DER" stations in the Pacific are: USS *Falgout* (DER 324), *Lowe* (DER 325), *Koiner* (DER 331), *Savage* (DER 386), *Haverfield* (DER 393) and *Wilhoite* (DER 397).

In addition to the 18 DERs currently on station off the East and West Coasts, 12 more are undergoing conversion and will soon add considerable strength to the nation's early warning detection system. Of these, USS *Finch* (DER 328), *Forster* (DER 334), *Roy O. Hale* (DER 336), *Vance* (DER 387), *Lansing* (DER 388), and *Durant* (DER 389) will go to the Pacific; while USS *Camp* (DER 251), *Sellstrom* (DER 255), *Brister* (DER 327), *Kretchmer* (DER 329), *Price* (DER 332) and *Hissem* (DER 400) will scout additional Atlantic stations.

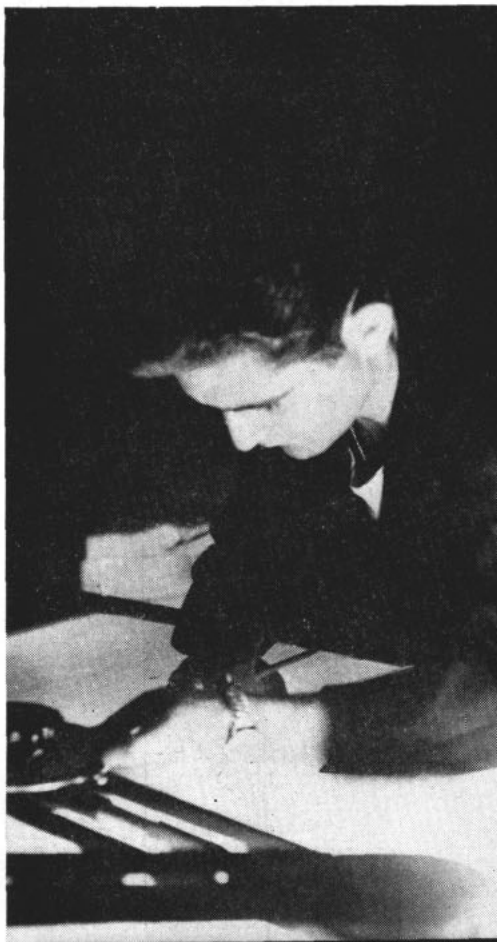
With the exception of *Wagner* and *Vandivier*, all of the DERs now serving in the Atlantic saw duty in World War II as escorts, and many of them have outstanding records.

It was *Pillsbury*, for example, who in World War II assisted in the sinking of two German submarines and it was a boarding party from this ship that went aboard U-505 after depth charges brought her to the surface. *Pillsbury* then steamed more than 2500 miles with the German sub in tow. For that action, she received the Presidential Unit Citation.

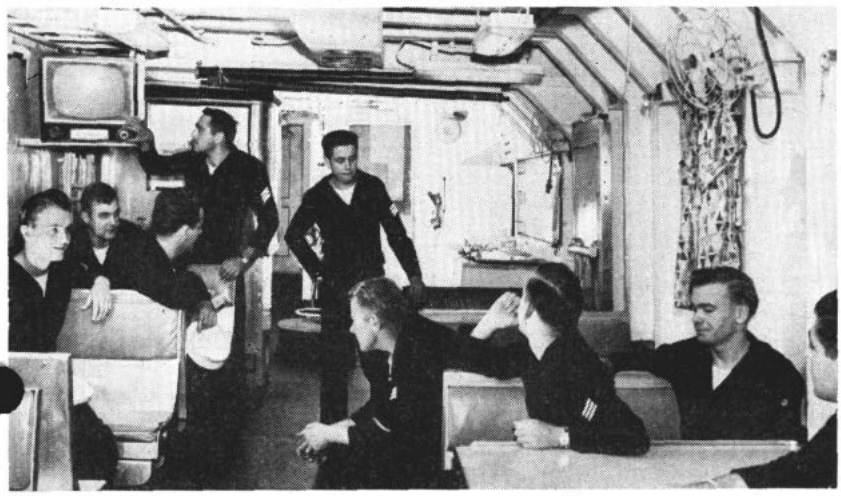
Kirkpatrick escorted 11 Atlantic convoys during WW II; *Harveson* chalked up 10 convoys; *Chambers* put in two and one-half years of convoy duty during which time she escorted 16 convoys during the North African and European campaigns; *Calcaterra* is also a veteran of 16 transatlantic convoy runs. *Fessenden* was credited with the sinking of an enemy submarine while part of a hunter-killer group with USS *Mission Bay*, now CVU 59.

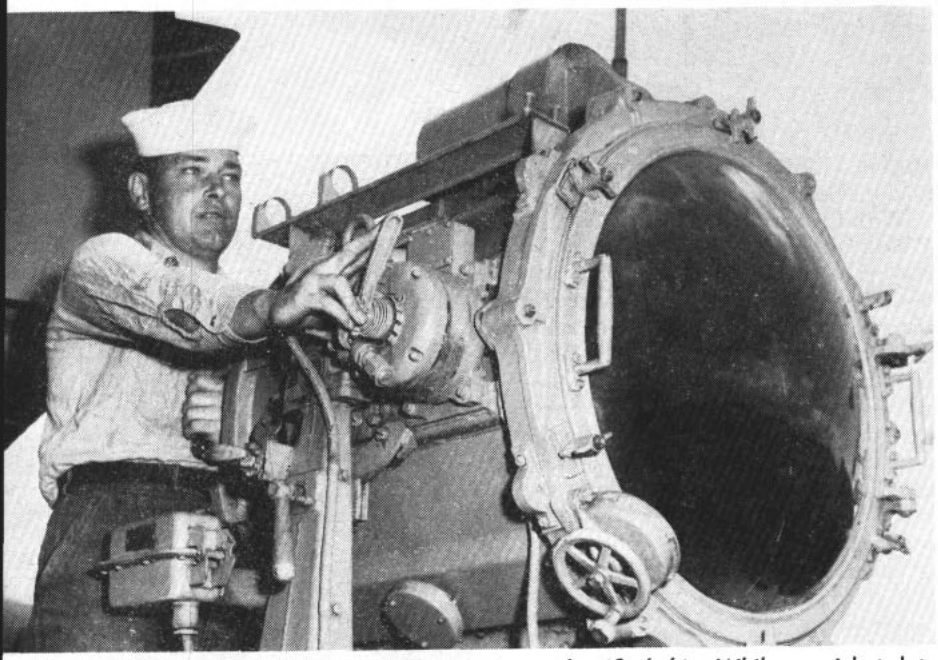
It was *Joyce* who served as a rescue ship when USS *Leopold* (DE 319) was torpedoed and sunk in 1944. Twice, while dead in the water picking up the 28 survivors, *Joyce* had to get underway to dodge torpedoes fired at her. It was on her next crossing that *Joyce* became something of a floating hotel as she

RADARMAN plots bogey in CIC and (*below*) DER's course is plotted while USS *Harveson* cruises on station.



DURING CONVERSION from destroyer escorts, DERs received the maximum in modern living at sea. Here, Navymen get ready to enjoy TV in lounge.





SIGNAL SEARCH LIGHT challenges an unidentified ship. While on picket duty DER men keep watchful eye on surface of sea as well as over and under it.

picked up 31 survivors of ss *Pan Pennsylvania,* one of the world's largest tankers, after that ship had been torpedoed and set aflame. And it was *Joyce* that located the sub by sonar and brought it to the surface by a pattern of depth charges. With the aid of uss *Peterson* (DE 152) and *Gandy* (DE 764), she forced the enemy crew to abandon and scuttle the sub. Twelve of the German crew, including the U-boat's captain, were picked up by *Joyce.*

With their WW II jobs completed, these escorts were placed in mothballs. They remained in the Reserve Fleet until 1950 when the challenge of air defense required these proud little ships to serve again.

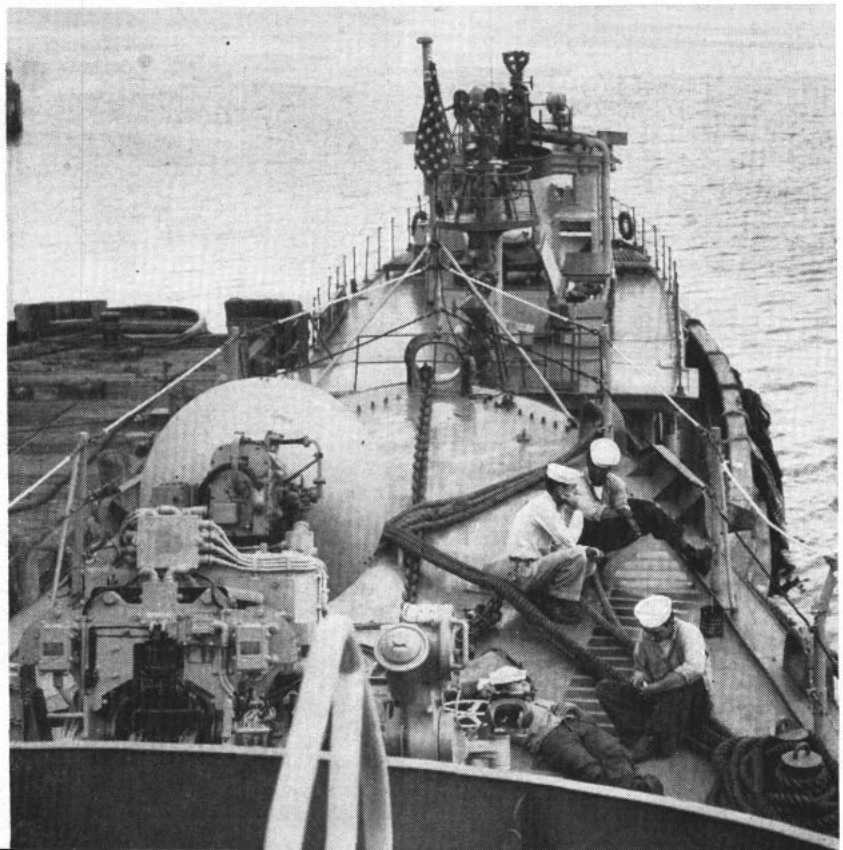
From their peaceful nesting places, the DEs were towed to shipyards where they underwent extensive modification and emerged as floating radar sets. While undergoing conversion, the ships' nerve centers—combat information centers—were enlarged to handle the added information to be fed by the new air search, height-finder and surface-search radar.

In addition to the electronic detection devices, more communications equipment had to be installed to handle voice radio and ship-to-shore communications between the shore-based aircraft control warning stations.

Much of this gear was put into what earlier were messing and berthing spaces. This meant, in turn, that the center portion of the main deck had to be enclosed and a superstructure added to provide more and spacious living quarters for the 150 enlisted men and 19 officers.

These modifications added more than 400 tons to the escorts' displacement, bringing their weight close to that of a destroyer. Prefabricated aluminum was used in all alterations in an effort to keep the added top-weight to a minimum. Even the tripod mast for the radar antennas and the huge deckhouses were constructed of aluminum. More than 60 tons of pig iron was placed in the bilges and voids to act as ballast and offset the added topside weight.

ILLUSION—Bow of *Harveson* is not as long as it seems at first glance. She is moored close to tug while in port for supplies and a breather from patrol duty.



Besides the enlarged CIC and installation of electronic and communications equipment, many improvements were made in the habitability of the ships. Even by using soft, multi-colored paints in compartments, laying carpets from bulkhead to bulkhead, adding fluorescent lighting, air conditioning and individual bunk lights, it did not bring living conditions aboard the DERs up to par with other types of ships that have recently been converted. This is because of the original purpose for which they were built and, owing to their added versatility, almost every inch of their 306-foot hulls is utilized.

Even without too many plush accommodations, the majority of DER crew members, like most destroyermen, take considerable pride in their duty and consider it the most desirable and satisfying part of their naval careers.

DERs are small but heavy. They are rough-riding and far from comfortable. Usually the risks are great as these ships always remain on station regardless of weather conditions. Work aboard the DERs is

harder than in most ships, yet the attraction of duty aboard them defies analysis.

The radar picket sailor or destroyerman is summed up thoroughly in a *DesLant Information Bulletin* which says, "You can recognize a destroyerman by his attitude, his training, his appearance, his spirit of service and devotion to duty. You can take a man out of destroyers but you can never take the spirit, the enthusiasm, the seamanship skills, and general all around 'know how' developed in destroyers out of the man."

Without a doubt, duty on board DERs, like most types of destroyers, separates the blue-water sailor from the shore-duty hound. The reaction of men serving in *Harveson,* first of the DERs, is typical.

"I thought I'd been around quite a bit and could take almost anything any ship could dish out," QM3 Trotter said. "I had never been seasick in my life, and thought it was a bunch of imagination or malingering. The first time I went out in *Harveson,* I learned better. I was really surprised when I found myself heading for the rail. Only thing that was really hurt was my feelings."

Harveson and other DERs are on station continuously in all types of weather. They steam within prescribed areas on varying courses and speeds depending on prevailing wind and sea conditions. Each ship mans a designated station for eight days before being relieved. In the event of a breakdown while on station, another ship from the squadron takes its place on short notice.

Although assigned to the Atlantic Fleet Destroyer Force, the DERs while on station are under the operational control of the Commander Naval Forces, Continental Air Defense Command.

The surveillance and reporting procedures of the radar pickets are similar to the operation of Air Force Aircraft Control and Warning (AC&W) stations. If a contact is made by the DERs, word is immediately flashed to the nearest shore-based AC&W station.

Once contact is made by the DERs, all aircraft—whether U. S. or foreign, commercial or military—must identify themselves by prearranged plans. If such planes fail to make themselves known, the DERs immediately notify the AC&W, which in turn send all-weather jet fighter planes scrambling to intercept the unidentified contact.

COOL JOB—Crew member of *USS Pillsbury* (DER 133) starts to clear ice after storm at sea. Below: DERs also help Navy check on far-out weather conditions.

To date, no hostile planes have been intercepted nor have the fighter pilots had to launch any rockets or do any shooting.

The DERs are capable of controlling—and frequently do control—interceptor planes sent out to investigate unidentified contacts made when on station.

It's the rigid schedule that the DERs must maintain, regardless of weather, that makes duty aboard them "rough." They spend many days en route to designated stations and then eight days on station, before starting the long haul back to port.

The DERs remain in port for at least six days before departing for station again. However, as "rough" as the duty may be, crew members swear by it. "Even with duty being harder than most DEs and DDs, I'm still satisfied with it," Halbrook said. "These DERs offer electronics technicians better training than most

USS FESSENDEN (DER 142) cruises Atlantic with her radar antennas alert. Below: keeping close guard below surface too, watch checks unidentified sub.

ships. ETs don't stand watches while at sea, but we're responsible for the continuous operation of the radar. When a piece of gear breaks down, we have to stay with it until it's repaired.

"Duty is tougher in the winter," ET3 Halbrook continued, "but ice doesn't bother reception. Sometimes an antenna freezes up and then it won't rotate. Believe me, it's a feat on a dark night, in the freezing cold, trying to break one loose while clinging to a wildly pitching ice-coated mast."

To ward off the problem of boredom while the DERs are on station, an off-duty recreation program has been organized for the crew. Weather permitting, they have plenty of swim calls, do some fishing and have movies almost every night. If they don't have movies nightly, they always come up with Bingo or some other kind of group entertainment.

In the past two years, while operating out of Newport, ships of CortRon 16 steamed about a quarter of a million miles while en route to and from, and while on North Atlantic stations.

Not only can the ocean radar pickets find and fix the position of approaching aircraft, but under favorable circumstances, they are also capable of destroying them. They are equipped with three-inch rapid-fire antiaircraft and 20mm machine guns.

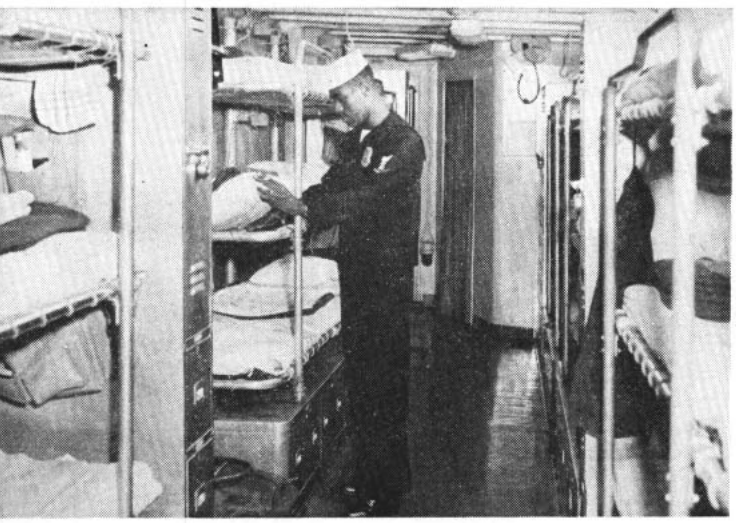
Originally built for convoy and escort work, the DERs still maintain their World War II anti-submarine punch. While on station they also conduct continuous submarine surveillance.

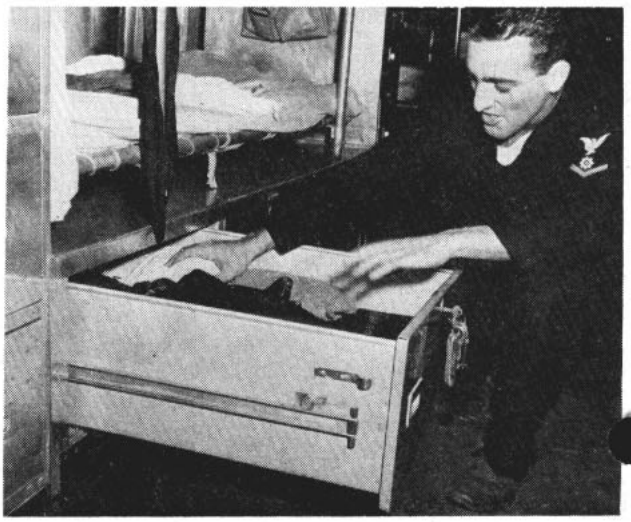
As a result, they can give advance warning of or even destroy an enemy submarine attempting to approach our shores to land advance reconnaissance parties, launch missiles or torpedo ships or lay mines in our harbors or shipping lanes.

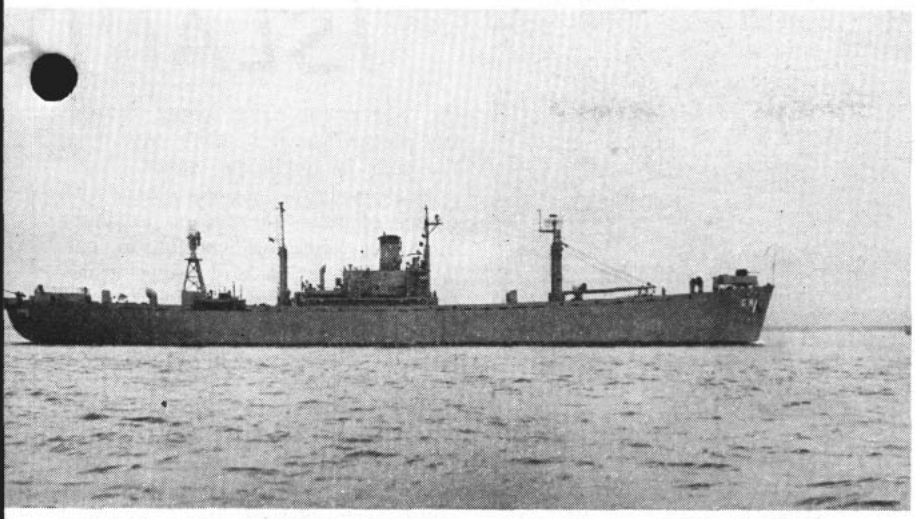
Aerial screening and submarine detection are just a part of the many tasks the versatile DERs perform. They also give periodic reports on weather conditions at sea, act as rescue vessels by going to the assistance of small craft and merchant ships in distress, or act as control ships for planes or other vessels engaged in search and rescue missions.

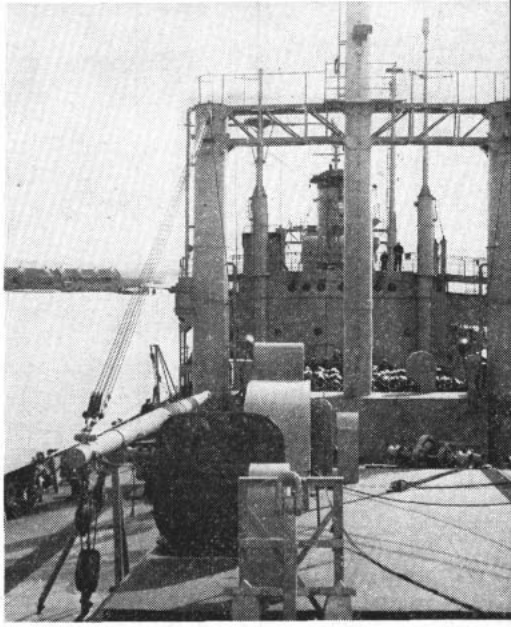
Their ability to move from place to place, to operate in all weather, and perform many duties makes the radar picket escort vessel invaluable, as well as a hard-to-destroy unit of our naval air defense forces.

BERTHING SPACE on DER is large, considering size of ship and its extra equipment. New style lockers keep gear.









ON THE ALERT—USS *Picket* (YAGR 7) and USS *Interceptor* (YAGR 8), shown at commissioning, are part of picket team.

YAGRs Stand Ocean Sentry Duty

PERHAPS THE MOST UNUSUAL of the recent additions to today's "Navy of Tomorrow" are the YAGRs—Ocean Radar Station Ships.

They are the clumsy, awkward—but vital—ex-Liberty ships of World War II which underwent conversion and provided an economical answer to an urgent need—a mobile means of extending our Continental Air Defense System seaward.

Last year, when the Navy was required to bolster its contributions to CONAD, the mass-produced merchantmen were taken out of mothballs and converted for off-shore screening and advance warning duties.

The first of these were USS *Guardian* (YAGR 1), *Lookout* (YAGR 2), *Skywatcher* (YAGR 3) and *Searcher* (YAGR 4), which now comprise YAGR Squadron 21, based at Newport, R. I.

At present there are eight YAGRs in service. The latest are: USS *Scanner* (YAGR 5), *Locator* (YAGR 6), *Picket* (YAGR 7) and *Intercept* (YAGR 8) operating out of San Francisco.

Like the DERs, the YAGRs while on station, are under the operational control of the Commander Naval Forces, Continental Air Defense Command. When not on station the YAGRs are under the administrative command of either the Eastern or Western Sea Frontier Commander. (The DERs are under ComCruDesPac or ComDesLant while not on station.)

Although having the same basic mission, the YAGRs differ considerably from the DERs. During conversion, the Liberty ships were converted solely for radar picket duties and are no longer capable of being utilized as merchantmen.

"Conversion," in the case of the DERs, meant primarily the addition of communications and electronics detection devices, enlarging the Combat Information Centers and redesigning compartments necessary for the job of extending the nation's early warning system beyond the reaches of shore-based radar. With these modifications and added equipment the DERs took on a new role, but did not lose their capabilities of performing the diversified duties for which they were originally built.

The WW II Liberty ships were selected for conversion to ocean radar station ships because there was no immediate need for their use as cargo carriers. Their wide and deep 10,000-ton-capacity cargo holds were ideal for installing large amounts of electronics detection equipment and building spacious living compartments.

During conversion, former storage spaces became enlarged CICs, air and surface radar masts replaced cargo booms, overhead lighting gave way to indirect fluorescent fixtures, air conditioning and additional communications equipment were added.

Habitability was the keynote of the conversion of the ex-merchantmen in order to give officers and crews of the YAGRs modern living conditions and features of shore-based facilities during long periods of patrolling on lonely stations.

Messing compartments, with four-man tables and colorful inlaid linoleum, have taken on the appearance of modern restaurants. Officers and CPOs have individual staterooms, while PO1s share four-man compartments. Other crew members have double-deck "chief-type" aluminum bunks, individual bunk lights and roomy lockers.

Two former cargo holds are now utilized for handball, archery, volley ball, table tennis, weightlifting and even a golf driving range. Hobby shops include woodworking equipment and a photographic darkroom.

The ocean radar station ships even have permanent motion picture theaters which are also used for divine services and assembly halls.

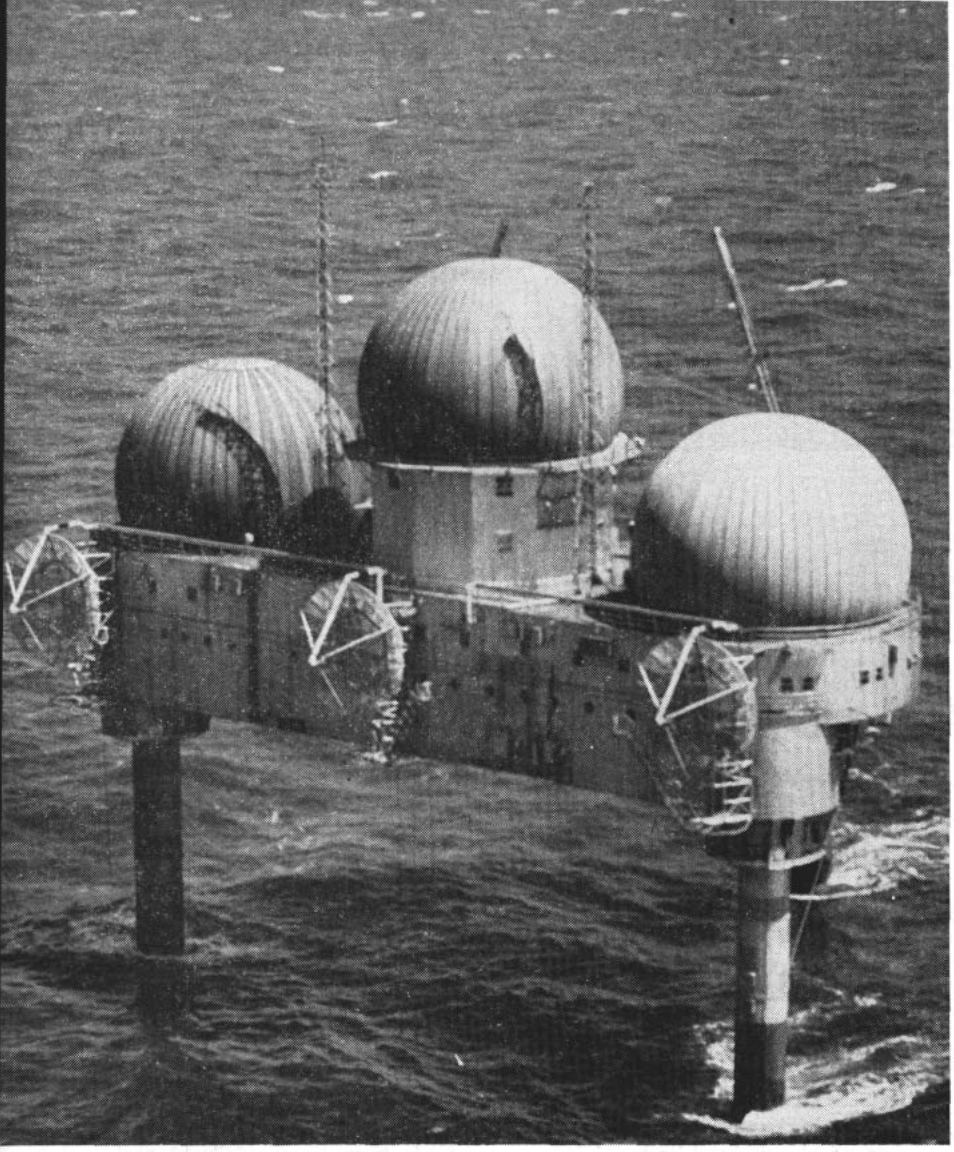
To insure greater stability and to help keep sensitive electronics equipment on an even keel, 6000 gallons of water have been sealed in the double bottoms.

With the new distilling systems now in use, the inconvenient rationing of water—common to most ships at sea—is unheard of aboard the YAGRs. Their enlarged distilling systems are adequate to assure enough fresh water so that usual conservation steps are not required.

The YAGR men like their duty. The crews of ocean radar station ships boast that, while performing tough and vital sentry duty on the high seas, they have the best living and recreational facilities in the Fleet.

—H. George Baker, JO1, USN.

ISLAND



ALONE IN THE WIDE sea off Georges Bank the first Texas Tower constructed under Navy supervision stands guard. Ball-like domes house radar antennas.

HUGE, TARANTULA-LIKE platforms far out in the Atlantic Ocean will soon join the vast early-warning radar net that is protecting this country against possible sneak attack.

The first of these platforms, called Texas Towers, was put into operation last year. This monstrous man-made island stands on three legs, or stilts, sunk deep into the Continental Shelf some 150 miles southeast of Boston.

The radar platforms represent a joint effort by the different branches of the service and civilian engineering firms. The platforms were designed and constructed under the direction of the Navy's Bureau of Yards and Docks. Air Force personnel will man the towers and provide helicopter service while MSTS will provide the surface transportation to and from the towers. The first of these radar islands is called "U.S. Air Force Station, Georges Bank, Texas Tower No. 2."

In addition to the towers in the Atlantic, plans are currently underway to construct another type of offshore island for use by the Navy. These platforms, to be constructed in the Gulf of Mexico, differ from the Texas Tower platforms in design, size and purpose. The Navy's offshore islands will house personnel who will study temperature and pressure variations in the sea, salinity factors, thermal gradients and periods and length of ocean waves.

The larger of the two types will be erected in 100 feet of water approximatxely 12 miles off the coast, with the platform 40 feet above the waterline. The smaller type will be located in 60 feet of water about two-and-one-half miles off the coast, also with a platform 40 feet above the water line. The lower deck of the platform will in each case clear the crest of hurricane waves.

Both types will be equipped with diesel electric generators, auxiliary machinery, heating, ventilation, galleys, refrigeration and crews' quarters. Helicopter landing decks, radar and communication facilities will also be provided. The larger platform will have sleeping accommodations for 30 persons while the smaller one will accommodate four.

The Bureau of Yards and Docks has already let the contract for the construction of these two Gulf Coast platforms for the Navy. Of more immediate interest to the Navyman are the Texas Towers now under actual construction and their installation in the Atlantic Ocean.

The Texas Tower southeast of Boston, first of these offshore radar stations, will become part of this nation's Continental Air Defense Command. A string of platforms will be built on the Continental Shelf between Virginia and Newfoundland and will close an important gap in the nation's radar defenses.

The towers, which have an area of some 20,000 square feet, are an adaptation of the so-called Texas towers on which numerous successful oil well rigs have been built in the Gulf of Mexico.

The typical tower platform is a 6000-ton triangular structure, approximately 200 feet long on each side, with a height of 20 feet, allowing for two decks. The upper deck is for living quarters, galley, mess hall and recreational facilities. The lower deck is for power plant, boiler rooms, fuel and water tanks and storage space.

Covering a part of the main deck is a deck house 60 feet wide and 200 feet long containing offices and operational facilities. Also rising from the roof of this deck house are two radio antenna masts and three ball-shaped radar domes about the size of a two-story greenhouse with planetarium-like roofs. Under these domes are the radar detection antennas. Two 80-foot boom derricks are located on the main deck.

The part of the main deck outside the deck house is kept clear of obstructions and is used as a helport. Under the platform there is a revolving bridge to allow access to

BUILDERS

all underside facilities as well as to each of the three supporting caissons.

Each radar tower will be self-sustaining, generating its own electric power and supporting a crew of 50 to 70 men.

After all the work that could be done at the shipyard was completed, the tower was made watertight and towed to its permanent location. With its 12 temporary tubular caissons and the three permanent caissons riding high in the air, the platform resembled a floating factory.

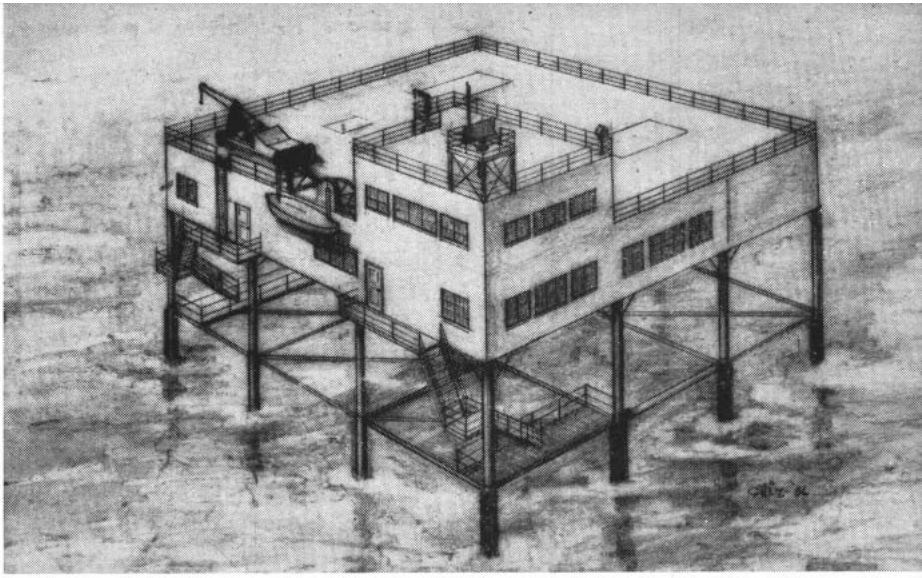
Once at the site, the temporary caissons were dropped to the ocean floor through the open wells of temporary brackets on the platform. Then a complicated pneumatic system took over to raise the platform high above the level of the water.

The raising process is much like that of a boy "shinnying" up a tree. A rig attached to each of the caissons contains a set of two rubber tubes, similar to gigantic automobile tire inner tubes. The tubes perform the role of the arms and legs in shinnying up the caisson.

One tube is deflated while the other is inflated so that it tightly grasps the caisson. The pneumatic system jacks the tube a fraction of an inch, pushing down on the caisson and lifting the platform. The deflated tube is then inflated to lock the platform in place, and the cycle is repeated.

The raising process is so accurate that movement of the platform can be controlled to one thirty-second of an inch.

The platform is supported at the beginning by the 12 temporary caissons, each six feet in diameter. Once the three permanent caissons, each 10 feet in diameter, are imbedded 48 feet into the ocean floor and the platform welded on, the temporary caissons are removed. The first of the Texas Tower platforms stands 81 feet above the level of the water.



NAVY'S OCEAN TOWERS shown in artist's sketch will be used for environmental studies. These stations will be located off Florida in Gulf of Mexico.

At present, the U.S. Navy and Air Force keep a radar eye out on the Atlantic with picket ships and complex radar aboard huge air transports. Although the towers will not replace the aircraft and surface ships for long-range radar work, they should replace the expensive airborne operations nearer the East Coast.

There are no usable offshore shoals on the West Coast and therefore no offshore radar platform construction is planned.

The Atlantic towers are a part of a gigantic warning radar web, including hundreds of ground warning stations, run by the Continental Air Defense Command. There are two general types of ground warning stations—semi-fixed and small automatic. While the semi-fixed stations take up 40 acres, the small automatic stations require only half an acre. The automatic stations pass on to the larger stations what radar observations they pick up.

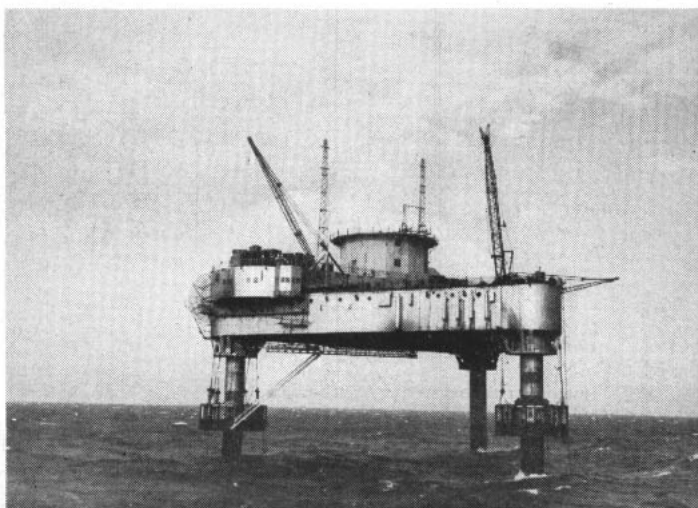
These stations, as well as the Texas Towers, will relay information concerning the direction, speed and altitude of approaching aircraft to the Air Defense Command for interception action.

In addition, these stations will pass on their information to Nike units throughout the country and will also keep them informed as to the location of friendly interceptors.

Built under BuDocks' supervision, these offshore platforms, which would have been considered absurdly fantastic a few decades ago, present another victory by man over the untiring sea. It is believed that the Texas Towers are the largest structures ever built so high above the sea, so far from land, and under such hazardous conditions.

—Rudy C. Garcia, JOC, USN.

PLATFORM is made ready to inch up temporary caissons. *Right:* Nearly completed, it rests on permanent legs.



The Story of Radar – And How It

FROM THE jet age juvenile to the man in the moon, everybody's heard of radar.

Most Navymen think of it as strictly a World War II invention, but actually the reflection of radio waves from solid objects, which is the basic principle behind radar, was proven as far back as 1886 by Heinrich Hertz, the discoverer of radio waves. In 1904 a German engineer was even granted patents in several countries on a proposed way to use this principle aboard ship as a navigational aid and obstacle detector.

Since then this wonder-working electronic eye has come a long, long way. In fact, its waves have been bounced off the moon. And they can also be bounced off fast-moving automobiles—that's how the traffic-ticket-by-radar was born.

The Navy doesn't have much to do with highway radar, but it can point with considerable pride to the important part it has played in radar's development. Three Navy scientists, Dr. Albert Hoyt Taylor and Mr. Leo C. Young, of the Naval Aircraft Radio Laboratory, and Dr. R. M. Page, of the Naval Research Laboratory, were among the foremost early pioneers of radar as we know it today.

In 1922, while testing plane-to-ground communications in the short-wave bands at Hains Point, Washington, D. C., Taylor and Young noticed that ships moving in the Potomac River distorted the pattern of radio waves, causing a "phase shift" or fluctuating signal. Until then it had not been known that radio waves could be reflected from small, moving objects, as well as from mountains and other large masses. Dr. Page was one of the leading figures in the research which followed this discovery, and many of the early radar patent applications were filed in his name.

By 1932 the Navy scientists were able to detect planes 50 miles from their transmitter, and by March of the following year NRL had made enough progress to outline in detail the theoretical military applications of radar. Congress helped keep the ball rolling in 1935, when the Lab got an appropriation of $100,000 specifically for radio detection work. (The name, radar, comes from RAdio Detection And Ranging.)

In June 1936 ADM Harold G. Bowen, USN, then Chief of the Bureau of Engineering, directed that plans be made for the installation of a complete set of radar equipment aboard ship. As a result, the old four-stacker, USS *Leary* (DD 158), had the distinction of carrying the first seagoing radar, which was tested successfully in 1937. On 17 February of the same year the then

oined the U.S. Navy

Assistant Secretary of the Navy, Charles Edison, and Fleet Admiral William D. Leahy, USN, then Chief of Naval Operations, witnessed a demonstration of aircraft detection by the first radar set developed in the United States.

A more practical set was installed in USS *New York* (BB 34) in 1938. Its success on maneuvers in early '39 proved radar was here to stay, and orders were put out for commercial production. By the time America entered World War II much of the Fleet had been equipped with this invaluable gear.

Meanwhile, scientists of other countries had also been working on radar of one type or another. In 1940, at a conference between British scientists and representatives of the Navy Department and Naval Research Lab, members of the British mission disclosed that their development of radar had stemmed from articles on the work Taylor and Young had done between 1926 and 1930.

During the war radar made tremendous progress behind its curtain of super-secrecy. In 1940-41 it helped win the Battle of Britain by enabling the RAF to intercept German bombers no matter when they made their attacks or where they crossed the English Channel. In 1942 it enabled the defenders of Midway to turn back the Japanese fleet.

In 1943 it guided a Navy plane to the first successful ground-controlled interception of an enemy aircraft in the Pacific theater.

Besides spotting enemy ships and planes, it was found that radar could be used in navigation, fire control, bombing, Ground Controlled Approach, meteorology and countless other operations.

The Office of War Information summed up the importance of radar when it said (before the atomic bomb was dropped):

"Radar has, more than any single development since the airplane, changed the face of warfare; for one of the greatest weapons in any war is surprise, and surprise is usually achieved by concealment in the last minutes or hours before an attack. The concealment formerly afforded by darkness or fog or cloud or artificial smoke or the glare of the sun simply does not exist in the world of radar."

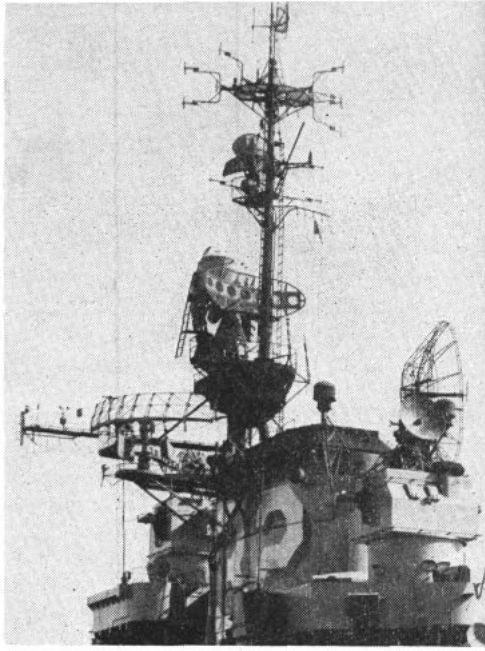
Few people realize that during the war more money was spent on radar research than on the development of the A-bomb—three billion dollars on radar and two billion on atomic energy. Since the war, radar's versatility has proved it was well worth the cost.

The principle of radar is the same as that of an echo, except that instead of sound, radar works with radio waves. For many years echoes were used to estimate such things as the distance across a canyon or the range of an iceberg from a ship.

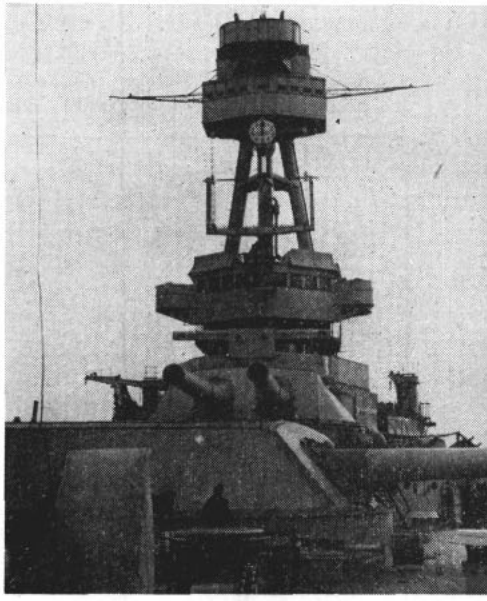
How? Well, let's say your ship is near an iceberg. When a blast is sounded on the whistle you time the interval between the blast and the return of the echo from the 'berg. Suppose it takes six seconds for the sound waves to make the round trip from ship to 'berg to ship. Since sound waves travel 1100 feet a second, the sound has gone 6600 feet in those six seconds. Divide the 6600 in half and you come up with the distance to the iceberg—3300 feet.

Of course, radio waves, moving at the speed of light (186,000 miles a second), travel much faster. But the principle is still the same—the measurement of distance by the time it takes for reflected waves to return to their source.

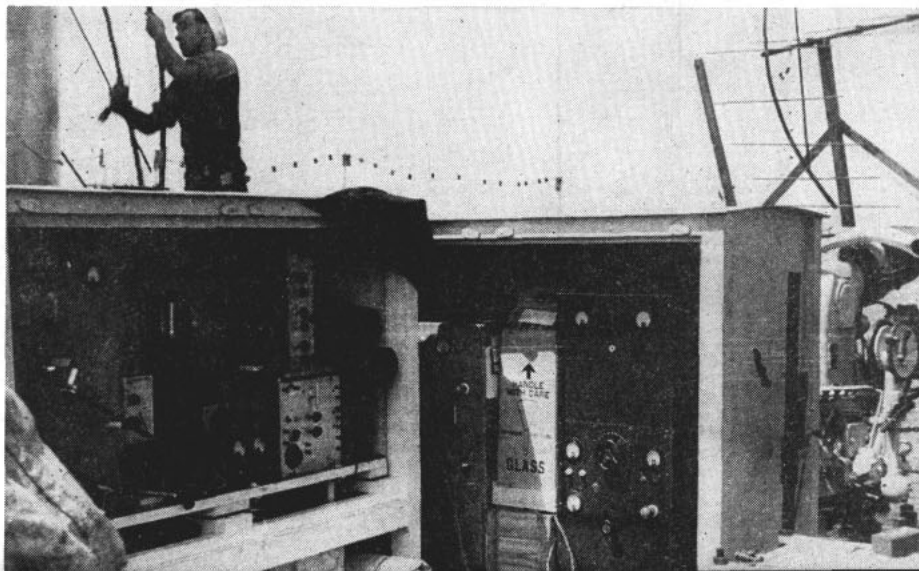
Basically, a radar set consists of three essential parts; a transmitter

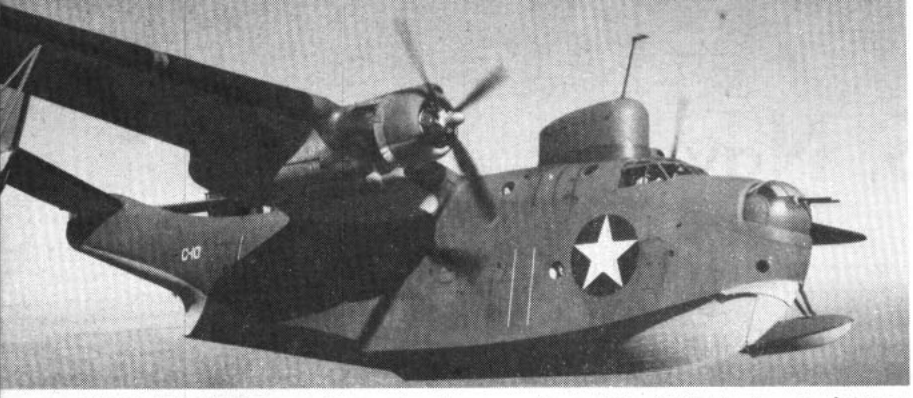


ANTENNA-STUDDED superstructure compared with early models (below) illustrates how radar had advanced.



EARLY BIRDS—*USS New York* (BB 34) tested radar in 1939 (note rectangular antenna between bridge and foretop). *Below:* First radar as it was on *Leary*.





WORLD WAR II brought great advances. Planes like PBM *Mariner* took Navy radar into the air during the war to search out and destroy the enemy.

to send out pulses of high-frequency energy, a receiver to detect the minute portion of energy which is reflected and a device to measure the time interval between pulse and echo and portray this information to the operator.

The radar pulse begins in an oscillator, which produces extremely high frequency radio waves, ranging from less than one million to 10,000 million cycles per second. These microwaves are conducted to the antenna by coaxial cables or hollow, metal pipes called wave guides. On their way to the antenna the waves pass through a device called the duplexer, which automatically switches the antenna from the transmitter to the receiver during the time radar echoes are returning. Thus, the same line and antenna can be used for either sending or receiving.

Since microwaves behave in the same way as light waves, a radar antenna (especially the parabolic one used in fire control) is a lot like the headlight of a car. As the light waves from the headlight are concentrated in a beam by the reflector, so the radar waves are concentrated into a beam or "lobe" by the antenna.

If you'll look around your ship, you'll notice antennas shaped like dishes, bedsprings and barrel-staves. Each of these shapes produces a lobe pattern for a particular job. The size of the antennas varies according to frequency. Low frequency radar uses a large antenna and high frequencies require small antennas.

The "dish" or parabolic antenna is used with high frequency fire control radars because it creates a sharp, narrow beam for pinpointing targets. The "barrel-stave," which is actually a dish antenna with the top and bottom pieces cut off, focuses the waves in a beam shaped like a vertical fan. This type is most commonly associated with surface search radars. The "bedspring" antenna, used with low frequency radars, produces a broader fan which is the most effective shape for the detection of planes at long range.

A radar pulse lasts for only a very few microseconds, after which the

RDs Have a Pip of a Job Operating Navy's Electronic Eyes

RADAR PLAYS an important part in the duties of many ratings in this electronic, nucleonic Navy, but the rating generally thought of first in connection with it is, of course, radarman.

At sea, the RD works in the Combat Information Center, where reports from lookouts, sonar, radio, radar, visual signals and intelligence are sifted, evaluated and combined to give the entire ship an up-to-the-minute picture of everything going on in the surrounding area. No matter how skilled the CIC officer may be, his evaluation depends in large part on the radarman's speedy and accurate interpretation of what he sees on the scopes. An RD's mistake in the judgment of the size, number, movement and location of contacts could mean the loss of his ship.

HUNTING—Radarmen practice searching for pips. Analysis and location of contacts by RDs may some day determine the safety of their ship.

The RD's job calls for a lot more than looking for pips, reading ranges and bearings and keeping his set in good working order. Besides knowing how to operate his own set he also has to know how to foul up the enemy's radar through electronic countermeasures and how to overcome enemy attemps to do the same to him.

Since peering into a scope is a tedious, eye-straining job, radarmen usually work in pairs, with the "onseat" operator being relieved by his partner every half hour. When not "onseat" the RD still has plenty to do. Logs and status boards have to be kept on information coming into the CIC. Navigational data and the location and movement of friendly and enemy ships and planes have to be mapped out on various plotting and maneuvering boards to keep CIC displays current. When not occupied at one of these tasks the RD may be found manning the sound-powered phones, the squawk box, voice tubes or ship's service phones to

transmitter "rests" for several thousand of these infinitesimal measurements of time. This is to keep the next outgoing pulse from drowning out any returning echoes while the receiver is listening for them. It also prevents the transmitter from going up in smoke, since the set would soon burn itself out if it were sending constantly with all its tremendous power.

When the radar waves hit a target they bounce back to the antenna and are "piped" to the receiver. The receiver amplifies the echo and causes it to show up on the radar scope as a "pip." The scope is actually the face of a cathode ray tube, similar to the picture tube in a television set.

Aboard ship the most common scopes are the PPI, RHI and precision scopes. The PPI (Plan Position Indicator) shows a map of the area around the ship, putting into proper relative position all the targets the radar "sees." On it a line of light called the "sweep" swings around the screen like the second hand on a clock, pointing in the same direction as the antenna. The pivot point of the sweep, in the center of the screen, is the ship's location. A pip appears as a spot of light, "painted" in the fluorescent chemical of the screen.

Each time the sweep hits it again the spot becomes a little brighter, until it continues to glow for several seconds after the sweep has passed. Ranges and bearings to the contacts can be determined by the operation of various controls.

The RHI (Range Height Indicator) presents a picture of a vertical cross section of space. The location of a plane in this cross-section graphically portrays its altitude and distance from the ship.

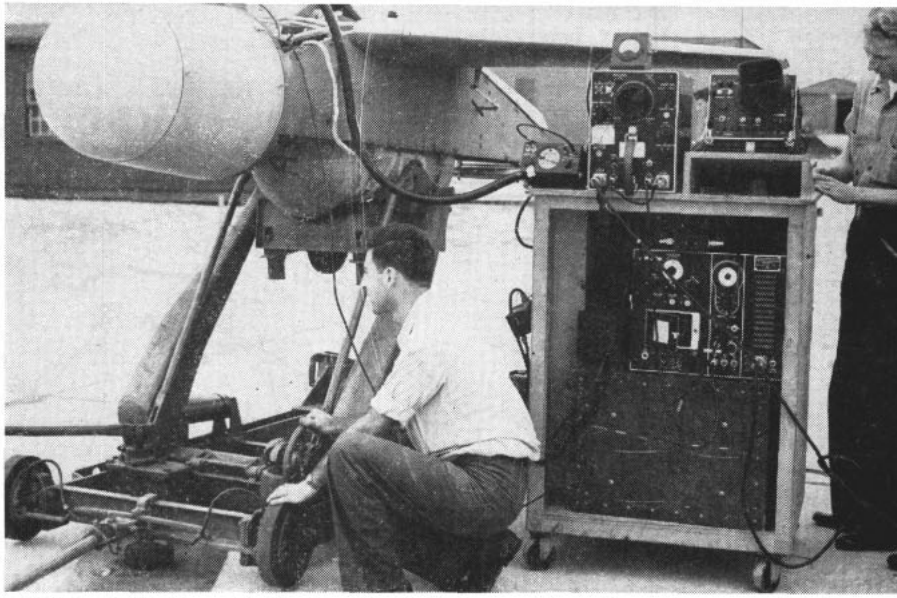
The various indicators used in fire control gear usually show the operator a pip in relation to a set of cross hairs. By training his equipment so that the cross hairs fall on the pip he points his director at the target.

Since the echoes picked up on radar scopes are called pips, the art of interpreting them is known, appropriately enough, as pipology. Once he has mastered this complicated, "seat-of-the-pants" art, the experienced radar operator can correctly identify the number and type of targets in a great many cases.

He can also tell whether the contact is on his side or the enemy's, through IFF (Identification Friend or Foe). This system consists of two units, the challenger hooked up to your ship's long-range air search gear, and the transpondor, carried by friendly ships and aircraft. In effect, the challenger electronically asks, "Who goes there?" and the transpondor answers by returning an echo which shows up as an identifying pattern on the PPI.

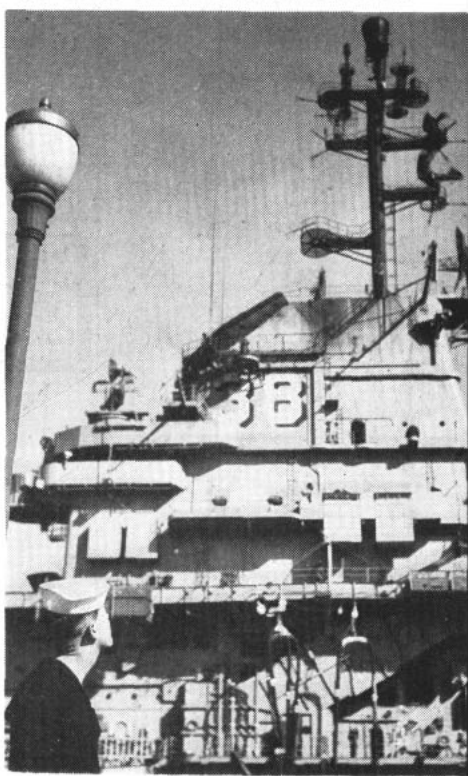
It's appropriate that radar should ask such a question, for this electronic wonder-worker is like a sentry, "walking" its post night or day, fair weather or foul, peace or war, to protect you, your ship and your country.

—Gerald Wolff.



RADAR OPENED up field of guided-missile warfare. Here Navymen check WW II Bat, first fully automatic guided missile, which was radar-guided.

SPECIALIZED RADAR antennas used on today's ships form weird pattern high above *USS Shangri La* (CVA 38).



Here's How You Qualify

relay to the rest of the ship the latest CIC information.

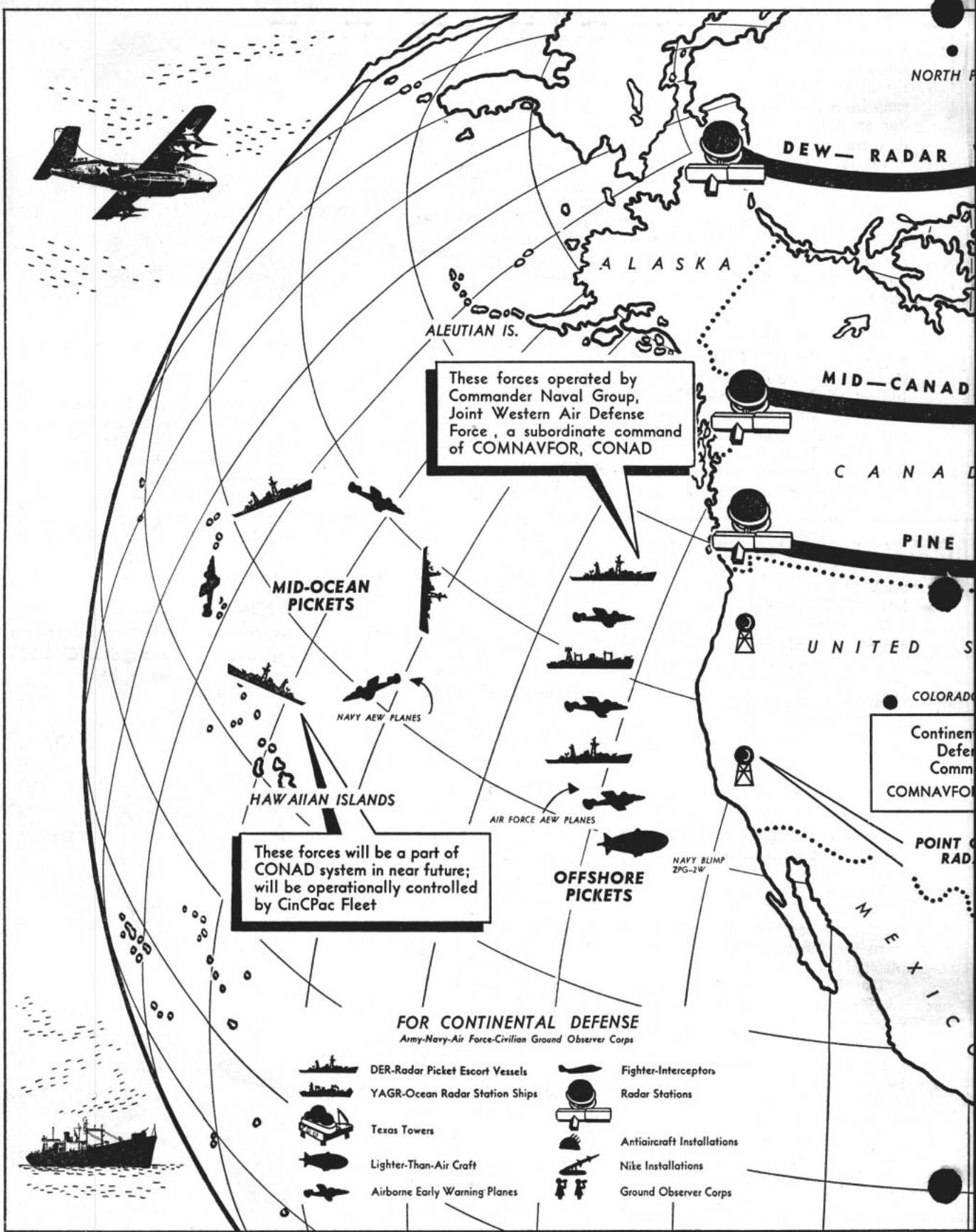
To qualify for the rating an aspiring RD should have average or above average general learning ability and should be able to use numbers in practical problems. He must also have good near vision, normal hearing and a clear speaking voice. A background in physics, mathematics, radio and electricity won't hurt him a bit either. He may get his training in radar through on-the-job experience, training course manuals or service schools.

There are two Class A schools, one Class B school and a number of special courses in which radarmen learn the intricacies of their complicated jobs.

The Class A schools convene every two weeks and the Class B school, every four. For details see NavPers 91769-B.

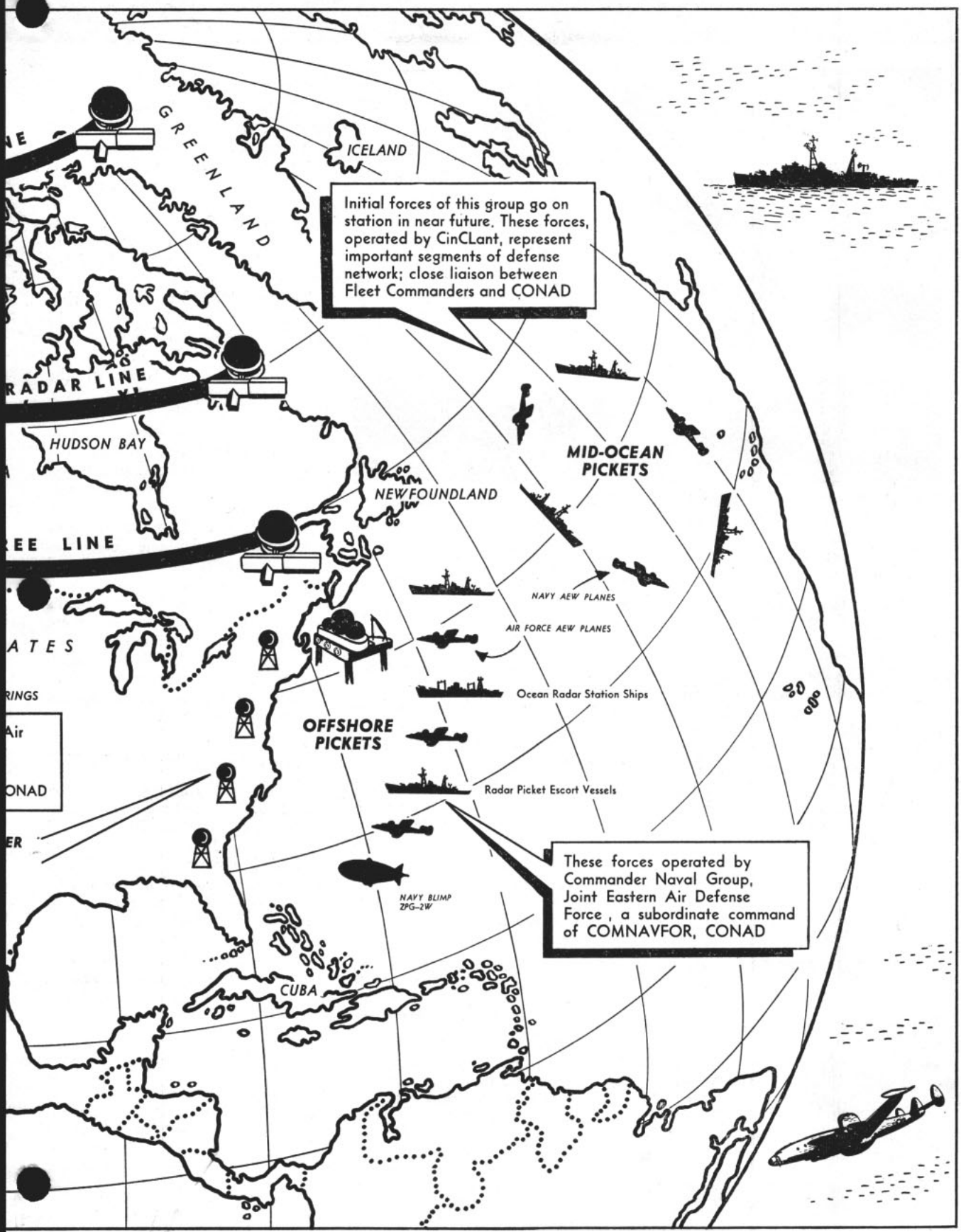
In a way, the radarman is a modern descendant of the lookouts who manned the crow's nests in ships of long ago. For, although RD didn't join the Navy rating structure until 1942, his job of scanning sea and sky has been part of the Navy from its beginning.

EYES AND EARS ON DUTY

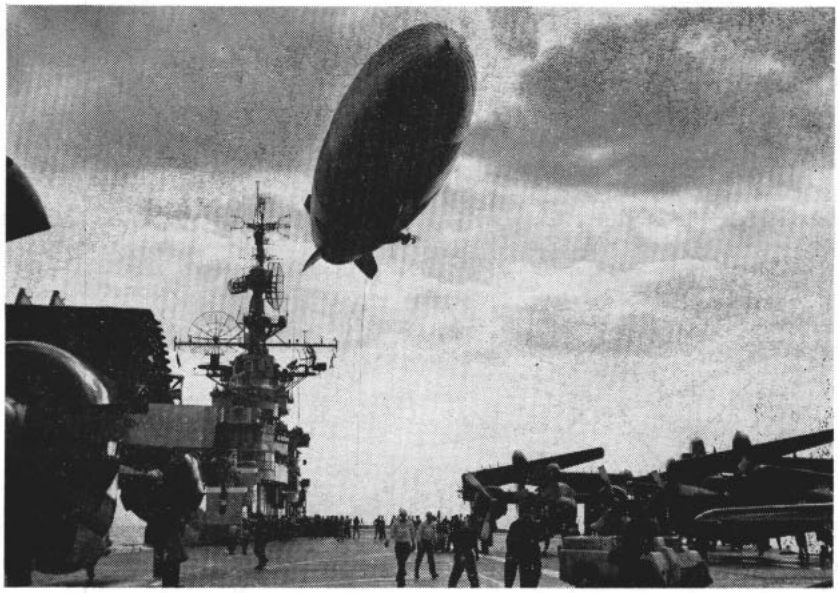


Prepared by ALL HANDS Magazine

DEFENSE OF A CONTINENT



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



FILL 'ER UP — in the air. *USS Leyte* (CVS 32) pumps gas up 300 feet to airship while maintaining 22 knots during LantFlt amphibious exercises.

Safety Award for NATC

The Navy's highest award for aviation safety in 1955 has been made to the Naval Air Training Command.

Flying nearly 2,000,000 hours during 1955, the Training Command lowered its aircraft accident rate by 27 per cent over the earlier record set in 1954.

Each of the major segments of the Training Command—Basic, Advanced, Reserve, and Technical Training has brought its aviation accident rate well below the goal which had been set for the Navy as a whole. In making the award, Admiral Arleigh A. Burke, CNO, noted that the improved safety record had been established at a time when a sizable portion of the flight training was being shifted from propeller-driven planes to jets.

In recent years the cost of airplanes has risen very sharply. During World War II the Navy's first-line fighter aircraft cost $75,000 to $100,000 apiece. The cost of today's first-line fighter and attack planes averages well over half a million dollars. Likewise the cost of training a naval aviator has risen sharply. The Navy's latest figure on the cost of the 18-month program which leads to designation as a naval aviator is $89,500 per student.

During 1955 the Naval Air Training Command averaged less than three accidents of all types per 10,000 aircraft flight hours. Fatal accidents were less than one for every 32,000 hours of flight training.

In September 1865, the Naval Academy, temporarily located at Newport, R. I., during the Civil War, was moved back to Anapolis, Md. On 3 Sep 1783 Great Britain, in the treaty following the Revolutionary War, acknowledged America's independence. On 11 Sep 1814 the Navy's victory in the Battle of Lake Champlain saved the United States from invasion. On 12 Sep 1942 Brazil placed her navy under the U. S. Navy's operational control. On 15 Sep 1950 the Navy landed the 1st Marine Division, U. S. 10th Corps, at Inchon in successful amphibious assault.

—USN

Last Signal for NAA

"Radio Arlington," once the most powerful radio station in the world and the first modern high-power radio station in history, has sent its last signal. The famed station, using the call-letters NAA and known to sailors as U. S. Naval Radio Station Arlington, has been disestablished after 43 years of global service.

The world's first shore-to-ship radio conversation originated in 1915 via "Radio Arlington" when Secretary of the Navy Josephus Daniels conversed from his desk in the Navy Department at Washington, D. C., with uss *Nebraska* (Battleship No. 14) off the Virginia Capes. In the same year there followed the first transoceanic radiotelephone system ever set up—between the station and the Eiffel Tower, Paris, France. A year later the pioneer long-distance telephone conversation, between "Radio Arlington" and the Navy's Radio Honolulu, took place. All of the War Department's messages during World War I were sent from "Radio Arlington."

The closing of the Navy station was marked by ceremonies held at the site of the original radio station in Arlington, Virginia.

Heavy Attack Wing for PacFlt

The first heavy attack wing in the Pacific Fleet Air Force was commissioned at the San Diego Naval Air Station. Heavy Attack Wing Two will assume operational and administrative control of the Pacific Fleet's heavy attack squadrons.

Heavy Attack Wing Two will be made up of Heavy Attack Squadrons Two, Four, and Six. The primary purpose of these squadrons is to conduct long-range, all-weather bombing missions.

The squadrons will fly the new A3D *Skywarrior* and the AJ2 *Savage*. The 25-ton *Savage* is capable of carrying an atomic bomb, while the *Skywarrior* has demonstrated that it is capable of taking off from a carrier in the Pacific, carrying out a mid-continent bombing mission, and landing on another carrier far out in the Atlantic.

Turbojet Target Drone

To provide a high performance target for gunnery and missile crews, the Bureau of Aeronautics is performing evaluation tests on the turbojet KDA-1 *Firebee* drone at the Naval Air Missile Test Center, Point Mugu, Calif.

The *Firebee*, launched from a "mother" plane, is remotely controlled from a ground station and permits unrestricted angles of approach. Upon being released from the aircraft at 15,000 feet, it will fly for 30 minutes at a speed of 500 miles per hour up to an altitude of 35,000 feet.

Reflectors which are sensitive to radar can be added to the *Firebee* to give gun crews an image on fire control radars similar to that which is reflected by larger aircraft.

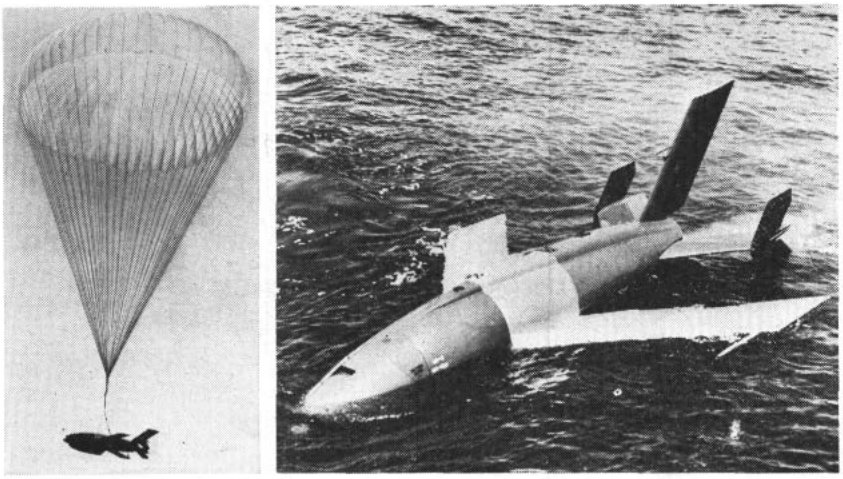
At the end of its flight, the *Firebee* can be recovered by a two-stage parachute system which operates automatically or by command. It can be recovered from land or water, repaired as necessary and flown again. Some KDAs have been flown as many as 10 times. This repeated use makes the *Firebee* more economical than conventional aircraft which have been converted to drone operations.

Plenty of E's for Red Rippers

Fighter Squadron 11, the famed "Red Rippers," have set an aerial bombing record never before equalled in the annals of Atlantic Fleet aviation: the squadron's 14 marksman-pilots have each earned the Navy's Efficiency "E" for their accuracy in high-angle loft bombing, in an annual competitive exercise held among all Atlantic Fleet squadrons capable of atomic weapons delivery.

In high-angle loft bombing, sometimes called "over-the-shoulder," a plane does an Immelman or half loop, releasing its bomb at some specified point along the course of the pull-up. Such maneuvers are necessary in atomic bombing to allow either jets or conventional aircraft to reach a safe distance after dropping their payload.

The members of VF 11, who flew F2H-4 *Banshee* jets for their record-setting performance, have been training extensively to increase their proficiency in delivering nuclear weapons. The squadron is a unit of Carrier Air Group 10, based at NAS, Cecil Field, Fla.



TURBO JET DRONE, *Firebee* KDA-1, is latest target for gunnery and missile training. Chute eases it down after run where (rt) it floats until picked up.

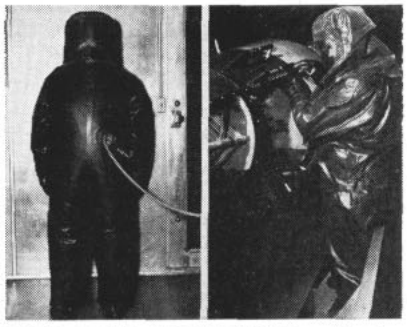
Late Style in Navy Suits

Two new suits have been developed to make life safer for Navymen working with rocket propellants and hazardous fuels.

Made of cotton, coated with resin-modified butyl rubber, the suits are designed to protect those who handle "hot stuff" such as foaming nitric acid and other corrosives.

One outfit, the general purpose suit, is to be worn by those who maintain and operate storage tanks, piping valves and power plants. The other, a special purpose suit, is for use in brief, but dangerous operations, such as refueling, loading, or repairing battle damage.

The general purpose suit consists of a waist-length jacket, bib-overall type trousers, hood, gloves and knee boots. Protected openings provide ventilation and the jacket and trousers can be taken off in seconds in an emergency. The special purpose outfit is of one piece with attached foot coverings and gloves. Since it completely encloses the wearer, this suit is hooked up to a hose to provide air for ventilation and breathing.



TWO NEW PROTECTIVE suits for Navymen are (left) suit for handlers of hazardous fuels and (at right) general purpose suit for rocket work.

Both suits were developed for BuShips by the Clothing Supply Office at Brooklyn, N. Y., as part of a joint armed forces project.

Navy's Top Aerial Marksmen

The title of "the Navy's Best Aerial Marksmen" has been bestowed upon Fighter Squadron 112.

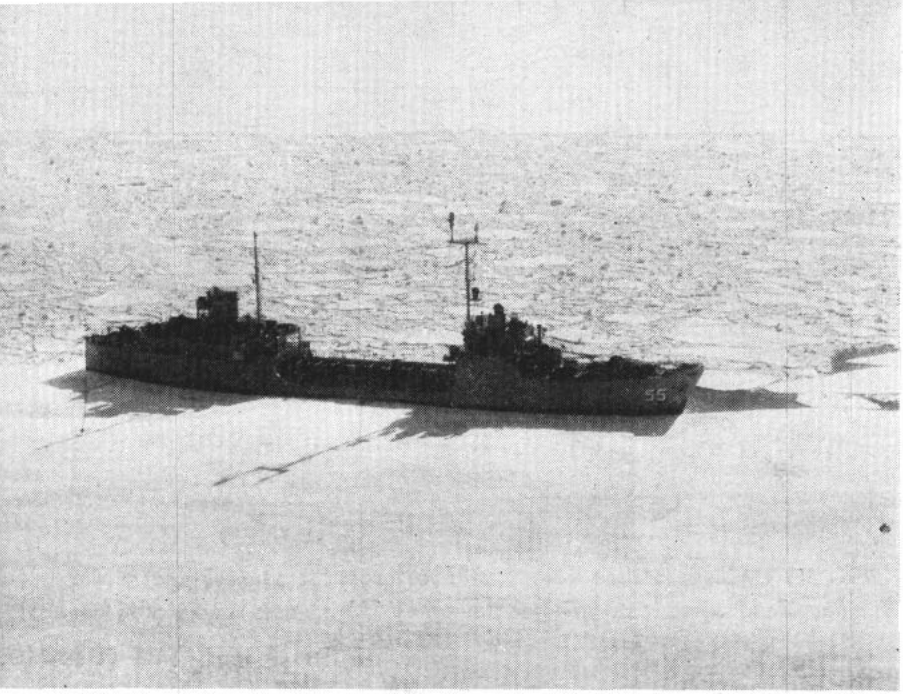
The Miramar, Calif.-based aerial sharpshooters won this distinction by outshooting three Navy and two Marine Corps teams during the first All-Navy Fleet Air-to-Air Gunnery Meet.

The six teams taking part in the meet represented the finest aerial gunners the Atlantic and Pacific Fleets had to offer. Each team consisted of a squadron commanding officer, three pilots and one alternate pilot.

Each team member fired 280 rounds of ammunition, without tracers, at targets towed at 15,000 and 25,000 feet. They were permitted to make only two runs on each target.

Fighter Squadron 112 scored 2964 points to win the Earle Trophy, while second place honors went to Marine Fighter Squadron 314 with 2554 points.

Individual honors for the meet went to LTJG Harold N. Wellman of Fighter Squadron 43 based at NAS Jacksonville, Fla. Shooting with a 20mm cannon, he scored 1096 points out of a possible 2240. In recognition, he was presented a trophy and acclaimed as the over-all individual champion of the 1956 Fleet Air Gunnery meet.



FRONTIER GAS STATION—*USS Nespelen* (AOG 55) moors to ice edge at McMurdo Sound, Antarctica, to fuel planes exploring unknown continent.

Earth's Last Frontier

If a last physical frontier exists, it is within those six million square miles of ice and snow that lie inside the Antarctic Circle.

Until last December more than three-fourths of the Antarctic had never been seen by human eyes. Today, photographs of one third of this unknown area are being processed and compiled into charts.

This frontier was penetrated by a handful of pilots and aircrewmen and four aircraft that in one month explored more of the Antarctic than all previous expeditions combined.

Early in December, last year, five ships of Task Force 43 were on station two hundred and fifty miles apart between New Zealand and Cape Adare on the Antarctic continent. Two R4Ds, two R5Ds, two UFs and two P2Vs were launched in man's first attempt to fly to the Antarctic from a land base. In past expeditions, aircraft had either been offloaded from a ship onto the ice or launched from an aircraft carrier a few hundred miles out.

About six hours out, the UFs and the R4Ds began to experience fuel problems owing to strong, unexpected headwinds. Within the next hour the four aircraft were ordered to return to New Zealand.

By evening the two R5Ds and the two P2Vs had landed on an ice strip near Ross Island at McMurdo Sound. That night the tired crews slept on board the ice-breaker uss *Edisto* (AGB 2), the ship carrying the advance parties that had laid out the ice strip and set up the camp at McMurdo.

The first week at McMurdo the aircraft were fueled by hand-pumping gas from 50-gallon rubber drums brought 35 miles by helicopter from the ships. Later, the planes were flown to a temporary ice strip beside the refueling ship, uss *Nespelen* (AOG 55).

During the following weeks flight operations were conducted regularly. Helicopters and *Otter* float-ski planes carried supplies between the ships and the budding air facility at Hut Point. Three hundred miles away other helicopters and *Otters* were on reconnaissance flights for the trail parties reaching out from Little America toward a point 80° South, 120° West. This point is one of the several outposts to be manned by scientists during the International Geophysical Year in 1957-58.

Back at McMurdo, the R5Ds and the P2Vs were conducting long range exploratory operations over the continent. The South Geographic Pole was crossed four times. One flight continued on to the Weddell Sea area and back—a 3450-mile trip that took 19 hours. In addition, the South Magnetic Pole was surveyed from the air and one hop reached far out into the hinterland to examine the "third pole"—the pole of inaccessibility—the Continent's most remote area.

Before Operation Deepfreeze I, approximately three million miles of the interior had remained totally unexplored. The air unit surveyed at least a third of the heartland never before seen by humans.

By the middle of January, unseasonably warm weather had weakened the ice to the point that the landing strip was unsafe. Long cracks had opened in the ice; seals and penguins were everywhere. The decision was made to return to New Zealand.

On the 17th, unfavorable winds prevented the fly-out but on midnight of January 18th all four aircraft were in the air headed for civilization. Eleven hours later the east coast of New Zealand came into view. The job was nearly over for these men. All that remained was the leisurely flight home over warm seas and friendly islands.

The job was not over for others. The Navy helicopters were still moving supplies at Little America and McMurdo Sound. The *Otters* at Little America were continuing their mission of running reconnaissance flights and dropping fuel and food to the trail parties of the Special Seabee Battalion. The men who manned and supported these aircraft were unsung heroes of the air unit. All day long—and there is, of course, no night—these aircraft were in the air. They were aware that in a few more weeks the cold Antarctic nights would begin, and the ice could freeze overnight, locking the ships in for an entire year. The success of the International Geophysical Year program rested on the speed and efficiency of this logistical air support.

On February 4th word was flashed that one of the *Otters* was missing on its return from a trail party outpost 350 miles from Little America. Six and one-half days later seven weary, hungry airmen were found. Their plane had crashed during a treacherous Antarctic whiteout.

Our summer is Antarctic's winter. In our early spring, temperatures there were running 40° below zero, frigid winds were piling snow alongside and over the huts that are now sheltering nearly two hundred persons who have volunteered to remain until next year. This group includes personnel of the Seabee Battalion and VX-6.

This fall, when the ships and air-

craft return, camps will be established and Operation Deepfreeze II will be underway. Scientists will arrive with their tons of equipment. Through the long days and nights to follow in 1957 and 1958 they will be busy with theodolites, seismographs, geiger counters and tide tables.

Navymen are penetrating further and further into the last frontier.

Musical NavCads

Voices now scattered to the four winds and seven seas will be entertaining you later this year by means of a 12-inch long-playing record. The recording was made in Hollywood by the Naval Aviation Cadet Choir from Pensacola, Fla., and includes Christmas music, hymns and popular selections.

The most unusual thing about the music—and the choir itself—is the maintenance of a high standard of excellence, despite the rapid turnover in choir membership. Cadets making up the group are assigned to Pensacola primarily for training, and move on to duty with the Fleet after their training is completed. As men of each group leave the area, their places on the choir must be filled with new members.

During rehearsals each Monday and Thursday, the choir director auditions from 20 to 40 new men to keep the group up to strength (usually about 70 members). Student pilots who join the choir give up many off-duty hours to practice. They are granted no special privileges and must keep their grades above average. Yet this group—which has been called nine-tenths spirit and on-tenth talent—has received enthusiastic applause in each of its many personal appearances.

The Aviation Cadet Choir was originally organized to sing during services at the Pensacola Naval Air Station chapel. Today it continues this important weekly appearance, but its fame has spread from coast to coast.

USAF Award for Navyman

A naval officer who cut a 30-minute job down to 30 seconds for MATS pilots all over the world has been awarded the Commendation Ribbon by the Air Force.

The Navyman is LT Robert G. Rich, USN, who devised a series of graphs to tell MATS pilots at a glance the amount of fuel needed for a flight, the time the flight would take, true air speed and optimum altitude for all aircraft in the MATS Transport Fleet.

In 1953 while stationed in Hawaii, LT Rich's squadron switched from R5Ds to R6Ds. The change-over resulted in a multiplication of fuel-load possibilities, thus complicating fuel planning. The smaller R5D could carry just so much gas, while the larger R6D could carry varying amounts. In addition, the "Liftmaster" had different fuel needs because it was pressurized and could fly at higher altitudes.

The problem of how to calculate fuel load quickly for the larger transports absorbed LT Rich, who studied engineering before entering the Navy. After four or five tries he hit on a system of graphic and tabular schemes, which Navy transport squadrons based at Hickam AFB, Honolulu, put through rugged tests. The graphs were an immediate success.

Soon afterward, LT Rich was transferred from Hickam AFB to the staff of the Senior Naval Officer at MATS Headquarters, Washington, D. C.

Before long MATS had him drawing up graphic tables for its transports. The handy albums, or "Fuel Planning Manuals," also include checks on equivalent and true air speeds, plus checks on lessening horsepower requirements as plane loads lighten in flight.

Navy Ships Rescued 242 Survivors of Ocean Collision

The escort vessels, USS *Edward H. Allen* (DE 531) and USS *Heyliger* (DE 510) and the Military Sea Transport Service ship USNS *Private Wm. H. Thomas* (T-AP 185) were among the first ships to arrive at the scene of the collision between the ocean liners *Stockholm* and *Andrea Doria*. The ships rescued about 242 survivors from *Andrea Doria*, including the captain and first officer.

Pvt Thomas was some 20 miles from the site when she received the SOS message from the stricken *Andrea Doria*. *Pvt Thomas*, carrying military passengers and dependents from Bremerhaven to New York, reached the crash scene about two hours after the collision. She picked up 165 survivors and departed for New York at 0400.

Allen and *Heyliger* were returning from a Reserve training cruise to Newfoundland and were 52 miles from the disaster scene when she received the relayed SOS message some three hours after the collision. Steaming at flank speed, they reached the badly listing *Andrea Doria* at 0500.

Both *Allen* and *Heyliger* sent out lifeboats to pick up survivors and rendering other assistance. *Allen* was designated to take the survivors aboard for the return trip.

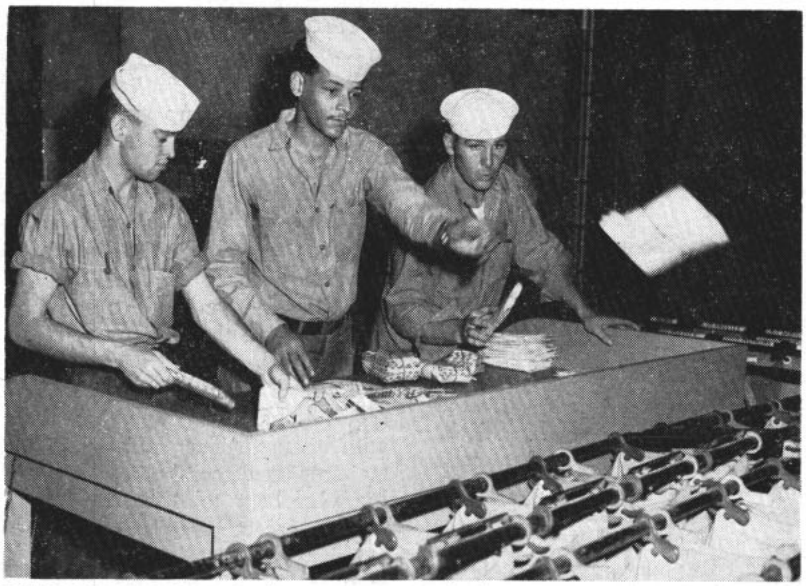
Allen's whaleboat began towing life boats, laden with survivors from the sinking *Andrea Doria*, to the other merchant ships standing by to receive them.

When the captain of *Andrea Doria* realized that all hope of saving his ship was gone, he, along with his first officer and the 77 remaining crew members were taken by whaleboat to *Allen*.

The escort vessels which are attached to the Third Naval District as Reserve training ships, remained in the area until *Andrea Doria* sank in 40 fathoms of water at 0710 on 26 Jul 1956.

In addition to the Navy ships which took an active part in the rescue operations, 10 other destroyers from DesLant had been ordered to the area but were recalled before they reached the scene.

USS TOLEDO (CA 113) looks sharp as crew members man her rail. Cruiser is currently assigned to Pacific.



STATESIDE-BOUND—Sailors at Navy's Yokohama Post Office toss air mail for USA in bags. PO handled over two million pounds of airmail in '55.

Navy Postal Unit Handles 10,500,000 Pounds of Mail

"You write—we'll expedite!"—That's the motto of the Navy's Far East Post Office.

Within a set of cream colored buildings at the U.S. Naval Base, Yokohama, Japan, a team of Navy mailmen functions as the "master postman" in the Western Pacific by delivering mail to or from home.

Last year, this team—working like a complex precision instrument—handled some 60 pounds of incoming and outgoing mail per minute. In a year's time that amounts to over ten and one-half million pounds of mail.

Organized so that the mail will be distributed in the shortest possible time, the Navy's post office at Yokohama has sections for incoming Navy and Marine Corps mail, incoming and outgoing parcel post packages, a rewrapping section (for parcels poorly wrapped or damaged in delivery), a registered letter section, and an outgoing mail section. There is also a filing department which keeps accurate tabs as to the whereabouts of every ship assigned to the U. S. Pacific Fleet. The outfit is especially proud of its registered letter section—it handled almost a million registered letters with only three being misplaced.

FLEET-BOUND—Master locater for incoming mail tells Navy mailmen location of ships in Pacific Fleet.

Homeward bound shipments of china and glassware constitute most of the traffic in the parcel post section, while packages of fruit from home cause the biggest headaches to the rewrapping section, as most "fresh" fruits are spoiled by the time they reach Japan. On every package that is damaged, spoiled or rewrapped, that department sends a letter of explanation.

During training maneuvers earlier this year about 31,000 sailors and Marines were kept happy because of the well planned operations of the Yokohama post office. Mail was delivered daily from a mobile floating post office set up aboard a landing ship, and was received on the battle-scarred shores of Iwo Jima three days after being mailed back in the states.

Jet Photo Recon Plane

The Navy has a new photo reconnaissance plane which can fly nonstop across the U.S. in less than four hours and at the same time photograph a continuous 10-mile-wide strip of the terrain below.

It is the swept-wing F9F-8P *Cougar*, a photo-recon version of the F9F-8 fighter.

The photo jet is capable of using as many as seven cameras at one time. Among them are the newest and largest designed for use by fighter-photo planes. They are operated by a semi-automatic push button installation — the Navy's latest camera control device. While the pilot is taking pictures, a new type image-arresting device automatically compensates for the plane's forward speed and altitude.

The Navy's newest photo reconnaissance plane can shoot pictures continuously for five hours. It is capable of taking as much as 1000 feet of movie film and 2400 feet of stills during one photo run. On a normal run it will crank out between 700 to 1200 feet on its 9-by-18-inch cameras during 25 minutes of actual picture taking. By utilizing flash cartridges it can also take night photos.

Despite the photo-*Cougar's* redesigned and lengthened forward fuselage, its flight characteristics match those of its transonic fighter counterpart. The actual speed capabilities of the aircraft are classified. However, in April 1954, an earlier model set an unofficial nonstop cross-country record. Averaging 645 miles per hour, the *Cougar* went from coast to coast in three hours, 45 minutes and 30 seconds.

Instrument Flight Safety Award

For exhibiting the most skill in instrument flying while undergoing flight training during 1955 at the Naval Air Training Command, Pensacola, Fla., LTJG Dennis G. Glover, USN, has been presented the Hart Memorial Award.

This award, consisting of a plaque and an aviator's chronograph, was established as a memorial to LTJG Silas C. Hart by his parents after he was killed in an aircraft accident in 1953.

LTJG Glover's name is inscribed on a large permanent plaque mounted at the NAATC headquarters. He is electronics officer of FASRon 11, based at Atsugi, Japan.

Navy Hero — Son of Ireland

A statue of Commodore John Barry (see page 15) will be presented this month to the Republic of Ireland by the United States Government. The Honorable William Howard Taft, III, American Ambassador to Ireland will make the presentation with Rear Admiral John B. Heffernan, USN, (Ret.), representing the Chief of Naval Operations. Other Navy officials will include Admiral Walter F. Boone, USN, Commander Naval Forces, Eastern Atlantic and Mediterranean, the Navy representative, and Commander Edward L. Beach, USN, Naval Aide to the President, as the personal representative of President Eisenhower.

The statue and pedestal are scheduled to be unveiled in a ceremony on 16 Sep 1956 at Wexford, Ireland.

Inscribed on both the east and west face of the statue will be a bronze circular wreath enclosing the words "Commodore John Barry, United States Navy, 1745-1803." On the south face are the words "Presented to the People of Ireland by the United States of America, 1956, in recognition of Commodore Barry's outstanding contribution to the naval annals of his adopted country. He was born in County Wexford and is buried in St. Mary's Churchyard, Philadelphia, Pennsylvania."

On the north face of the statue are the words "In command of the *Lexington* in 1776. Barry captured the first naval vessel to be taken by an American man-of-war. In 1783 he fired the Navy's last shot of the Revolution. From 1794 until his death in 1803, Barry was senior Commodore of the United States Navy."

The statue of Commodore John Barry was transported from Boston, Mass., to Ireland in the destroyer USS *Charles S. Sperry* (DD 697).

STRANGE LOOKING craft is Navy's new flying radar laboratory with a 15-foot mast that raises and lowers in flight and houses meteorological instruments.

DDs Prove Battle Readiness

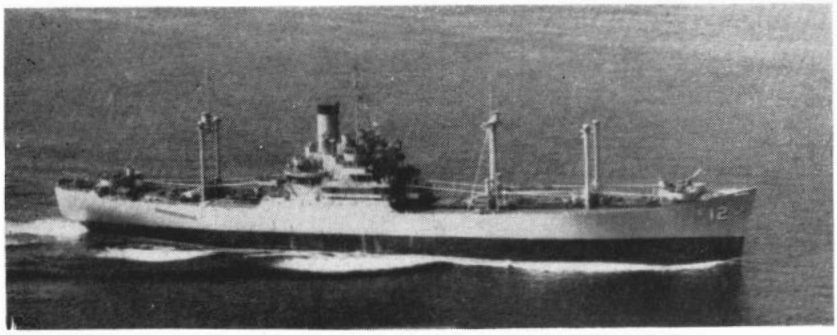
Winners of the "E" for over-all excellence in the intra-type destroyer battle-readiness competition for fiscal year 1956 have been announced. The competition is conducted during each fiscal year to determine the ships that excel in gunnery, engineering, communications, repair, administration and operations readiness inspections.

The pennant is awarded each year to some 10 per cent of the ships of the Fleet. Winners are determined on a point basis. A ship accumulates them in three different ways—through exercises and trials in which it takes part, through inspections by senior officers and through over-all administrative efficiency.

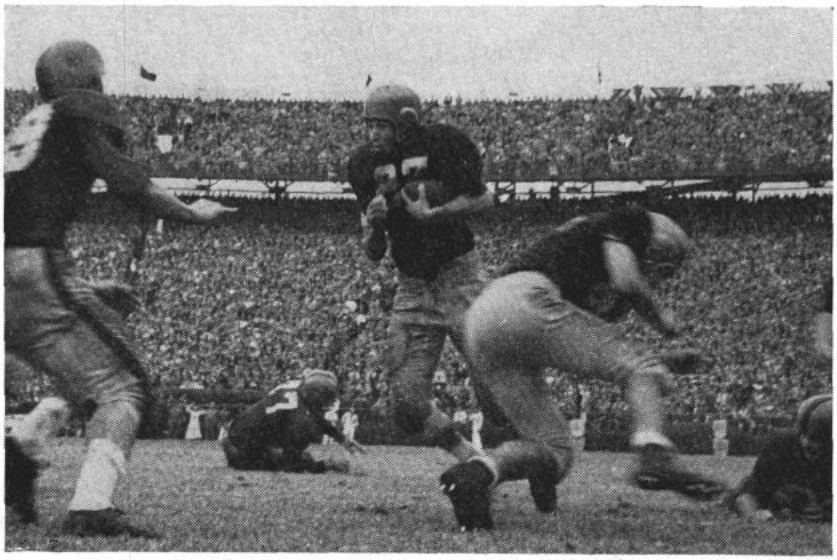
Ships finishing first and second in the squadron destroyer battle-readiness competition were awarded plaques and allowed to paint the letter "E" on the ship's bridge bulwark.

Plaques have been forwarded to appropriate "flag officers" of the following first-place ships for presentation: USS *Hank* (DD 702), *Harold J. Ellison* (DD 864)—second award; *Stribling* (DD 867)—third award; *Newman K. Perry* (DDR 883)—second award; *Fechteler* (DDR 870), *Gainard* (DD 706), *Hawkins* (DDR 873), *Massey* (DD 778), *Miller* (DD 535), *Henley* (DD 762)—third award; *Hale* (DD 642); *Fred T. Berry* (DDE 858); *Corry* (DDR 817), *Robt. A. Owens* (DDE 827), *Gatling* (DD 671), *Sigourney* (DD 643), *Monssen* (DD 798), *New* (DDE 818)—second award; *Francis M. Robinson* (DE 220)—third award; *Coates* (DE 685), *Cromwell* (DE 1014), *Albert T. Harris* (DE 447), *Brough* (DE 148) *Pillsbury* (DER 133), *Joyce* (DER 317), *Yosemite* (AD 19), *Shenandoah* (AD 26), *Wilkinson* (DL 5).

"E" plaques have also been forwarded to the following second-place ships: USS *Borie* (DD 704), *Dyess* (DDR 880), *Steinaker* (DDR 863), *Goodrich* (DDR 831), *Samuel B. Roberts* (DD 823), *Compton* (DD 705), *William R. Rush* (DDR 714), *Zellars* (DD 777), *Lewis Hancock* (DD 675), *Willard Keith* (DD 775), *Benham* (DD 796), *Keppler* (DDE 765), *Charles P. Cecil* (DDR 835), *Murray* (DDE 576), *Cotten* (DD 669), *Bearss* (DD 654), *Charles J. Badger* (DD 657), *Holder* (DDE 819), *Darby* (DE 218), *Raymond* (DE 341), *Tabberer* (DE 418), *Snowden* (DE 246), *Chambers* (DER 391). These DDs are ready.



***USS WRANGELL* (AE 12) sails toward port. 'Don't tangle with the *Wrangell*' is the ship's by-word that became popular while she supplied ammo in WW II.**



'ANCHORS AWEIGH'—As football season arrives again Navymen through out the Fleet will pick up the pig skin in intramural and interservice games.

All-Navy Rifle Champs

Chief Warrant Officer Jack R. Kanavel, USN, fired a 465 out of a possible 500 to win the individual All-Navy Rifle Championships held at the Fleet Air Defense Training Center, Dam Neck, Va. Kanavel is stationed at the Naval Hospital, Corpus Christi, Texas.

Team honors were taken by the 11th Naval District entry, representing the West, with a score of 1799 to 1730. Representing the East was the team from the Ninth Naval District.

This was the first All-Navy competition in which Kanavel has participated. Previously, from 1948 to 1955, he had fired only in Marine Corps matches. In 1953, while serving with the Sixth Marine Regiment at Camp Lejeune, N. C., Kanavel achieved the coveted "Distinguished" title. This honor was earned during his shooting in the Southeastern Division Rifle Matches.

Runner-up for individual rifle shooting honors was Donald McCoy, AOC, USN, also a member of the 11th Naval District team. McCoy fired a 362 to lead by two points N. C. Wettestead, ICC, USN, a member of the 9th Naval District team.

Rounding out the top 10 rifle shooters in this year's competition were Lt. J. B. Overton, USN; I. N. McKee, GMC, USN; A. W. Sievers, AOC, USN; R. L. Grigone, ABC, USN; D. R. Sherman, ABC, USN; A. Sasules, AOC, USN; and Captain E. E. Hedblom, MC, USN.

Members of the winning 11th Naval District team besides McCoy, Sievers, Sherman and McKee were D. O. Pineo, PMC, USN, V. H. Farr, GMC, USN, A. A. LeTourneau, BMC, USN, and J. F. Darton, GMC, USN.

Boatman's Holiday

When Lieutenant Gerald W. Wise, USN, reported to Composite Squadron 62 at NAS Jacksonville from Photo School at NAS Pensacola, fellow squadron members learned he had arrived the hard way.

Rather than drive the 390 land miles across northern Florida in one day, he had chugged 865 miles on a 20-day cruise through the Gulf of Mexico and the Intra-Coastal Waterway in his 21-foot cabin cruiser.

Plans for his ambitious adventure began in the spring when he purchased the boat, powered by a 66-horsepower engine. In addition, he bought a small icebox, alcohol stove, bunks, fishing gear, and "about four pounds" of charts.

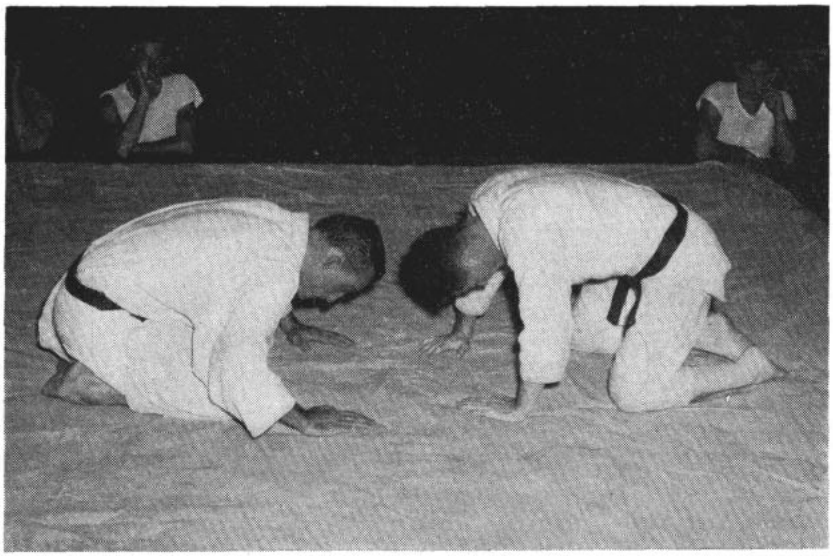
With his wife and dog aboard ("Don't ever take a dog on a boating trip," advises Wise. "We had hair in everything."), the "trio" left Pensacola immediately following graduation ceremonies from the five-month aerial photo course which he took.

Traveling the Intra-Coastal Waterway, they made their first stops at Fort Walton and Panama City. Three days later found them at Carrabelle, where they spent five days waiting for strong winds to subside before venturing into the Gulf for the 200-mile haul to Cedar Keys and Tarpon Springs.

Except for short jaunts into the Atlantic, they remained on the waterway from Tarpon Springs to Jacksonville. Stops along the eastern coast of Florida were made at Sarasota, Boca Grande, Fort Myers, Clewiston, Melbourne, New Smyrna and St. Augustine.

"Our trip across the heart of Florida—through Lake Okeechobee—proved exciting and interesting," Wise said, "despite the fact that we hit a rock which bent the shaft and cracked a propeller blade."

"All in all, it was a very enjoyable



JUDO EXPERTS—Two Navymen participating in ancient and popular sport assume traditional position used by Japanese to thank opponent for match.

trip, but I wouldn't want to try it in a boat smaller than 21 feet," he added. "Good weather is a must in a boat that size and I think that we'll equip our boat with a two-way radio for our next trip."

The trip took a total of 20 days. Lieutenant Wise figured that it cost about $10 a day, but this figure included all expenses such as fuel, food and repairs. A trip by car from Pensacola to Jacksonville would have been only about 10 per cent of that figure—but certainly not so adventurous.

For Hunters and Anglers

Navymen who are hunting and fishing enthusiasts are reminded that they should observe all federal, state and local laws regardless if they hunt or fish on or off the military reservation.

A recent Department of Defense directive, published within the Navy as OpNav Inst. 5800.2A, stressed current policy regarding hunting and fishing on military reservations.

Although hunting and fishing at each station is authorized and controlled by individual commanding officers, the instruction emphasized that if it is permitted, it should be conducted in accordance with federal, state and local laws, as well as those of the service concerned.

It must be remembered that on certain military installations where state officials have no authority, state bag limits, seasons and other conservation measures are operative as federal laws and enforceable by federal officials. At some stations, both state and federal officials have jurisdiction to enforce state hunting and fishing laws, while at other bases, game laws are enforceable by state officials only.

The DOD directive requested COs "to seek cooperative agreements between state and local jurisdiction and civilian sportsmen's groups for the conservation of wildlife and the promotion of all forms of healthy outdoor recreation."

The instruction also stated that restrictions on the use of areas under military jurisdiction should be held to a minimum and civilian sportsmen should be prohibited only when necessary to insure safety, security, protection of government property, and efficient accomplishment of the station's mission.

For a roundup on hunting and fishing licenses by states, see ALL HANDS, September 1955, page 54.

SIDELINE STRATEGY

THE FIRST TROPHY ever to be awarded by Bureau Special Services to a Navyman for bowling a perfect game was given to Enoch F. Miller, PNC, USN. Chief Miller, who is attached to the Thirteenth Naval District personnel office, scored his 12 consecutive strikes in Seattle, Wash.

The qualifications for gaining one of these trophies have been expanded. In addition to a perfect 300 game, any bowler who has a three game set of 700 or better will also be eligible for a trophy. Chief Miller qualified in both respects.

It was on 10 July that Miller performed his feat. He had rested from bowling for the previous week, having competed in a 40-game Endurance Classic in Ogden, Utah. Although he had a tender thumb as a result of the endurance bowling, his first game on the 10th was a respectable 189. By the second game, either the tenderness was gone or else he had a numb thumb, and he rolled seven consecutive strikes.

On his eighth ball, thoughts of a perfect game caused too much tension and his ball left a 6-7-10 split. He came back with his second ball, however, to pick up the split and with marks in the 9th and 10th frames, he finished the game with a 254 score.

Came the third game and again Miller fired the black ball into the pocket for seven consecutive strikes. Once again he was confronted with the "exasperating eighth," as he called it.

"I made up my mind that I wouldn't clutch up," reported Miller. "So I drank a coke and just took my time. My first ball in the eighth crossed over to the Brooklyn side but still carried through without hesitation.

"My 9th and 10th balls were back in the pocket, however, the sweeper action from a thin Brooklyn hit on the 11th strike left most of the pins lying in the alley. But they were all down.

"After brushing the dust off my knees, I delivered the 12th ball which I felt quite sure would be a strike from the time it left my hand. The spectators seemed to think so too, and it was."

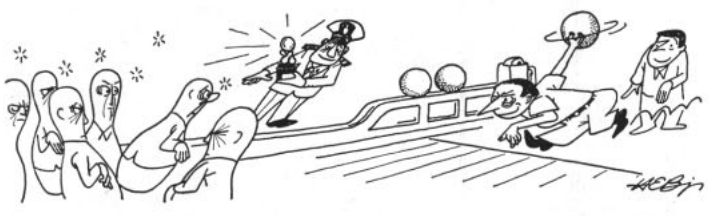
Miller's perfect bowling and 723 set didn't just come. Some 18 months ago, while carrying a 148 average, he began a concentrated practice program. Since that time, he's bowled over 4000 games, an average of some 222 games per month. Practice obviously does make perfect!

★ ★ ★

Sailors on USS *Worcester* (CL 144) are enjoying a new recreation feature which few other ships in the Fleet can boast. The ship has a skeet range located near the fantail. The range is operated whenever the ship is at sea.

Interested nimrods purchase shells at the traps and use shotguns provided free by the ship's Special Services. Just as soon as they get their "shootin' eyes" in shape, *Worcester* sailors are planning to form a team to enter in competition with shore stations and other ships at sea.

—Rudy C. Garcia, JOC, USN



SERVICESCOPE

Brief news items about other branches of the armed services.

AIR FORCE helicopter brings fresh food, mail, and supplies to men manning Texas Tower radar station.

THE ARMY MEDICAL SERVICE, with its 61,000 physicians, nurses, medical specialists and enlisted men, celebrated its 81st anniversary 27 Jul 1956.

While the primary mission of the Army Medical Service is the health and well-being of the soldier, other services and the civilian population as well have benefited from the Army research programs. Research projects range from safety devices on autos to actual medical research on Q fever (a pneumonia-like malady), artificial kidneys, yellow fever, smallpox, many other diseases and numerous drugs.

The Army Medical Service has one of the largest medical libraries in existence. It is used by students of medicine the world over, contains more than 650,000 bound volumes and is growing at the rate of more than 25,000 volumes per year.

From the library's photographic department has come the Medical Illustration Service. This service collects, publishes and exhibits illustrative material of medico-military importance which, whenever possible, is made available to other federal agencies, civilian institutions, and qualified physicians.

★ ★ ★

AN ARCTIC SHELTER which can be erected in 90 minutes by seven men under ideal conditions has been developed by the Army at the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va.

Capable of withstanding winds of 100 miles-per-hour and snow loads up to 75 pounds per square foot, the building has been adopted by the Army for use as barracks, communications shelters and first aid stations.

At one of the experimental sites in Canada, the 20 x48-foot structure, which can be air-dropped in a disassembled condition, was erected in 65 man-hours by troops working in 35 degrees below zero weather. Furnished with the building is an oil-burning space heater which can maintain a 70-degree temperature in temperatures as low as 65 degrees below zero.

A modified version of this building is in use by the Navy to house personnel participating in the current expedition in the Antarctic.

★ ★ ★

SUMMER TRAINING for approximately 3,500 members of the Air Force Reserve and Air National Guard units from seven states featured a full scale airborne training exercise at Fort Bragg, N.C., during which Reservists were integrated with regular Air Force organizations.

The 15-day annual active training period was aimed toward the production of combat-ready Reserve forces which can quickly and smoothly be absorbed into the active Air Force in the event of an emergency.

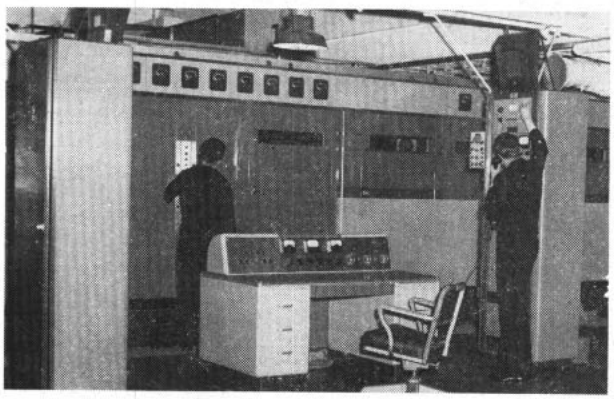
Highlights of the operation included assault missions and drops by approximately 8000 paratroopers of the Army's 18th Airborne Corps. More than 250 troop-carrying aircraft were employed during the major training exercise.

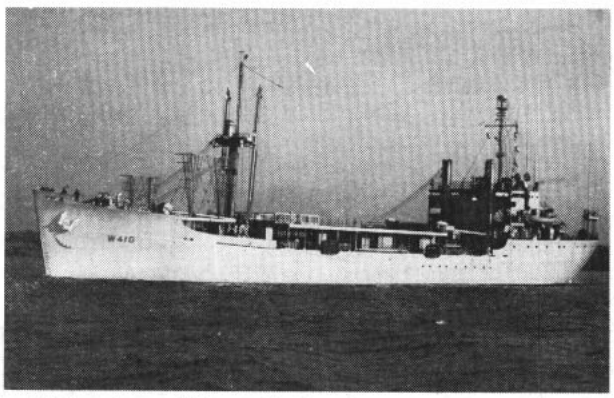
★ ★ ★

NEW ARMY RULES will lessen the emphasis on speed but stress the need for accuracy when shooters compete for the famed "Dogs of War" trophy at the Camp Perry National Matches this month. The rules were changed after the National Board for Promotion of Rifle Practice (NBPRP) detected weak spots in the 1955 Matches.

The trophy was revived last year after a 15-year lapse. It is awarded by the NBPRP to the team winning the Infantry Trophy Match. The U. S. Army Blue team won the trophy in 1955.

Under the 1956 rules, each six-man team receives its full quota of 384 rounds of service ammunition at the first stage, on the 600-yard firing line. Shooting on this line will be at eight kneeling-type silhouette targets (Army F target) which will be exposed for 50





SEAGOING broadcasting station USCGC *Courier* (WAGR 410) relays Voice of America over Iron Curtain.

seconds. The team then moves to the 500-yard line, then to 300-yards and the final stage at 200 yards.

Scoring will be four points per hit at 600 yards, three at 500, two at 300 and one at 200 yards. There will also be a bonus award for fire distribution.

★ ★ ★

A NEW ARTILLERY PROJECTILE made of paper and water has been developed by the Army to provide an inexpensive shell for test firing.

Made at present only for the 105mm howitzer, the new shell costs about $1. This compares with the $10 cost of the conventional metal projectile. Its weight and resistance to the expansion of the propellant gasses make it possible to test operation of the howitzer's recoil system.

The 105mm howitzer using this shell may be fired where the range is only a matter of a hundred feet or so, for the muzzle blasts forth only water and bits of paper.

The shell consists of two wax-impregnated, kraft paper tubes. These are four inches in diameter and 42 inches long and resemble elongated ice cream containers. The ends of the tubes are sealed with three one-eighth inch cardboard disks.

The projectiles are filled with water through a three-quarter inch hole in the forward end which is then enclosed with a cork.

The new type of projectile is filled with water just before firing and then loaded into the gun's muzzle instead of the breech. Standard rounds are loaded into the breech.

The water spray from the projectile is harmless, but the cardboard end closures may damage targets at a distance of 75 feet. At 125 feet there is almost complete safety against flying particles of cardboard.

★ ★ ★

RESEARCH on two new type aircraft—designed to combine the vertical take-off and landing abilities of the helicopter with the high speed capabilities of the transport airplane is being conducted by the Army.

The project calls for construction and evaluation of research aircraft at a much reduced scale in size and time, and at 10 to 20 per cent of the cost required for developing a complete airplane.

Differing in some respects from the "convertiplane," with which the Army is now experimenting, the new research aircraft will test a number of unique high-lift devices, for quicker take-offs and shorter landings.

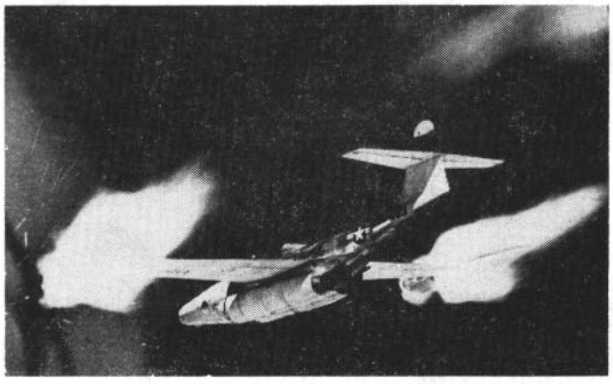
★ ★ ★

THE USAF *THUNDERBIRD* aerial demonstration team has converted to F-100 Super Sabre jets, thus becoming the first aerial demonstration team to fly supersonic aircraft.

Since activation in June 1953, the *Thunderbirds* have flown 223 demonstration flights before combined audiences of more than 10,000,000 persons. Previously the team was equipped with F-84F *Thunderstreak* aircraft.

The team will demonstrate the same precision flying techniques in the new aircraft that were previously shown to spectators throughout the United States and in 12 Latin American countries.

Their 17-minute demonstration consists of a series of loops, slow rolls, barrel rolls, clover-leaf turns, a 360-degree turn within the confines of the airfield, with the demonstration being capped by a "bomb burst" maneuver.



MIGHTY MOUSE rockets blast from USAF F-89D *Scorpion*, fighter-interceptor, operating with CONAD.

During the "bomb burst," the aircraft climb straight up, split toward the four points of the compass, roll and then come straight down, individually to roar past simultaneously from four different directions at a point directly in front of the spectators.

The *Thunderbirds* fly their performance in a tight diamond formation with wing tips overlapping and the aircraft just five feet apart.

★ ★ ★

AIR FORCE PILOTS will soon have a new automatic warning signal to remind them to "lower wheels" when about to land.

The warning will come from a tiny 13-ounce device that puts a bothersome 250-cycle interrupted tone into the pilot's headset when throttle setting, airspeed and altitude indicate he's about to attempt a landing. The sound ceases when the wheels are down and locked.

The device operates independently and will function even if the plane's electrical system is damaged or the radio is disabled.

The new warning device is adaptable to various aircraft and is expected to replace the present wheels-down horn in the cockpit.

ARMY MISSILE master stations use photo-electric guns to enter air targets into guided missile tracking system.

THE BULLETIN BOARD

Sea Shore Desk at San Diego Will Handle Moves of EMs in Pacific

To increase the efficiency of personnel distribution, a new Pacific Fleet enlisted distribution office is being established at NAS San Diego, Calif. Scheduled to begin operations on 1 December, the new office will handle the distribution and assignment of all Pacific Fleet enlisted personnel.

One of the primary objectives of the office will be to give maximum consideration to the desires of each man when he is assigned or reassigned. Administratively speaking, the office will:

- Permit closer coordination between the Fleet and type commanders in personnel assignment.
- Eliminate the long lines of communications.
- Allow the Navy to make better use of its EMs through a more accurate forecast of the personnel needs of Pacific Fleet commands.
- Permit improved services for the distribution officers.
- Permit the consolidation of all Fleet PAMIs into one PAMI located at the San Diego office.
- Reduce the "pipeline time" and excessive paper processing by mechanization of the present methods. "Pipeline time" is that period during which people are awaiting orders or in transit to a new assignment.)

Up to this time, the Commander Service Force, U. S. Pacific Fleet in Pearl Harbor has been responsible for the enlisted men in all ratings except aviation ratings (Group IX), which come under the Commander Air Force, U. S. Pacific Fleet in San Diego. These two commands have made personnel available to the type and area commands for assignment to duty station.

Under the new system, the personnel functions of these two commands will be combined at North Island in its new Fleet Enlisted Distribution Office. Also, the distribution officers of the type commands will also be located in the same office. In effect, the new program will permit all the Fleet distribution officers to work in close coordination in the one office.

"The bends? . . . Naw, forgot to put out my cigar before I went down."

This office will be on a direct data transceiver line with the Bureau of Naval Personnel. This permits the transmission and receipt of personnel data by means of punch cards at the rate of eleven 80-column cards a minute.

The Navy is increasing the use of punch cards to process personnel data (see ALL HANDS, August 1956, page 39.) The greater speed provided permits more personal data on each EM to be considered in his assignment. These cards are capable of rapid processing by electrical accounting machines.

This means that each EM can be assured that more information on his personal desires and career considerations are reaching the distribution officers. (Also, the cards include information on a man's skills, his dependents and other pertinent facts.) Further, because machines can do the clerical processing much faster, the distribution officers will have more time for considering personal problems and needs. The ability to communicate data faster by transceivers means less time in awaiting orders or more advanced information on his new duty assignment.

The present plans call for data transceivers at the key distributional points, such as San Diego, Norfolk, San Francisco, Pearl Harbor, Long Beach, Great Lakes, Memphis, Pensacola, and Washington, D. C.

Service Forces to Make Direct Assignment to New Construction, Ships Undergoing Conversion

Enlisted personnel assignments to all new construction and vessels undergoing major conversion will be made directly from active Fleet personnel in the near future, in accordance with a recent decision of the Chief of Naval Personnel. The decision to delegate greater detailing responsibility to appropriate service force and air force commanders was made in accordance with a plan suggested by the Commander Service Force, Atlantic Fleet.

Heretofore, enlisted personnel billets for new construction and conversions have been filled primarily from assignment sources available to the Chief of Naval Personnel, with men being drafted from the Fleet only as a last resort.

The new setup, which is effective for all vessels except submarines, will be used in manning ships scheduled for commissioning on and after 15 Mar 1957, and will be effective for all ratings except those listed below. This change in assignment procedure is expected to result in the attainment of improved levels of training in new ships as a greater percentage of petty officers assigned will have had recent Fleet experience.

Ratings *not* affected by the new manning plan are:

- Hospitalmen and Dentalmen.
- Those under direct assignment control of BuPers.
- Those requiring a course of instruction conducted at a service school for which service force commanders do not hold quotas.
- Those requiring special training in connection with such new developments as nuclear propulsion, guided missiles systems, and other new equipment installations.

BuPers Inst. 1320.4A is being revised to reflect the new manning procedure.

The Chief of Naval Personnel will continue to make the necessary local adjustments of personnel available to the Fleet in order to provide adequately for additional requirements.

Chiefs and Top POs Get Together for Navy Career Conference

A SPECIAL Department of Defense committee is currently studying the viewpoints, opinions, and recommendations of about 220 career enlisted Navymen who met during August to determine what deters and what stimulates reenlistments.

These "findings" came out of conferences held at NTC Bainbridge and NTC San Diego. Approximately 110 CPOs, PO1s, and PO2s of the "East Navy" (Atlantic commands, Mediterranean area and Sixth Fleet, Panama and Caribbean area, and naval districts east of the Mississippi River) met at Bainbridge. San Diego was the meeting place for some 110 "West Navy" representatives from Alaska and the Far East area, the Seventh Fleet and other Pacific Fleet commands, and naval districts west of the Mississippi.

During these meetings, the hand-picked senior POs representing more than 60 different ratings, discussed what they considered to be the "facts of life" that make a man reenlist or fail to reenlist. After detailed studies and debates, they made recommendations which they thought should be taken to strengthen the favorable aspects and correct any shortcomings of the Navy.

The two Navy conferences were similar to studies also made during August by top three pay-graders of the Army, Air Force and Marine Corps.

These meetings were held at the request of the Department of Defense Advisory Committee on Professional and Technical Compensation. This committee is making a study of current military pay and personnel policies at the request of the President and the Secretary of Defense.

The committee felt that senior enlisted men should be recognized as a source of expert opinion on personnel and reenlistment problems.

More than 140 senior petty officers from throughout the Navy were selected by their own commands as delegates to the conferences on the basis of their individual experience, personal character, leadership, technical qualifications and familiarity with the opinions of other enlisted men. In addition to the hand-picked delegates, 65 "NavCats"—members of Navy Career Appraisal Teams—were individually selected and designated to attend.

The Navy meetings were all-enlisted conferences. The delegates were given the opportunity to set their own rules for panel discussions. Only a minimum of officer guidance was given. That, in the form of assisting delegates in organizing and orienting their efforts, was done by a handful of officers (and enlisted men) from the Career Activities Branch of the Bureau of Naval Personnel and the Navy's Ad Hoc Committee on Recruiting and Retention.

During the three-day meetings, suggested topics were presented to and by the career sailors. Those that warranted detailed study were turned over to panels of 11 or 12 delegates for discussion. When these panels completed their studies, the results were read to the assembled delegates for "all hands" discussions and comments. Each panel chairman had 15 minutes to present his panel's findings. Each presentation was then followed by a 15-minute discussion period.

The panel findings and subsequent discussions and comments from each conference were then combined into one large report and submitted to the Cordiner Committee. This committee, consisting of civilian and military experts on pay and administrative matters, is now studying and weighing the recommendations of the career enlisted men. If warranted, the committee will recommend that each service secretary take administrative action on matters which the services themselves can handle. For those matters that cannot be corrected or that are not within the jurisdiction of the forces, the committee will draft career-legislation for submission to Congress next Spring.

HOW DID IT START

DDR—Radar Picket Destroyer

DDRs—Radar Picket Destroyers—came into being in the closing days of World War II when it became necessary to extend the area of radar surveillance of a naval task force beyond the range of any individual radar.

DDRs are basically the same as most long-range, high-speed destroyers—capable of speeds well over 30 knots—but have additional radar antenna masts and more communications equipment.

Although converted for detection and warning duties, the DDRs retained their basic anti-submarine detection equipment and other armament. This consists of six five-inch guns, several three-inch rapid fire antiaircraft guns, depth charges, hedgehogs, and a bank of torpedo tubes as well. With such, they present a threat to enemy forces from below as well as above and on the surface.

Radar picket destroyers usually make up the outer rim in the formation of a task force. They operate many miles in advance, on each side and behind the main or heavy elements. If they detect approaching enemy ships or planes, a radio report is flashed to the task force so it can intercept them or take other defensive measures.

DDRs provide the same screening and advance warning services to task forces as their smaller brothers (DERs) perform for the nation. **(See p. 20)**

Both the DDRs and the radar picket escort vessels can keep in close touch by radio and radar with the fighter aircraft or other units sent out to meet the enemy. They can relay information as to the location and movements of the enemy and direct them to an interception.

In addition, DDRs serve as an advance element to shoot down or destroy the enemy forces before they get a chance to penetrate the task force.

Greater Benefits for Your Family Are Provided in New Law

THE SERVICEMEN'S AND VETERANS' Survivor Benefit Act, which provides a complete change in service-connected death benefits for armed forces personnel, has been signed by the President and becomes effective 1 Jan 1957.

This bill, according to the Defense Department, is probably the most important armed services "morale" legislation passed by the second session of the 84th Congress. It fills a long standing need for the improvement and protection of the servicemen's family. As such, it provides a strong inducement to attract and retain personnel of the caliber required for the armed forces.

The Servicemen's and Veteran's Survivor Benefit Act revises all current government survivor benefit programs which relate to *service-connected deaths*. That is, the new law applies in the case of any death which occurs while serving on active duty and any death which is the result of a service-connected disease or injury, or the result of an existing disease or injury aggravated by active duty.

The law, however, does *not* change in any way the existing regulations concerning *non-service connected deaths*. (That is, deaths which occur while on retirement, inactive duty or after discharge *unless* they are the result of service connected diseases or injury).

The new legislation will have a broad impact. It will affect survivors of present and future active duty servicemen and certain veteran and retired personnel whose deaths are service connected. The law will also give substantial benefit increases to 30,000 widows, 85,000 orphans, and many of the 285,000 dependent parents now on VA rolls.

"I'd prefer a demitasse, if you please."

The new act (P.L. 881) is designed to improve and streamline present benefit systems. It provides a uniform, equitable and efficient program for the future by placing all survivor benefits in relationship to the lifetime income of the deceased serviceman. Hereafter, survivor death compensation will consist of increased payments from the Veteran's Administration and if there are children under 18 years of age, additional increased Social Security death payments will also be made.

The new form of death payments for widows, orphan children and parents paid by the VA will be called "dependency and indemnity compensation."

Major Benefits

Major benefits of the new bill, as compared to old laws include:

• ***Death Compensation for Widows*** —The new law increases monthly death compensation payments for widows from $69.60 per month to a minimum of $122 and a maximum of $266.

Up to the time of the new law (which goes into effect 1 Jan 1957) widows of service personnel in most cases would receive death compensation from the Veterans Administration. The VA death compensation would pay widows without any children only the flat amount of $69.60, if their husbands died during peacetime, and a maximum of $87.00 if death was during wartime. These flat rate monthly payments have been made regardless of the deceased serviceman's rank or rate or length of service.

Under the old law, a widow with one child received $96.80 for herself and one child and $23.20 for each additional child if the serviceman's death was in peacetime and a slightly higher rate for wartime deaths.

Under the provisions of the new law, if a serviceman dies while on active duty, or if a retired serviceman or veteran's death is service-connected, after 1 Jan 1957, (when the new law goes into effect) the widows will receive $112 per month plus 12 per cent of the serviceman's basic pay. That is, a monthly sum will be paid ranging from $122 for a seaman recruit's widow to $266 for widows of those in the highest pay grade.

Death compensation payments under the new system are in relationship to the basic pay of the serviceman at the time of his death and are the same regardless of whether death is attributed to wartime or peacetime service.

A childless widow, under the new law, will receive monthly VA death compensation payments ranging from $122 to $266 for the rest of her life

A Fast Look-See at Survivor Benefit Act

Here is a quick rundown of the highlights of the new Servicemen's and Veterans' Survivor Benefit Act:

- Revises the death compensation program for personnel who die on active duty or of service connected causes by providing widows with greatly increased monthly payments partially related to military pay; increases existing monthly payments for orphaned children; provides a sliding scale of benefits for parents subject to certain annual income limitations.
- Extends *full* Social Security coverage to those in the armed forces on a contributory basis.
- Revises the six-month death gratuity to range from a minimum of $800 to a maximum of $3000.
- Eliminates coverage of service personnel under the Servicemen's Indemnity Act (the so-called "$10,000 free insurance") and coverage of reserve personnel under the Federal Employees Compensation Act.
- Provisions of the new law become effective 1 Jan 1957.

For more details and the benefits of the new law compared to the old, see the accompanying article.

or until she remarries. Under the old laws, her VA death compensation was limited to $69.60 or $87.00 only.

The new law does not provide for additional payments for widows with minor children as the old law did. This is compensated for in the new law by merging former indemnity payments and the new increased "dependency and indemnity compensation" payments with the increased Social Security death benefits for widows with minor children. However, even without the provisions for added compensation for minor children, the minimum monthly compensation payable under the new law ($122) is greater than the amount allotted to a widow with two children ($120) under the old law. In addition, the widow with children under 18 years of age, under the new law, is entitled to increased Social Security benefits as outlined under "Social Security."

However, if the serviceman's widow has children over 18 years of age who are helpless or incapable of self-support, the new law provides for additional VA dependency and indemnity compensation at the rate of $70 per month for each child.

It also provides for VA dependency compensation payments at $35 per month for each child reaching the age of 18 and ineligible for Social Security payments, provided each child is pursuing a course of instruction at an approved educational institution. These payments will be made until such schooling is terminated or when the student reaches the age of 21, whichever is the earliest.

• ***Social Security*** — The new law puts all active duty military personnel under Social Security on a *full participating basis,* rather than providing a limited gratuitous credit and reduced benefits as in the past.

The free Social Security credit given active duty servicemen was only $160 per month regardless of their actual basic pay which might be a great deal more than that.

What's the difference between the old and new methods of figuring Social Security for service personnel?

Under the former provisions, you as a Navyman would be chalking up free Social Security credit of $160 per month. However, persons just entering the service, without any previous wage coverage, would not be entitled to any Social Security benefits until they completed 18 months' service. Also, upon retirement, except under certain limited conditions, the free Social Security credit given for military service would be lost, because a person drawing retirement pay could not draw old age benefits from Social Security credit based on military service. That is, the retired careerman would not be entitled to Social Security old-age payments upon reaching the age of 65, unless he received Social Security credit from civilian employment. Therefore, as far as the career Navyman is concerned, the provisions of the old law had little to offer.

The new law, on the other hand, offers the career serviceman dual advantages. By being placed under full Social Security coverage, all military personnel will have Social Security-insured status or its equivalent immediately upon entering the service. Hereafter, all Social Security credit based on military service will NOT be lost *regardless of retirement or when one leaves the service.*

The new act enables the serviceman to receive his retired Navy pay PLUS *old age insurance payments upon reaching the age of 65.* These monthly payments under Social Security range from $30 to $108.50 depending upon the amount of monthly wages for which Social Security taxes were paid and for how long they were paid. These monthly old age payments will be in addition to the career serviceman's retirement pay.

In addition, his wife, upon reaching retirement age (62), will also receive old age payments ranging from $16.50 to $54.30 per month. (However, the husband must be entitled to old age benefits, that is, he must be 65 before his wife can become eligible.)

If the serviceman dies while on active duty or upon retirement and is survived by a widow with children under 18 years of age, she will receive monthly compensation ranging from $30 to $200. The exact rate is determined by the former earnings of the serviceman and on the number of surviving children. This Social Security death compensation is *in addition* to the widow's VA death compensation outlined above.

As an example, let's presume a PO2 with ten years' service dies while on active duty. He is survived by a widow and two minor children. At the time of death his basic pay was $211. Under VA dependency and indemnity compensation provided by the new law, his widow would receive monthly payments of $138 ($112 plus 12 per cent of $211) and $156 Social Security death benefits, which would bring the PO2's widow's monthly income from these two sources alone up to $294.60. Under the old law, the most she would receive from these sources would be $248. That is, $120 VA payments for herself and two children ($138 under new law) and $128 Social Security survivor benefits ($156 under new law). So you see that even without the provisions for additional dependency and indemnity compensation for minor children, the widow under

"Huuu . . . Bout, . . . HAYsse!"

the new law has greater benefits.

What is the cost to you for these added Social Security benefits and old age insurance?

All in all, these added benefits will cost servicemen $116,000,000 each year. That sure sounds like—and certainly is—a lot of money. When broken down to each active duty serviceman in all branches of the armed forces, it's actually very little. Although the servicemen will contribute 116 million dollars each year, it will also cost the government an additional 116 million to finance these added benefits each year.

Under the new bill, a serviceman will contribute two and one-fourth per cent of his monthly basic pay beginning 1 Jan 1957. The amount you will be required to pay will be small. It will range from $1.87 per month for a seaman recruit (E-1) to the maximum of $7.54 for a CPO (E-7) with 30 years service. Note that these deductions will be made only on the first $4200 of the serviceman's basic pay and individual annual payments, regardless of one's rank or rate, will not be more than $94.50 per year.

• ***Six-Month Death Gratuity***—The new law still provides for a death gratuity payable to survivors of active duty service personnel equaling six months of a man's basic pay and special and incentive pay, up to a total payment of $3000 with a minimum payment of $800 in any event. (The new law also provides for this gratuity to be paid if death occurs within 120 days following discharge or release from active duty or inactive training duty, provided that death is service-connected.)

"His wife just found out he could cook!"

One of the benefits of the new six-month death gratuity provision is that it raises the minimum amount payable under old law from $468 to $800. However, as stated above, there is now a top limit of $3000 in the death gratuity payment. This top limit will not affect those Navymen whose pay (basic, special and incentive) is less than $500 monthly. Another major advantage of the new bill is that it cuts red tape and authorizes disbursing officers to make immediate payment of death gratuity to the designated beneficiary.

• ***Benefits to Orphaned Children and Parents***—Here again there are increased benefits under the new law. The old law provided peacetime benefits ranging from $53.60 monthly for an orphaned child to $96.60 for three children, with wartime benefits of $67.00 for one orphan and $122 for three. For each additional child the old monthly payments would be $18.40 (peacetime) or $23 (wartime).

Under the new law, effective 1 Jan 1957, there will be no distinction between peacetime and wartime death payments. The minimum payment to one orphaned child will be $70 per month and $130 for three. Each additional child will receive $25 per month.

As a comparison, the four orphaned children of a serviceman who died last year would be entitled to $115 per month, while under the new law they would be entitled to $155.

In the case of parents, the new Servicemen's and Veterans' Survivor Act is designed to give increased benefits for increased needs. The new law also revises regulations as to dependent parents.

Here's how the old and the new laws affect dependent parents.

In the past, one surviving parent received $60.00 monthly ($75.00 if death of the serviceman was in wartime) and two dependent parents receive $64.00 monthly ($84.00 wartime), provided they came within the limits of VA income requirements.

The new law considers parents as dependent parents in all cases where they come within certain income brackets, regardless of whether or not they were in fact dependent on their son at the time of his death.

Also this law calls for payments to parents to be made on a percentage formula, by setting the amount of compensation to the graduated scale of their incomes. A single parent is eligible if his annual income is $1750 or less, while two parents are eligible if their combined income is $2400 or less. The amount of compensation they receive is dependent

If You're Nearing Retirement, Check This

The free Social Security credit that Navymen have been receiving under current laws will not be lost, and in some cases will be an added advantage when the new Servicemen's and Veterans' Survivor Benefit Act goes into effect on 1 Jan 1957.

Since current laws prohibit retired service personnel who are drawing retirement pay from any Social Security benefits, it will be highly beneficial to those Navymen planning retirement to wait (if permitted by current regulations) until after 1 Jan 1957.

Those retired before the new benefit act becomes effective, leave the Navy without any Social Security credit or benefits whatsoever. In such cases, the retired Navyman will have to build up a certain amount of Social Security credit through civilian employment before he or his dependents are eligible for any Social Security benefits.

Under the new law, a Navyman retiring after 1 Jan 1957 will take with him or retire with six years of free Social Security credits based on the flat rate of $160 per month, regardless of his rank or rate. That six years of credit represent wages totaling $11,520 and will be a great contribution toward establishing eligibility for both old age and survivor benefits payable under Social Security. In some cases, depending upon the age at which a Navyman retires, the six-year free Social Security credit will be sufficient to warrant Social Security benefits and the retired Navyman will not have to seek civilian employment in order to qualify.

on their actual amount of income. The income range on which the percentage formula is based is from $750 to $1750 annually for one parent, and from $1000 to $2400 for both parents. The maximum monthly benefit allowed is $75 for one parent and $100 for both.

• ***Free Indemnity Discontinued*** — Discontinuation of the $10,000 Free Indemnity that was provided under the old laws may seem at first glance to be a big loss to the serviceman's survivors. But a careful study of the difference between the laws will show that the serviceman's survivors will be better off even without the indemnity. It must be remembered that the $10,000 would be payable in monthly installments of $92.90 during a period of ten years only and then would be stopped.

The examples quoted above, and the tables on page 50, will show that the total increased monthly payments payable under the new act are greater in the long run.

The following case will illustrate an all too common occurrence foreseen by the lawmakers.

A widow of a serviceman who died in peacetime has been receiving $162.50 per month (including the $92.90 indemnity) for the first ten years after her husband's death. At the end of 10 years, her monthly payments are suddenly reduced to $69.60 per month. Without the new law, that is the total amount the widow could expect to receive until reaching the age of retirement (62) when she would receive a small additional old age retirement benefit from Social Security.

Under the new system, the widow will receive a fixed amount ranging from $122 to $266 per month, depending upon her husband's rank or rate, until she reaches the age of retirement at which time she will receive *additional* old age benefits.

With the termination of the "Free Indemnity" under the new law, the government is utilizing the savings to increase the level of death compensation payments to widows, surviving children or parents. Despite any savings that might be made from discontinuing the indemnity, the government is paying in the first year a total of more than 75 million dollars MORE than it did by providing the "free indemnity" so that it may increase the long range benefits to the surviving families of servicemen.

• ***Insurance*** — Present holders of NSLI and USGLI policies now in force or issued before 1 Jan 1957 will not lose anything under the new law. However, the special five-year nonconvertible NSLI term policies, for which those now in the service have to apply within 120 days after discharge, will be discontinued under the new law. Those servicemen who surrendered their NSLI or USGLI policies while covered by the free indemnity will be able to reinstate their policies while still in the service or within 120 days after completing their active duty.

• ***Equitable Benefits to Survivors of All Military Personnel***—In passing the new law, Congress recognized that the old legislation made possible certain inequities which worked to the detriment of career service personnel. Some survivors came under

WHAT'S IN A NAME

Triton, First Nuclear Picket Submarine

Triton **is the name that has been assigned to the Navy's first nuclear powered radar picket submarine. At present under construction, USS *Triton*, SSR(N) 586, will be the largest submarine ever built.**

The longest submarines in the world today are also U.S. radar picket "boats," designed to provide screening and advance warning for fast carrier task forces and other types of Fleet operations.

Triton **will have a displacement of about 5450 tons compared to 2470 tons for the 343-foot *USS Sailfish* (SSR 572) and *Salmon* (SSR 573) two of our newest submarines.**

The SSR(N) 586 will be the third ship in the U.S. Navy to be named *Triton*. The first was the yard tug YT-10 which served for 31 years before being "retired" in 1930. The second *Triton* was the SS 201, a Fleet type submarine built in 1940 and sunk North of the Admiralty Islands in 1943. (There is also a Coast Guard cutter of the same name.)

The second *Triton* contributed much to our over-all submarine effort in the Pacific during World War II. She was in there fighting from the very beginning and continued doing so until she went down on 15 Mar 1943. At the time of the Pearl Harbor attack, *Triton* was on patrol off Wake Island. In her fighting struggle to help defend Wake, *Triton* had the distinction of being the first Pacific Fleet submarine to make a torpedo attack during WW II.

In the spring of 1942, *Triton*, during one patrol, struck at the enemy on 11 different occasions. She sank two sampans by gunfire, a Japanese submarine with one torpedo during a daylight submerged attack, torpedoed a cargo ship and two passenger-cargo ships — seven ships in 11 tries.

Triton **did a bang-up job of celebrating the 4th of July in 1942 when she sank a Japanese destroyer to become the first U.S. submarine to sink an enemy ship during the Aleutians campaign.**

In mid-December 1942, *Triton* was assigned a new type mission — that of air-

craft control and life saving — the first of many such missions by submarines which accounted for saving more than 500 Allied aviators before war's end.

Triton **covered a lot of territory and contributed much during her short, three-year career with SubPac. A veteran of the war's very beginning when she first encountered enemy forces off Wake, she sank a total of 11 ships — 31,788 tons of Japanese shipping — before she went down fighting against three Japanese DDs.**

The SSR(N) 586 like the earlier *Triton* and all other submarines, is named after fish or other forms of marine life. Triton is a marine snail having a stout spiral shell that is usually very colorful. In Greek mythology, Triton was a sea demigod with the lower portion of his body being fish-like. Triton's special attribute was a trumpet made of a marine snail shell, which he blew when he wanted to raise or calm the waves.

So by nature and mythology, it is fitting that the Navy's first nuclear powered radar picket submarine is named *Triton*. Like the snail triton, the SSR(N) 586 will roam the seas with its antennae "feeling" for any dangers that may approach and like the demigod Triton, the radar picket sub will be an added means of controlling the seas.

the provisions of Federal Employees Compensation death benefits, while others had limited VA benefits. The survivors of Regular Navy and Naval Reserve personnel who died under the same circumstances on active duty previously had been eligible for varying amounts of death compensation.

The new legislation corrects this shortcoming by increasing death compensation benefits to be administered by the VA, and further, the law is applicable to all active duty service personnel, regardless whether regular or Reserve, with payments based on the income level of the serviceman at the time of death.

Here are examples of the benefits payable under the new Servicemen's and Veterans' Survivor Benefit Act in comparison with those offered by old laws.

The following figures are based on a PO2 with 10 years' service in the regular Navy. He is survived by a 28-year old widow and two children, ages 4 and 7. At the time of death, the amount of the PO2's monthly pay and allowances was $341. Of that, $211 was base pay. (The provisions of the new law apply to all personnel on active duty.)

		UNDER THE OLD LAW		UNDER THE NEW LAW
		Wartime	Peacetime	
(a) For the	Indemnity	92.90	92.90	——
first ten	Compensation	150.00	120.00	138.00
years	Social Security	128.00	128.00	156.60
	Total Each Month	$370.90	$340.90	$294.60
(b) Until	Indemnity	——	——	——
older child	Compensation	150.00	120.00	138.00
becomes age	Social Security	128.00	128.00	156.60
18	Total Each Month	$278.00	$248.00	$294.60
(c) Until	Compensation	121.00	96.80	138.00
younger child	Social Security	105.80	105.80	117.40
becomes age 18	Total Each Month	$226.80	$202.60	$255.40
(d) Until	Compensation	87.00	69.60	138.00
widow reaches	Social Security	——	——	——
age 62	Total Each Month	$ 87.00	$ 69.60	$138.00
(e) After	Compensation	87.00	69.60	138.00
age 62, for	Social Security	52.90	52.90	58.70
life	Total Each Month	$139.90	$122.50	$196.70

The following example is based on a LT, USN with ten years' active service. He is survived by a 28-year old widow and three children, ages 2, 4, and 7. At time of death pay and allowances were $587 per month, of which $437 was basic pay.

		UNDER THE OLD LAW		UNDER THE NEW LAW
		Wartime	Peacetime	
(a) For the	Indemnity	92.00	92.90	——
first ten	Compensation	179.00	143.20	165.00
years	Social Security	128.00	128.00	200.00
	Total Each Month	$399.90	$364.10	$365.00
(b) Until	Compensation	179.00	143.20	165.00
oldest child	Social Security	128.00	128.00	200.00
becomes age 18	Total Each Month	$307.00	$271.20	$365.00
(c) Until	Compensation	150.00	120.00	165.00
next oldest	Social Security	128.00	128.00	200.00
child becomes age 18	Total Each Month	$278.00	$248.00	$365.00
(d) Until	Compensation	121.00	96.80	165.00
youngest	Social Security	105.80	105.80	162.80
child becomes age 18	Total Each Month	$226.80	$202.60	$327.80
(e) Until	Compensation	87.00	69.60	165.00
widow is	Social Security	——	——	——
age 62	Total Each Month	$ 87.00	$ 69.60	$165.00
(f) After age	Compensation	87.00	69.60	165.00
62	Social Security	52.90	52.90	81.40
	Total Each Month	$139.90	$122.50	$246.40

• ***Options Offered***—The new bill gives survivors of deceased military personnel whose deaths were service-connected and who are now on VA rolls, the option of electing to receive the benefits under old laws or those benefits provided under the new legislation—whichever is to their greatest advantage.

Those survivors who now receive higher benefits than the new law offers may continue to receive the higher benefits until they run out. In such cases the widow may then elect the benefits of P.L. 881 and receive benefits under the new law which are more advantageous.

As an example, a widow now drawing $92.90 indemnity and $69.60 death compensation—a total of $162.50 per month—would receive that amount only for ten years following her husband's death. At that time, under old laws, her total monthly payments would drop to $69.60. By electing at the end of the 10-year period to receive the benefits of the new bill, her monthly compensation would be increased to at least $122 per month but not more than $266 per month, depending upon her husband's basic pay at the time of his death.

If a widow is now receiving free indemnity payments and VA compensation under old laws and the combined total of both benefits is lower than what she would receive under the new law, she may surrender her present indemnity payments ($92.90) and receive the new "dependency and indemnity compensation" offered by the new law. The widows of servicemen whose deaths were service connected and are receiving $10,000 insurance payments under NSLI and USGLI (not "indemnity") do not have to sacrifice such payments in order to elect the benefits of the new act.

It is significant to note that in no case will the survivors of career service personnel lose any money under the new bill. The new law provides substantial increases for the vast majority of survivors now receiving VA death compensation and permits everyone the option of continuing to

receive present benefits or to receive the benefits of the new bill.

Thus, for an example, the widow of a CPO, or of any rank or rate for that matter, now receiving only $69.60 or $87.00 monthly death compensation under old laws, may elect the benefits of the new bill which provide her with at least $122 or more, depending upon the husband's rank or rate, from this source alone.

Here are a few more points of interest provided for in the new bill.

- The new legislation permits the Treasury Department to continue its present authority to levy on compensation for delinquent taxes. (This provides that the government can hold up any money due a person for the payment of federal income taxes, or other indebtedness due the government.)
- In addition, the new law permits military service to be counted for either Social Security old age benefits OR Civil Service retirement, but NOT both.
- One of the law's biggest advantages is that of cutting red tape. The new law repeals all present survivor benefit laws for active duty servicemen and wraps them all into a one-package bill. Hereafter, one application, being prepared jointly by the Secretary of Health, Education and Welfare (who administers Social Security payments) and the Administrator of Veterans' Affairs, will be used for applying for both VA death compensation and Social Security benefits offered by the Servicemen's and Veterans' Survivor Benefit Act.

SecNav Appoints 273 Enlisted Men to Naval Academy

The Secretary of the Navy has appointed 273 enlisted men from the Regular Navy, Naval Reserve, Marine Corps and Marine Corps Reserve to the U. S. Naval Academy as part of the Class of 1960.

All appointees on full-time active duty and 20 members of the Reserve components successfully completed a six-month course at the Naval Preparatory School at Bainbridge, Md.

Appointments by the Secretary of the Navy are based upon relative standing in the Naval Academy scholastic examinations given in March. Of the new midshipmen, 127 were selected from the Regular Navy and Marine Corps and 147 were selected from the Reserve components.

This program of selecting highly qualified EMs for possible appointment to the Naval Academy is a year-to-year deal. If you think you are eligible and can qualify for next year's program, check now with your personnel officer.

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

The latest list of 16-mm. feature motion pictures available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each movie is followed by the program number. Films in color are indicated by (C) and those in wide-screen processes, by (WS). Distribution began in July.

Movies distributed under the Fleet Motion Picture Plan are leased from the motion picture industry and are distributed free to ships and most overseas activities. These films are paid for by the BuPers Central Recreation Fund (derived from non-appropriated funds out of profits by Navy Exchanges and ship's stores) supplemented by annually appropriated funds. The Chief of Naval Personnel administers this program.

Prince of Players (564) (C) (WS): Biographical Drama; Richard Burton, Maggie McNamara.

All-Navy Cartoon Contest
G. C. Vliet, PNA3, USNR

"You realize of course that you're out of uniform."

The Prodigal (565) (C): Biblical Drama; Lana Turner, Edmund Purdom.

The Broken Star (566): Adventure; Howard Duff, Lita Baron.

Let's Make Up (567): Musical; Errol Flynn, Anna Neagle.

Jubal (568) (C): Action Drama; Glen Ford, Ernest Borgnine.

Broken Lance (569) (C) (WS): Western Drama; Spencer Tracy, Richard Widmark.

The Magnificent Matador (570) (C): Drama; Anthony Quinn, Maureen O'Hara.

Outside the Law (571): Drama; Ray Danton, Leigh Snowden.

Come Next Spring (572) (C): Drama; Ann Sheridan, Steve Cochran.

Diane (573) (C): Costume Drama; Lana Turner, Pedro Armendariz.

Violent Saturday (574) (C) (WS): Crime Drama; Victor Mature, Sylvia Sydney.

Slightly Scarlet (575) (C): Drama; John Payne, Rhonda Fleming.

Shadow of the Eagle (576): Costume Drama; Richard Greene, Valentina Cortesa.

Blackjack Ketchum, Desperado (577): Western Drama; Howard Duff, Victor Jory.

Patterns (578): Drama; Van Heflin, Everett Sloane.

The Racers (579) (C) (WS): Adventure Drama; Kirk Douglas, Bella Darvi.

Great Day in the Morning (580) (C): Drama; Virginia Mayo, Robert Stack.

Backlash (581) (C): Western Drama; Richard Widmark, Donna Reed.

Crime in the Streets (582): Drama; James Whitmore, Sal Mineo.

The Bold and the Brave (583): Drama; Wendell Corey, Mickey Rooney.

Untamed (584) (C) (WS): Drama; Tyrone Power, Susan Hayward.

The Birds and the Bees (585) (C): Comedy Drama; George Gobel, Mitzi Gaynor.

Quincannon, Frontier Scout (586): Adventure Drama; Tony Martin, Peggie Castle.

Dig That Uranium (587): Comedy; Leo Gorcey, Huntz Hall.

Goodbye My Lady (588): Drama; Walter Brennan, Brandon DeWilde.

Dependent Medicare At Service, Civilian Hospitals Is Okayed

AN IMPROVED PROGRAM of medical care for your dependents has been passed by Congress and signed into law (Public Law 569, 84th Congress). The new law, like the revised survivor's benefit program (see page 46), is designed to improve morale throughout the uniformed services by providing better medical care for the dependents of servicemen.

To accomplish this purpose the new law:

- Recognizes by statute the importance of this traditional benefit and the entitlement of service members and their dependents to medical care, while establishing a uniform level of medical care which may be provided dependents.
- Requires the establishment of a system for providing medical care through civilian medical facilities for those spouses and children of active duty personnel who do not have access to service medical facilities.
- Continues the practice of providing medical care to dependents and retired personnel at service medical facilities, while permitting dependents and retired personnel of all the uniformed services to obtain available medical care at any medical facility of the Army, Navy, Air Force, or Public Health Service.
- Permits retired personnel to obtain dental care at facilities of the uniformed services.
- Provides other benefits, such as hospitalization of Army and Air Force retired enlisted members without charge for subsistence (a benefit already available to retired enlisted Navymen), and hospitalization of dependents in excess of one year in unusual cases.

Navy instructions for putting the new Dependents' Medical Care Act into effect are still being written, therefore all details of the program's operation are not yet settled; however, the law provides that the program become effective in early December. Below you will find a rundown on the major points of the newest benefits available to your dependents if you—and they—meet the requirements set forth by the new law.

Who Is Eligible? Lawful dependents of the following categories of personnel are eligible for benefits of the new program: (1) personnel on active duty for a period of 30 days or more; (2) personnel on the retired list who are eligible for receipt of retired pay, *except* those Reserves retired with pay who have had less than eight years of active duty; and (3) lawful dependents of personnel who died on active duty or who died while on the retired list as indicated above.

The term "lawful dependents" is defined by PL 569 to include:

1. The lawful wife (or the lawful husband if in fact he is dependent upon the member or retired member for support);
2. Unremarried widow and dependent children of deceased members whose death occurred on active duty or while in a retired status (or unremarried widower if in fact dependent for over half of his support because of a mental or physical incapacity);
3. Children under 21, unmarried, including adopted or stepchildren, and children over 21 if incompetent or physically incapacitated, or children under 23 enrolled in a full-time course of study in an institution of higher learning approved by the Secretary of Defense or the Secretary of the Department of Health, Education and Welfare;
4. Parents and parents-in-law, if

WAY BACK WHEN

Hoisting Navy's First American Flag

On 13 Oct 1775 Congress, prodded by the doughty John Adams and spurred by the desperate situation of General Washington, voted to fit out ships "with all possible despatch." This was the legislative birth of the permanent Continental Navy, although individual colonies had vessels before this date. (Rhode Island, for example, authorized two sloops to be fitted out on 15 Jun 1775, and "Washington's Fleet" was already in existence—see ALL HANDS October 1956 p. 59).

The appointment of a Naval Committee on this day in October and the appropriation of $100,000 by Congress on 2 November, paved the way for the nucleus of what would one day become the most powerful naval force in the world.

The colonies, already battling on the land, needed a sizable fleet of warships as quickly as possible to protect them against attacks by the mighty British Royal Navy.

Within two months, the Naval Committee managed to fit out eight vessels. *Alfred* was designated to be the flagship of this new Navy.

The raising of the colors aboard *Alfred*, a salty Indiaman formerly known as the *Black Prince*, is recorded as follows:

"Since Captain Dudley Saltonstall was still absent from Philadelphia, the honor of raising the flag aboard *Alfred* fell to John Paul Jones (second in command). *The exact date is not known, but it was* probably 3 Dec 1775, when he rowed out to *Alfred* with the new American flag in his hands.

The flag that John Paul Jones hoisted aboard *Alfred* was 'a Union flag with thirteen stripes in the field emblematical of the Thirteen United Colonies.' In the upper left corner, however, it retained the *crosses of St. George and St. Andrew* as a sort of last, lingering tie to the mother country.

"George Washington is said to have raised a similar flag a few days later in Boston, but the flag hoisted by John Paul Jones was the Mark 1 original with the thirteen red and white stripes—the first American flag.

"The sailors stood at attention, the Marines on the quarterdeck fired a salute, one of *Alfred*'s guns boomed and the red and white stripes fluttered in the wind above the icy water. A crowd massed on shore gave a resounding cheer. The American Navy was launched."

As John Paul Jones later described it: "I hoisted with my own hands the flag of freedom the first time it was displayed, on board *Alfred* in the Delaware."

in fact dependent for over one-half of their support and residing in household of member or retired member.

What Is Available? Under the Dependents' Medical Care Act medical services available to dependents at facilities of the uniformed services will include diagnosis, care for acute medical and surgical conditions, care for contagious diseases, immunizations, maternity and infant care, emergency dental care in the United States and regular dental care outside the continental U. S. In addition, hospitalization not to exceed 12 months or treatments may be provided in special and unusual cases for dependents with nervous or mental disorders or chronic diseases.

Hospitalization will not be available to dependents for domiciliary care, for usual nervous and mental disorders, chronic diseases, or elective medical and surgical treatment.

Other services for which dependents will not be eligible include ambulance service (except in acute emergency); home calls (except in special cases where it is determined to be medically necessary); prosthetic devices, hearing aids, orthopedic footwear, and spectacles, except that outside the U. S. and at remote stations inside the U. S. where such are not commercially available, they may be bought at invoice cost from government, if available.

Payment for hopitalization in service facilities will continue to be a per diem charge of $1.75 per day. It should be noted, however, that the new law allows for setting up uniform minimal charges for outpatient care whenever a special finding determines that such charges are necessary to restrain excessive demands upon service medical facilities.

Wives and children of personnel on active duty may also be allowed to use civilian medical facilities at government expense if service medical facilities are not available or (with certain limitations) in areas where both military and civilian facilities are available. The care which may be provided in civilian medical facilities is generally the same as that available from medical facilities of the uniformed services, except for normal outpatient care. The new law does, however, authorize the Secretary of Defense to allow civilian medical facilities to perform some services frequently considered out-

patient care. For example, this could include surgery to be performed in a physician's office, or X-rays or laboratory tests to be taken in clinics or laboratories other than in hospitals.

Public Law 569 specifically lists the following services which will be available through civilian facilities to the wives and children of active duty personnel:

- Hospitalization in semi-private accommodations up to three hundred and sixty-five days for each admission, including all necessary services and supplies furnished by hospital during inpatient confinement;
- Medical and surgical care incident to a period of hospitalization;
- Complete obstetrical and maternity service, including prenatal and postnatal care;
- Required services of a physician or surgeon prior to and following hospitalization for a bodily injury or for a surgical operation;
- Diagnostic test and procedures, including laboratory and X-ray examinations, accomplished or recommended by a physician incident to hospitalization.

For each admission to a civilian hospital under the Dependents Medical Care Act, the patient will be charged whichever of the following sums is larger: $25; or a sum equal to $1.75 per diem multiplied by number of days hospitalized.

13-Button Trousers Are Here to Stay

By popular demand, "the better fitting—more Navy-looking" 13-button, broadfall-front trouser will replace the zipper pants—now part of the official blue uniform for enlisted men in pay grade E-6 and below.

The decision to restore the 13-button trousers was based upon a recommendation of the Naval Uniform Board as the result of a recent survey conducted throughout the Fleet.

The tight-fitting, broadfront trousers were abandoned in 1948, when the Navy began issuing zippered pants with slash and back pockets. Since 1948, either type has been regulation.

Initial Clothing Allowances Revised for Enlisted Personnel

Fiscal 1957 rates for initial clothing monetary allowances have been revised for enlisted men and women.

For the period 1 Jul 1956 through 30 Sep 1956 enlisted men receive an initial allowance of $163.35; on and after 1 October, however, the allowance will be $171.85.

Enlisted men will continue to be paid their initial clothing allowance in two increments. The first increment remains $4.75, with the balance of the applicable rate becoming the second increment. (The above figures do not apply to personnel who revert to enlisted status from NavCad and OCS training.)

The initial clothing allowance effective for enlisted women during fiscal 1957 is $204.60 when black and white dress pumps are obtained from clothing and small stores stock; $211.20 when only the black pumps are obtained from C&SS; $211.85 when only the white pumps are obtained from C&SS; and $218.45 when neither white nor black dress pumps are obtained from clothing and small stores.

Enlisted women will receive their initial clothing monetary allowance in either two or three increments, with a first increment of $48.40, second increment of $156.20 and a third increment of the applicable amount at present prescribed.

A final change listed in Alnav 28 (12 Jul 1956) affects only enlisted men assigned to duty as members of the U. S. Navy Band or the Naval Academy Band. In lieu of the present $80 supplemental clothing allowance for band uniforms, members of the two bands will receive uniforms as items of organizational issue. The *Navy Comptroller Manual* will be revised to reflect the above changes.

Autumn in Paris? Navy Families Go for This Duty Year 'Round

NOT EVERYONE CAN PULL DUTY in Paris but you can always dream, can't you? To give some substance to your dreams, here's a rundown on living conditions which is specifically slanted to Paris. However, much of the information is also applicable to other parts of France and, in some instances, to adjacent parts of Europe.

Entry of Dependents — Upon receipt in the Bureau of Naval Personnel of the application for transportation for dependents, the necessary forms and authorization for dependents to make application for official passports, when required, will be forwarded to the dependents.

Orders — Be sure you have enough copies of your orders to cover all overseas shipments. You'll need a minimum of 25 copies with you since copies are required for transportation and billeting en route to your duty station.

Housing — Private homes can be obtained from time to time in the suburbs starting at average rentals of $140 per month, plus utilities and heating (utilities run as high as $30 a month). Such houses are rented furnished. Generally speaking, they are not modern according to our standards. Tenants have difficulty keeping the utilities in order and holding servants who prefer to be in town. Transportation is a problem and a car is practically a necessity, even though there is a good rail service to many of the suburbs.

Apartments — In most cases, apartments are rented furnished. In one case, it might mean four or five rooms containing only the bare essentials, and in another it might easily describe the interior of an antique shop, with pictures, bric-a-brac and objects d'art. Prices for furnished family apartments are from $150 a month and up with utilities extra. Many apartments are available only for short periods from three to six months. Renting on a monthly basis is the most convenient arrangement, of course, though in many instances landlords demand payments from three to six months in advance.

If the apartment is obtained through an agent, there are sometimes fees ranging from 50% of one months's rent to 10% of the annual rent. Most apartments have no garage facilities, and tenants are, therefore, obliged either to park outdoors or rent a garage at a cost of approximately 3,000 to 5,000 francs a month (350 francs equal $1.00).

Heating—When purchased through the Embassy, coal averages $40-$48 a ton for anthracite. Gas heat costs slightly less than coal. Central heating, when provided, is normally turned on between 15 October and 1 November and, regardless of the weather, is turned off on or about 15 April. Bath water is heated by a central hot water system or individual units in bathrooms. In houses, the use of from six to ten tons of coal during the fall and winter months is common.

Hotels — Generally, hotel rates in Paris vary according to the season, with the higher summer rates in effect between 15 March and 15 November. Most hotels in Paris provide only hotel service, and range in price from about 1,500 francs a day (350 francs = $1.00) to just about any price you are willing and able to pay.

Servants — After permanent quarters are obtained, it is usually possible to locate servants. Maids are paid about $35 monthly when living in or about 45 cents by the hour. Nursemaids are paid from $40 to $50 depending on their experience, languages, etc. Most people find a maid much more of a necessity here than in the U. S. because of inconvenient kitchens, old homes, involved shopping problem, etc.

Household Effects—These, if shipped concurrently, will reach Paris about two to three months after your arrival and can be stored in Paris at U. S. Government expense for a period up to six months.

Don't bring a stove. You may find a place with a two-burner gas plate or a place with gas, electric, wood, and coal stoves all packed into one kitchen. Wait until you see where you are going to live, and then plan to supplement your facilities with items which best fit in with that particular arrangement.

If you have any small heaters that do not draw too much current, bring them. Otherwise, you can get good ones, both electric and kerosene, at the PX and in the local market. French houses and apartments are usually not heated to the degree to which Americans are accustomed.

Resale of household goods, before departure from France, is subject to French customs tariff. An inventory of household goods by serial number will be made for the French customs when you enter France and upon departure you must account for all items sold in that country.

Electrical Appliances: Sixty cycle household appliances will function satisfactorily on the local fifty cycle current with the exception of phonograph turntables, wire recorders, electric automatic coffee pots, and electric clocks. Special adapters for some of these appliances can be bought in the States for about $1.00 and are not available on the local market. It is well to remember that the efficiency of a 60 cycle appliance is somewhat reduced when operating on 50 cycles. It is recommended that all motor-driven equipment such as refrigerators, washing machines, etc., have a 50-60 cycle motor. Automatic washing machines do not work well but non-automatic machines are very useful. Bring your vacuum cleaner

QUIZ AWEIGH ANSWERS
QUIZ AWEIGH IS ON PAGE 9

1. (b) USS *Mississippi.*
2. (a) 1917.
3. (c) X-1.
4. (b) One officer and four men.
5. (a) USS *Glacier.*
6. (b) Ram through the obstruction by power from her engines.

"Hit him? I can't even see him!"

too (as well as a carpet sweeper).

Blankets: Bring your own, but new ones are obtainable through PX or mail order.

China and Cooking Utensils: Bring your own. Available in all price ranges at local department stores. Limited patterns of china are available at the PX. Table silver is rarely furnished so it's suggested you bring that also. Bring your own coffee pots, or new ones can be purchased at the PX. Spare parts and replacements for specific American models are available through mail order only. Most automatic electric pots work unsatisfactorily.

Furniture: Store most of it. Unfurnished apartments in Paris are rare. However, end tables and small chests of drawers are very useful as there are never enough in French furnished apartments or houses. Your favorite easy chair and occasional chairs will be assets. French houses and apartments usually have plenty of pictures and mirrors, but seldom a full-length mirror.

Lights: American light bulbs will not fit French sockets, which are of the bayonet type. Bring only light bulbs that will be used in your own American lamps. Replacements are available in the PX. Fluorescent tubes are available on the French market, but in general, their lengths are different from American tubes.

Electrical Kitchen Equipment: Bring what you have. Toasters, and mixers of French manufacture are available on the French market at very high prices; all are available at the PX.

Phonographs: Bring your own, but don't forget to check your distributor for adapting it to run on 50 cycles. Infrequent and limited supply at the PX, but they can be obtained through mail order. Bring your records.

Radio: Bring it. Portable and table models sometimes available at the PX. Shortwave is necessary to pick up U.S. broadcasts. *Television:* American sets will not operate in France without costly modifications. Practically no Americans in Paris have bothered with TV.

Refrigerators and Deep Freezers: Bring a refrigerator with a large freezing compartment. Deep freezers can be used, but are not essential. However, if you don't already possess these items, you may prefer to buy your refrigerator over there at the PX, after determining your requirements.

Transformers (electrical): Don't buy until you determine your needs. You can buy them in the PX and on French market. They are necessary for some appliances.

Clothing – Generally you will wear the same type of clothing in Paris that you would wear in any metropolitan American city. Warmer clothing is required in the winter because of fuel cost and lack of adequate central heating. The darker shades of clothing are predominant.

Dry cleaning, pressing and dyeing facilities are available although both dry cleaning and laundry are not completely satisfactory and rather expensive.

Women's Clothing: Bring all your clothes, particularly for cold weather wear. There is no middle ground for shopping in Paris as is found in many department stores and shops in the States. Clothing for adults is generally custom made although the ready-to-wear clothing is becoming less scarce and not so highly priced as formerly. An average simple ready-made wool dress would cost about $50, and having the same dress made, with material from the Post Exchange, would cost about $35. A ready-made suit would cost about $70 and up.

A heavy wool coat (or a three-quarter or full-length fur coat) is a necessity. A raincoat is a must and you will find the medium-to-heavy weight the most practical. Bring your bathing suits, too.

Hats, blouses and purses, available at French specialty shops, are beautiful but frequently expensive. PX does have hats, blouses, suits, dresses, purses, stockings, gloves and underwear. Sizes, quality and style are, of course, limited.

Shoes: Bring all the shoes you will need during your tour over here or make arrangements to send to the States for them, particularly if you have a narrow foot. French shoes are expensive and generally do not fit American feet.

Children's Clothing: There is a fairly good supply of clothes for teen-age boys and girls. If your children belong to the Scouts bring all items of their uniforms. Bring a good supply of baby and younger children's clothing and make arrangements to send to your favorite store for additional needs. Limited amounts available at the PX. Children's ready-made clothing in French market is generally higher but very attractive.

Men's Clothing: Suits or sport jackets, with shirt and tie are worn at the office. Civilian shirts, ties, socks, sweaters, gloves, slacks and sport jackets, plus suits and overcoats are stocked in PX. There is also a uniform shop which stocks all necessary items. Military personnel wear civilian clothes except when visiting French Army installations, U. S. Army installations in Germany, or on certain other special occasions.

Food – The commissaries in France are well-stocked with standard canned goods, baby food, coffee, sugar, flour, freshly baked bread, fresh pasteurized milk, cream and

SONGS OF THE SEA

The Fisherman's Daughter

I've been caught in a net by a dear little pet,
And her eyes are as blue as the rolling sea,
She's a fisherman's daughter, she lives o'er the water,
She's going to be married next Sunday to me.
She's as rare as the salmon, there's really no gammon
As sweet as shrimps newly served up for tea,
My soul she has caught and a place I have bought,
Where a ray of bright sunshine forever will be.

—USN

cottage cheese, butter, and eggs.

The commissaries also have cigarettes, tobacco, toothpaste, a few cosmetics and toilet articles. Fresh frozen fruits and vegetables, meat and fish are also sold.

Local stores stock almost all food items which could be obtained in the States at about the same prices. There are, however, no supermarkets.

Restaurants: Paris is world-renowned for its superlative food and abounds in restaurants ranging from the quaint to the elegant. Most of the French eating places uphold the reputation for serving excellent food and wines.

Automobiles — Don't make a special effort to bring a new car with you, but do make sure your car is in good condition before leaving the States. You will find that repairs are very expensive and time-consuming here, and the required parts are sometimes difficult to locate. European cars are available in all sizes, but the smaller ones offer economy of operation and upkeep together with a comparatively low initial cost.

Registration plates are necessary and can be obtained on a special basis, valid during the period you are in France. Bring your Stateside title and registration with you. You will need European-type liability insurance, which will cost more than U. S.-type insurance (about double), before you are permitted to drive your car from the port where it arrives.

Gasoline can be obtained, provided minimum insurance requirements are met, by registering the vehicle with the Provost Marshal, Seine Area Command, Paris. The price is approximately 28 cents per gallon.

Transportation in Paris — Taxis are reasonable and plentiful (except during rush hours) during the day. A tip of approximately 15 per cent should be added to the meter reading. At night, taxi rates double.

Metro (subway) and bus services in Paris are excellent and very reasonable, but extremely crowded during rush hours. The metro runs until 0030 and buses operate until 2100.

Education — The Army operates a dependents' school in Paris, grades 1 through 12. New school buildings were opened in September 1954. There is no tuition charge to children of service personnel. Bus service is provided within a 19-mile radius, without charge. The vast majority of children attend this school.

There is a private school, the American Community School, operating under the supervision of a board of prominent Americans and including all grades through high school. There is also the Denny School, which is English, open to any English-speaking pupils, either as day or boarding students.

It is possible for children to attend French public schools in the community in which they live. There is no tuition fee. Tuition fees are charged in most French private schools.

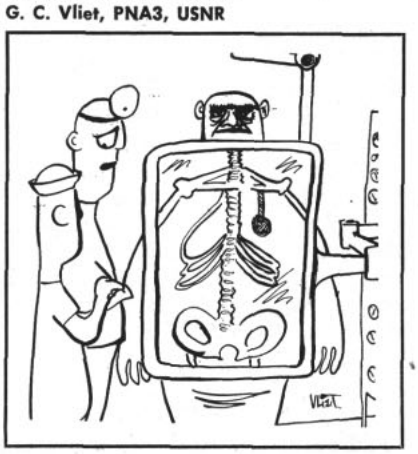
Paris is famous for its universities and colleges, and excellent courses in most subjects are given though almost always at an advanced level, since basic instruction in any subject is left to the secondary schools.

Medical and Dental Facilities — The U. S. Army Hospital in Paris is at present providing medical service at the hospital for all U. S. military personnel and their dependents.

The Army Dental Clinic is at the same location as the U. S. Army Hospital. Examinations for military personnel and their dependents are given daily, except Saturdays and Sundays, at both the hospital and dental clinic.

Civilian dental care is above average, and there is a considerable number of American-trained French dentists. Their fees, however, are high.

All-Navy Cartoon Contest
G. C. Vliet, PNA3, USNR



"He's a bos'n's mate I presume?"

Religion — All general denominations are represented and at least one weekly service in English is conducted.

Recreation — There are clubs in Paris to suit every purpose, and social and outdoor life can be enjoyed about the same as in any large city in the States. Recreation facilities for adults and children are adequate. Although there are no lakes of any size nearby, there are both indoor and outdoor swimming pools for summer and winter recreation. Various sporting clubs in the suburbs offer tennis and golf. Horseback riding may be enjoyed in the Bois de Boulogne, a famous park located between the suburbs of Neuilly and Auteuil. All sports equipment may be purchased in Paris, but those who have such equipment as tennis rackets, golf clubs, ice skates, etc., should bring them. Sports attire may be purchased, although it is more expensive than in the States.

Paris has a world-renowned opera, innumerable theaters where excellent plays and concerts may be heard, nearly all in the French language, and moving picture houses showing American and European films. There are enough art museums, galleries, restaurants and night clubs to keep one completely occupied for the entire tour of duty.

Short trips may be made to the Atlantic or English Channel coasts, about 125 miles from Paris and to such resorts as Deauville and La Baule, 280 miles southwest of Paris. Other trips may be made through the Chateau country of the Loire Valley, to the Riviera or French Alps, or to Belgium, Spain, Germany and other countries in Western Europe. There is excellent rail transportation and many trips can be made over the week end.

Bicycles are a widely used form of transportation and recreation in Paris, and are very useful for children and grownups alike, especially in the suburbs. If your child owns one, bring it along, but don't buy one to bring. The children usually prefer the light-weight European models which are available here. A good idea is to bring along saddle bags for books. In France, these are about double the U. S. price.

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. 22—Announced approval by the Secretary of the Navy of the reports of promotion boards which recommended officers of the Navy and Naval Reserve to the grades of captain, commander, lieutenant commander and lieutenant in the Medical Corps and Dental Corps.

No. 23—Concerned unfilled requisitions at supply activities on 30 June.

No. 24—Announced approval by the Secretary of the Navy of the report of a selection board which recommended Regular Navy warrant officers for promotion to the grade of Chief Warrant Officer.

No. 25—Authorized the incurring of certain obligations pending signing of the Department of Defense Appropriation Bill for fiscal year 1957.

No. 26—Quoted letter from the Secretary of the Navy to president of line selection board considering promotion of captains to temporary rank of rear admiral.

No. 27—Announced approval of Department of Defense Appropriation Act of 1957.

No. 28 — Announced certain changes in initial clothing monetary allowances for enlisted personnel.

No. 29—Announced the convening of line selection boards to consider men on the active list of the Regular Navy and Naval Reserve (except TARs) to the grades of captain and commander.

No. 30—Announced approval by the President of the report of a selection board which recommended Regular Navy line officers for temporary promotion to grade of RADM.

No. 31—Announced approval by the President of the report of a selection board which recommended officers for temporary promotion to the grade of major general in the Regular Marine Corps.

No. 32—Emphasized that Public Law 538 (84th Congress) which authorized shipment of privately owned vehicles in commercial U. S. vessels does not increase the number of Navy facilities intended to handle such vehicles.

No. 33—Concerned the lump sum readjustment payment for members of the Naval and Marine Corps Reserve involuntarily released from active duty.

Instructions

No. 1020.6C—Promulgates clothing allowances for Naval Aviation Cadets and Naval Aviation Officer Candidates.

No. 1050—Concerned sick leave for active duty Navy and Naval Reserve patients in Army and Air Force hospitals.

No. 1520.15C—Promulgates the eligibility requirements and procedures for officers to request postgraduate education for courses of instruction convening in fiscal year 1958.

No. 1520.49—Authorizes the issuance of diplomas or certificates of satisfactory completion of courses of instruction to Navy officer faculty members.

No. 1533.40—Establishes a procedure for assigning identification numbers to students enrolled in Regular and Contract NROTC programs.

No. 1550.25—Calls attention to action necessary to down-grade the publication *Naval Weapons Supplement* to Unclassified.

No. 1626.10A—Restates amplifying instructions relative to the administration of offenses involving unauthorized absence of enlisted personnel.

No. 3740.1—Sets forth the procedure regarding restoration of authority to pilot naval aircraft to former naval aviators.

Notices

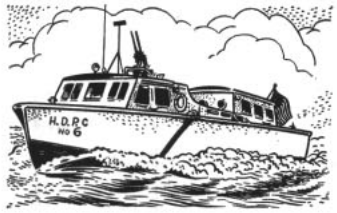
No. 1306 (13 June)—Announced change No. 2 to BuPers Inst. 1306.22B, which is concerned with the assignment of enlisted personnel to duty as instructors.

No. 1120 (14 June)—Announced changes in a number of Instructions

HERE'S YOUR NAVY

Atomic subs, guided missile cruisers and giant aircraft carriers take the limelight but today's Navy still has, and always will have, a place for its nameless and even sometimes numberless vast fleet of small boats.

Typical are "The Guardians of Yokosuka Harbor"—12 harbor defense



patrol boats—responsible for the security of all ships present at the U.S. Fleet Activities, Yokosuka, Japan.

Although the threat of sabotage is slight, these 45-footers maintain around-the-clock patrol and are always on guard against such possibilities. In addition to keeping un-

authorized personnel and all types of boats outside the waters under Navy's jurisdiction, they also warn small craft operating in the area of expected rough water and high winds in advance of the small craft warning flag being hoisted.

Manned by a coxswain, engineer, line handler and Japanese interpreter, these "guardians" . . . equipped with a two-way radio, twin .50 caliber

machine gun, first aid kit, fire extinguisher and life-saving gear . . . are prepared for any emergency they may encounter.

The guardian role of these patrol boats is now two-fold. They are being utilized for training personnel of the Japanese Maritime Self-Defense Force in the science of small-boat-handling, engineering, gunnery and anti-submarine warfare.

in the 1120 series in order to require the submission of the Enlisted Evaluation Report (NavPers 1339) instead of the present Chief and Petty Officer First Class Evaluation Sheet (NavPers 1339).

No. 1085 (19 June)—Furnished information on the availablity and effective date of NavPers 760 for certain ratings.

No. 1611 (19 June)—Announced Change No. 1 to BuPers Inst. 1611.6, which is concerned with instructions and procedures regarding Naval Aviator Disposition Boards.

No. 1743 (20 June)—Concerned the observance of Jewish High Holy Days to be celebrated in September.

No. 1306 (20 June)—Requested verification of the instructors data furnished by Report BuPers 1306-3 and advises of the forthcoming change in the preparation of Instructor Reports.

No. 1710 (21 June)—Announced the 1956 National Rifle and Pistol Championships to be held at Camp Perry, Ohio, 14 Aug—8 Sep 1956.

No. 1430 (22 June)—Provided information concerning submission of certified copies of service record pages for change of status to CPO, permanent appointment.

No. 5321 (26 June)—Announced Change No. 1 to BuPers Inst. 5321.1A, which is concerned with the preparation and submission of the Roster of Officers (Form NavPers 353).

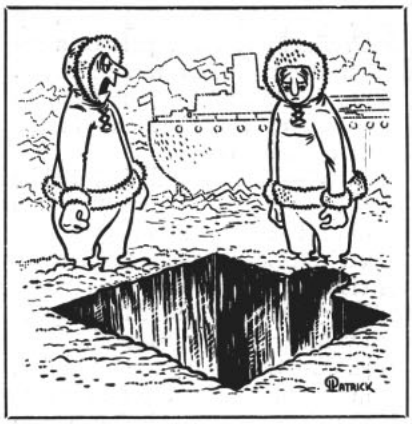
No. 1410 (3 July)—Provided information concerning interim qualifications required for Fire Control Technician L (Integrated Systems) FTL3.

Navy Reports Results on Polio Vaccine in Epidemic

The Navy's Surgeon General has announced that it is relatively safe to administer Salk vaccine to both children and adults during an outbreak of poliomyelitis.

This conclusion was reached after an analysis was made on a "crash" program conducted last fall. At that time 80 per cent of the Hawaii-based married naval personnel and their dependents were given the vaccine during an epidemic.

Approximately 21,000 Navymen and dependent women and children were given the Salk vaccine during the emergency immunization program. Because of the short duration of the epidemic—which ended about 30 days after the Navy began the vaccinations—it was not possible to obtain conclusive proof as to the effectiveness of the vaccine in prevention of poliomyelitis, although the results were strongly suggestive of this.



"I told him not to use his electric blanket!"

There was no evidence that the vaccine had caused paralysis to occur among those who possibly were infected with the virus at the time they received the immunization.

A careful analysis was made to learn if giving the vaccine under the conditions of a rapid spread of poliomyelitis among these families had any harmful effects. No evidence of this could be found. An equal percentage of vaccinated and unvaccinated cases developed paralysis during the early days of the program, but the vaccinated cases seemed less severe.

Administering the vaccine did much to boost morale of the Navy families based in Hawaii as most of them were familiar with previous outbreaks on the Island.

Radioman 'B' School Graduates First Class at Bainbridge

The Navy's first class of the new Radioman "B" School at Bainbridge, Md., has been graduated and Marvin H. Suttman, RMC, USN, has the distinction of being its honorman.

Suttman, who was recently selected for promotion to warrant officer (W-1), is currently preparing for his new officer duties and added responsibilities by attending the Electronics Maintenance School at Great Lakes, Ill.

"The Navy's Radioman 'B' School," according to its OIC LCDR C. E. Preble, USN, "in spite of its small beginning, will make the Navy radiomen of today and tomorrow better and more versatile performers."

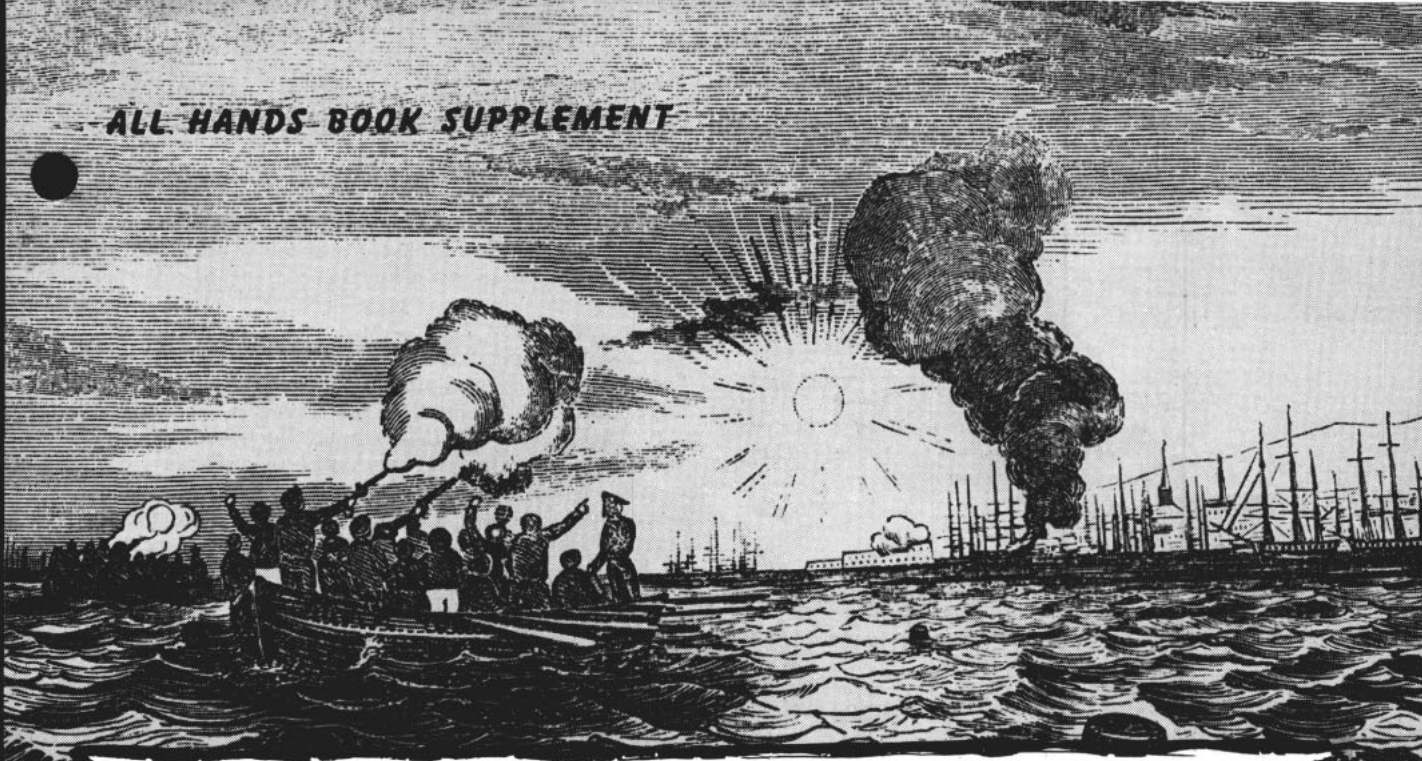
During its 30-week term, the course is divided into two phases. The first 16 weeks are devoted to giving the radioman a thorough knowledge of basic electricity and electronics, with the remainder of the course being devoted to practical experience. The second phase includes "trouble shooting" and repair of representative types of communications equipment.

Training covers transmitters, receivers, UHF equipment, special circuits, keyers—converters and associated teletype and facsimile equipment, and operation and maintenance of communications systems.

The communications phase of the school covers combined communications systems; task force organization communications, security, message preparation, frequency allocation, distress communications, movement report systems, weather reporting and practical work in a communications system mock-up room.

Sounds interesting, and by now you must be wondering how you can attend this school. To qualify, you must be an RM2 or higher; be a graduate of Class A Radioman School or have equivalent training, be in your second or subsequent enlistment, and have 24 months of obligated service when you enter.

If you meet these requirements and are interested in attending the Class B Radioman School, you should submit a request to your Fleet commander. If you're on shore duty, then you should submit your request via normal channels, to the Chief of Naval Personnel (Attn. Pers B2133).



"I Sailed With John Paul Jones"

DIARY OF EZRA GREEN (1746-1847)
Serving on board the Continental Ship-of-War *Ranger*, under command of Captain John Paul Jones, from 1 November 1777 to 27 September 1778

Captain John Paul Jones was an early exponent of the strategy of taking the offensive against enemy seaports and ships. In Ranger, *Jones had a ship which (although it was not the man-o'-war that he had hoped for) enabled him to put some of his ideas into action.*

Ranger *had been built at Langdon's Island, Portsmouth Harbor, in 1777. John Paul Jones received command of the ship on 18 June that same year. Fitting the frigate and preparing for her mission was no easy task.*

For example, the following extracts from John Paul Jones' letter to the Marine Committee, dated 29 Oct 1777, two days before sailing, give a lively idea of the difficulties he had to contend with, and the proverty in resources available to the youthful American Navy.

"With all my industry I could not get a single suit of sails completed until the 20th current. Since that time winds and weather have laid me under the necessity of continuing in port. At this time it blows a very heavy gale from the northeast. This ship with difficulty rides it out, with yards and topmasts struck and whole cables ahead. When it clears up I expect the wind from the northwest, and shall not fail to embrace it, although I have not now a spare sail nor materials to make one. Some of these I have made of hissing. I never before had such disagreeable service to perform, as that which I have now accomplished and of which another will claim me credit as well as the profit. However, in doing my utmost, I am sensible that I have done no more than my duty."

Thus imperfectly equipped, having a very good crew, but "only thirty gallons of rum," as Jones laments, for them to drink on the passage, Ranger *sailed from Portsmouth on 1 Nov 1777; the date that this diary begins.*

John Paul Jones

What was the mission assigned to the man-o'-wars-man? The Commissioners wrote to John Paul Jones: "After equipping the Ranger *in the best manner for the cruise you propose, [proceed] with her in the manner you shall judge best for distressing the enemies of the United States, by sea or otherwise, consistent with laws of war and the terms of your commission."*

How well Captain Jones succeeded in his assignment to "distress the enemies" is indicated by the man who sailed with him and whose diary is quoted here, Ezra Green, ship's physician.

"A few words may be necessary in respect to the Diary of my father, Dr. Ezra Green, which I am quite

"I Sailed With John Paul Jones"

sure he never suspected would appear in print before the public eye." This was a prefatory note to the diary written by Walter C. Green, son of the man who sailed with John Paul Jones.

"When quite a lad I was, out of curiosity, rummaging over an upper chamber closet, where in promiscuous order were odd volumes—school books, speeches, sermons, etc — when this unpretentious pamphlet turned up in marbled paper-cover. All the particulars of it I had heard my father frequently recount, and hence did not at that early age appreciate its value. . . . This Diary [later] came under the eye of Commodore George Henry Preble, who requested my permission for its publication in the Historical and Genealogical Register, together with such facts as he might gather of my father's public life during five years' service as surgeon in the Army and Navy during the American Revolution. To this request I gave my willing assent." (Boston, 16 Nov 1874)

PORTSMOUTH ROAD, Nov. 1st, 1777, Saturday.—Between the hours of 8 & 9 this morning weigh'd anchor and proceeded to Sea with a moderate breeze, before night lost sight of the American shore.

SUNDAY, Nov. 2nd.—A very fine morning and a favorable wind, all well on board—except some few who are a little Seasick.

FRIDAY, Nov. 7th.—A strong gale at Northwest which carrys us 10 Knots.

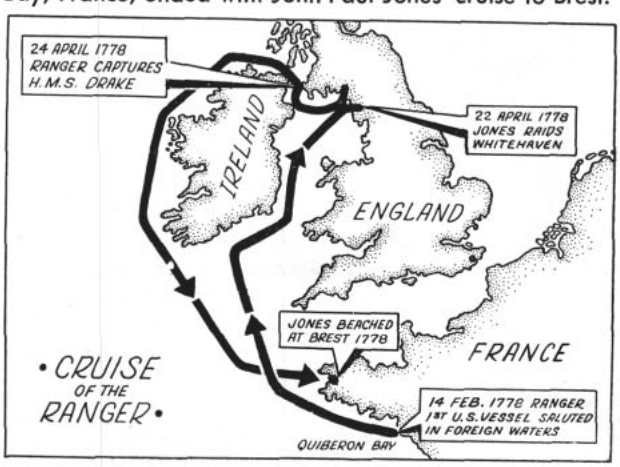
THURSDAY, Nov. 13th.—About seven this morning saw a sail on our lee Bow distant about 2 Leagues, gave chase and spoke her about 12 O'clock, a Brig From Carolina bound for Bordeaux with several Tory Passengers on Board, among whom were Hartley the organist & his wife.

FRIDAY, Nov. 14th.—This Morning at 5 o'clock came up a severe Thunder Storm from the Southwest.

SATURDAY, 15th.—Last evening came on a gale of wind which increased till about 3 this morning when it began to abate, in the height of the gale a sail was seen under our lee Quartet, hove to till she came up, a Schooner from St. Peters bound to Bordeaux.

SUNDAY, 16th.—A fresh Breeze, and high Sea from the late gale. About 10 o'clock our tiller Rope broke by which we were in Danger of the Ship's broaching to.

CHART shows Ranger's path which began at Quiberon Bay, France, ended with John Paul Jones' cruise to Brest.



WEDNESDAY, 19th.—About six this morning saw a Sail under our lee Quarter, gave Chase or rather bore away till we came within about a mile of Her. Found Her to be a large ship standing our course, clewed up our Courses and hawl'd Our wind—got ready for action she standing on her course close to the wind, wore ship when it was too late, continued the chase till night and lost her.

SATURDAY, Nov. 22nd.—At nine o'clock this morning saw a Sail on our weather Beam—little wind; One of Our People fell from the Chains but was saved by a Rope's End Handed Him.

SUNDAY, Nov. 23rd.—Early in the morning saw a Sail supposed to be the same we saw yesterday, came up with and made a Prize of—about 8 o'clock—a Brig laden with fruit and wine from Malaga bound to Yarmouth, Riches Comr.—She is called the *Mary*—there are no less than six sail in sight at this time.

WEDNESDAY, 26th.—Early in the morning gave chase to a Brig under our lee Bow, but were obliged to give over Chase on seeing a very large Ship to windward with several other Sail in Company who appeared to be standing athwart us, about 2 she hove to with a Fleet of 13 Sail of Ships & Brigs at 2 Leagues Distance, clewed up Our Courses & stopp'd our Ship's way expecting every minute when she would come down upon us; about 4 she stood on her Course, we made sail close to the wind with a design to cut off a Brig which could not keep up with the Convoy, lost her in the night.

SATURDAY, 29th.—A very heavy gale, hove to at night in the Bay of Biscay 60 Leagues distant from land.

SUNDAY, 30th.—Fine weather and a strong wind in the night hove to and sounded in 80 Fathom water.

TUESDAY, Dec. 2nd.—Ran in for the Land with a fine moderate Breeze, narrowly escap'd running on a Sand through want of a Pilot and arrived all in good Spirits at Peanbeauf on the River Loire and came to anchor in the evening.

FRIDAY, Dec. 5th.—the Prize Brig *Mary* arrived here safe—Went to Nantes with Capt. Simpson arriv'd at 9 in the Evening this is a very considerable City distant ten leagues from Penbeauf am told there are 12 Parishes in Nantes in one of which are 30,000 Souls.

SATURDAY, Dec. 6th.—Went to the Tragedy but it was to me in an unknown Tongue, was not much pleased or entertained, how ever the Musick was good.

SUNDAY, Dec. 7th.—Returned to Peanbeauf and on board the *Ranger*.

FRIDAY, 13 Feb.—Set sail for Quiberon Bay M. Williams & Brothers on board, in company with us Brig *Independence*, anchored in the Bay about six in the Evening 4 Ships of the line besides Frigates in the Bay.

SATURDAY, 14 Feb.—Very Squally weather came to Sail 4 o'clock P.M. Saluted the French Admiral & rec'd nine guns in return. This is the first salute ever pay'd the American flagg. [1778]

SUNDAY, 15th Feb'y.—Brig *Independence* saluted the French Flagg which was returned.

WEDNESDAY, 25th Feb'y.—Fleet got underway and left us at anchor Contrary to Expectations, about 12 o'clock it being very windy we came to sail, ran out of the Bay without a Pilot, attempted to the Northward of Belisle, but did not succeed, put back hoping to run into the Bay again, but could not weather the Rocks. In the

From *Diary of Dr. Ezra Green, 1746-1847*. Reprinted, with additions, from the *Historical and Genealogical Register* for January and April 1875. Printed privately by David Clapp & Son, Printers, Boston, 1875.

midst of our Trouble having narrowly escap'd over setting the Ship were alarm'd with the cry of Fire—after all our endeavors to procure a Pilot were in vain, & night coming on, bore away and ran out to the Leeward of the Island, very squally still.

THURSDAY, 26.—Arrived in Quiberon Bay again this Evening after a short but very tedious & unprofitable Cruise.

TUESDAY, March 3rd.—Weigh'd anchor and came to Sail in fine weather & smooth Water, sail'd along the Coast about 25 Leagues and came to anchor in a small Bay near a small village called Benodett, had a curious adventure with a French Pilot who came on Board to pilot and Ship but would not be compell'd to take charge of her.

THURSDAY, March 5th.—Went with Joseph Ratcliff to Pontlably and procured good lodgings for him, supposing the Eruption (which came out last night) to be small Pox—we were treated with great respect as we were Americans, were waited on near half a mile to the Boat and on parting gave them 3 cheers which was answered with "vive Le Congres."

AT BREST, Tuesday, March 10th.—Last night eight of our people took the Cutter and went on shore and ran off leaving the Boat on the Rocks.

SUNDAY, 15th.—I had the pleasure of entertaining the Commisaries Lady & two Sisters on Board the *Ranger*.

WEDNESDAY, 18th.—Last night died after a lingering illness for more than three weeks Willm. Reading. His remains were decently interr'd about 11 o'clock A.M.—P.M. the Ladies came to pay Capt. Jones a visit as he was absent when they pay'd us the first Visit.

MONDAY, 23rd March.—Got under way and ran up to Brest; saluted the Admiral, rec'd the news of Lt. Stormont's Having left Paris on receiving a copy of the Treaty with America.

THURSDAY, 2nd April.—Got up anchor, pay'd the French Flag another Salute rec'd 11 for 13—One of our Seamen narrowly escap'd drowning; when the Ship was coming to sail, was turned off from the Sprit sail Yard. The Ship went over Him, but He was luckily taken up by the Man who was in the Cutter which was vear'd astern. Arriv'd at Camaritt about 5 O'clock P.M.

FRIDAY, 3rd April.—Our Ship being laid on Shore for cleaning I went with our Pilot & Lt Wallingsford to take a view of the New Fort which is building on an Eminence at the distance of three miles from Camaritt.

SUNDAY, 5 April.—Attempted to get out to sea with the *Fortuna* of 36 guns but were oblig'd to return to Brest.

WEDNESDAY, 8th.—Made a second attempt to get out & fail'd.

On the 10th of April Captain John Paul Jones sailed out of Brest Harbor headed for the British coast. In a period of less than a month he was to make a commando attack on British soil to set fire to shipping at Whitehaven. Later he was to land on St. Mary's Isle with the intent of capturing a friend of the King of England to hold as hostage; and during the rest of the time he was capturing or sinking British shipping, including the mighty Drake. *The brief, almost off-hand, remarks in Ezra Green's diary tell part of the story.*

FRIDAY, 10th.—About 5 O'clock P.M. came to Sail in Company with the Frigate *Fortuna*—were detained by the Cutter which was sent after Santo Camaritt.

SATURDAY, 12th.—Fine weather but no Convoy to be seen. About 10 in the morning saw a sail to windward which prov'd, quite contrary to our fears, to be the *Fortuna*—we were all ready for action when she came alongside of us.

MONDAY, 14th.—Our Convoy left us sooner than Capt. Jones Expected which He resented but could not prevent.

TUESDAY, 15th April.—Early in the morning saw a Brig under our Lee Bow, about 8 O'clock spoke her: from Ostend to Galway laden with Flaxseed. Took the People their Baggage & c. on board, scuttled, and left Her. [*This ship was captured and sunk in the area between Scilly and Cape Clear.*]

WEDNESDAY, 16th.—Made some part of Ireland in the morning suppos'd to be the high land of Dungarvin.

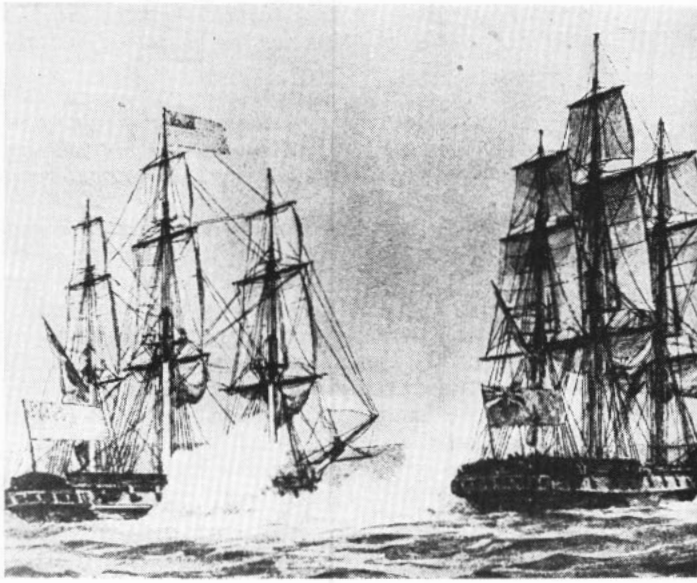
THURSDAY, 17th.—Saw a ship in the afternoon under our Lee bow, at Sun's setting spoke Her—a Ship of about 350 Tons from London for Dublin laden with Hemp, Iron, Porter & c. Ordered her to Brest. [*This ship was* Lord Chatham, *and after her capture was manned by men from Captain Jones' crew to sail her to the French port.*]

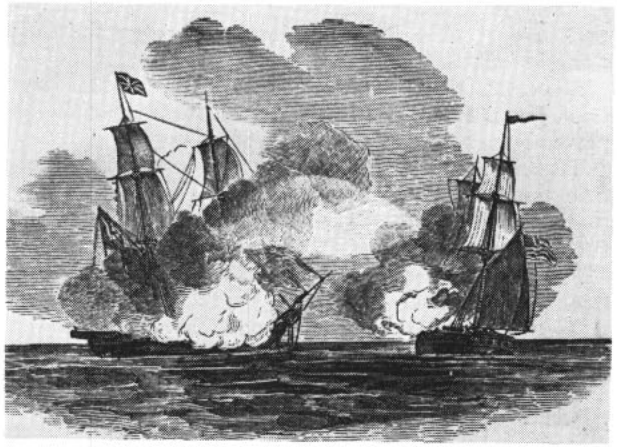
SATURDAY, 19th.—Made a warm attempt to take a Cutter mounting 8 Guns. She slipped through Our Fingers. Had the Captain have permitted the Marines to fire on them when they first came under our Lee Quarter might have taken Her with great Ease.

SUNDAY, 20th.—In the morning near the Isle of Man sunk a Schooner laden with the Barley & Oats about 60 tons burthen from some part of Scotland. In Evening sunk a Sloop in ballast from Ireland.

MONDAY, 21st.—Bore down for Belfast Lock, took a fishing Boat with 4 men in sight of a Ship at anchor. They informed us that she was a Man of War of 20 guns [*Drake*]; we made sail and stood off about an Hour, when the Capt ordered the ship to be put about in order to go in and cut her out, but the wind blowing fresh and the people unwilling to undertake it we stood off and on till midnight when the people consenting and the wind having lulled a little we stood into the River but it being somewhat Dark did not drop our Anchor so as to lay her along side, therefore were oblig'd to cut and run out, which we were very lucky in effecting.

RANGER AND DRAKE exchange volleys. Drake's capture added greatly to growing reputation of John Paul Jones.





POWER of new US Navy was realized when *Ranger* harried the coast of England and took many prizes.

John Paul Jones, in his official report later on the meeting with the British man-of-war Drake, *stated: "I determined to attack her in the night. My plan was to overlay her cable, and to fall upon her bow, so as to have all her decks open and exposed to our musquetry, & c. At the same time, it was my intention to have secured the enemy by grapplings, so that, had they cut their cables, they would not thereby have attained an advantage." However, his plans were delayed by the weather.*

TUESDAY, 22nd.—Stood off and on all Day with a design to make another Trial if the wind lull'd at night. There being no signs of more moderate weather, wore ship and stood back towards Galway Mull—Our people very much fatigued.

Not a man to waste precious time and ready to take the advantage of every opportunity, Captain Jones postponed his encounter with Drake *for another equally daring venture—a landing ashore and an attack on shipping.*

WEDNESDAY, 23rd.—Weather somewhat more moderate & Our people a little recruited, Our enterprising Capt. with about 30 men went on shore about 11 P.M. with a Design to fire the Town of Whitehaven.

This is from John Paul Jones' report: "When we reached the outer pier (of Whitehead) the day began to dawn. I would not, however, abandon my enterprise, but despatched one boat . . . with the necessary combustibles to set fire to the shipping on the north side of the harbour.

"I went with the other party to attempt the south side.

"I was successful in scaling the walls and spiking up all the cannon on the first fort. Finding the sentinels shut up in the guard-house, they were secured without being hurt.

"Having fixed sentinels, I now took with me one man only, (Mr. Green) and spiked up all the cannon on the southern fort, distant from the other a quarter of a mile."

THURSDAY, 24th.—After watching the night and all the morning till broad day light in expectation of seeing the smoke of the Town and Shipping (ascend as the smoke of a furnace) began to fear that Our People had fallen into the Enemies Hands; however about half an hour after sun rise we discovered two small Boats at a great Distance coming out of the River's mouth, and clouds of smoke arising from the Shipping.

The boat sent to the north had run into difficulties and the candles carried by Captain Jones' party to start fires had burnt out. Day was "coming on apace," but Captain Jones could still make this report: "A light was obtained at a house disjoined from the town, and fire was kindled in the steerage of a large ship, which was surrounded by at least an hundred and fifty others, chiefly from two to four hundred tons, and lying side by side, aground, unsurrounded by the water. . . .

"I should have kindled fires in other places if the time had permitted; as it did not, our care was to prevent the one kindled from being easily extinguished. . . .

"The inhabitants began to appear in thousands and individuals ran hastily towards us."

Soon after we saw them fire on the Boats from the shipping, soon after we saw them fire on the Boats from the Shore, but most of the Cannon being spiked up by our People they could do but very little. The Boats were soon out of their Reach and came along-side with 3 prisoners for one left behind.

After firing the shipping at Whitehaven, Captain Jones and his crew immediately turned to another expedition ashore, this time, for the purpose of capturing as hostage Lord Selkirk, a friend of the King of England.

The same Day crossed over to the other side of the Bay to the Mull of Galway. Capt. Jones with Lt. Wallingsford and about 12 men went on shore at St. Mary's Isle with design to take Ld. Selkirk Prisoner. As he was not at Home and no man in the House, for the sake of his Lady & her Company they came off without doing any further Damage than plundering Him of plate to the amount of (as near as I can judge) 160 lb. weight of Silver.

Always a gentleman, Captain Jones later apologized to Lady Selkirk in a famous letter which explained that his plans to capture her husband were to make him the instrument whereby the Americans could obtain a "general and fair exchange of Prisoners." He also promised to purchase with money out of his own pocket the silver that had been distributed to his crew and to return it to Lady Selkirk at the first opportunity.

The crew of Ranger *was now ready to take on* HMS Drake.

FRIDAY, 24th.—Early in the morning our Capt. proposed making a second attempt to cut out the Ship in Caracfergus, which was now within a small Distance. The People, both officers & men, discover'd great unwillingness to make the attempt. Capt. Jones notwithstanding declared publickly his determination to go in. In short it seemed impossible to avoid it for the Tide & what little wind there was, had imperceptibly carry'd us in so far that there was very little chance of an Escape, and now which was about sun-rise we saw the Ship with Her Sails loos'd and had nothing to do but to get ready for Action. Our People at the same time discovering the greatest readiness to engage Her. When she [the Sloop of War *Drake*] came out at 11 almost Calm. About 12 Saw a Boat coming from the Ship which we Decoy'd and took on board a Midshipman & 5 Men; there being a light Breeze of Wind & understanding by the People from the Ship that she was coming Out to us; clung our wind and stood out under easy sail till 4 O'clock, P.M. & hove to for Her. She came up about 6 and hailed. After the usual Compliments were pass'd we wore Ship and gave her a whole broad side, without receiving a Shot: the Action continued till 5 minutes after seven, very warm, her two Commanding officers, being the one Capt. Burdon killed & the other Lt. Dobbs mortally wounded and about 20 of Her Men disabled and the Ships Rigging Sails & c. Very much damaged, they were

obliged to give her up by the wave of the Hat & a call for Quarters for, having the Second Time cut away their Ensign staff, they had no Colours to Strike.

The action between Ranger *and* Drake *lasted, according to Captain Jones' account, an "hour and five minutes, when the enemy called for quarters." For an interesting account of the sea battle and other exploits of the naval hero, see the Book supplement in* ALL HANDS, *June 1952, page 59, entitled "John Paul Jones: Gentleman-Commando."*

SATURDAY, 25th.—Very pleasant and almost calm a fine opportunity for repairing and fitting for Sea. From on board the *Drake* buried the Remains of Capt. Burdon with the Honors of War. Spoke a Brig from White Haven of about 300 Tons commanded by Capt. More. Put a Prize Master and Hands on Board Her. At 12 were not far from the place of action. About 2 O'clock P. M. having a light Breeze sent away the Fishing Boat's crew with a present of Money 17 Guineas and the *Drake's* Main Sail & M. Top Sail. In the evening committed the body of Lt. Wallingsford to the deep with Honours due to so brave an Officer.

MONDAY, 4th May.—Died of his wounds and the same day were decently buried the remains of Nathl. Wells, of Portsmouth, America.

THURSDAY, May 7th.—Arrived at Brest with the Ship *Drake* in Company.

MAY 9th, Saturday.—Sent on shore to the Hospital Pierce Powers, James Falls & Thos. Taylor from the *Ranger*. At the same time sent from the *Drake* 13 Prisoners.

SUNDAY, 10th May.—Arrived here the Prize Brig *Patience*.

FRIDAY, 29 May.—Drew a petition in behalf of my good Friend Simpson now in gaol in Brest which was sign'd by Lt. Hall, Mr. Cullam and myself & sent on shore to the office in order to go to the Commissioners at Paris.

THURSDAY, 18th June.—Rec'd news of an Engagement between a French & English Frigate not far from Morleaux. The French Frig. was ordered out to Adml. Byron to speak, she refus'd to obey, therefore were fired on by the Eng.—the action began about half past 4 on the afternoon of yesterday and continued 5 hours, though the Eng. Struck they were prevented bringing her off by Adml Byron's Squadron 12 Sail of the Line besides Frigates.

THURSDAY, 2nd July.—Had the company of Col Frazier and Mr. Pringle to Dine, afternoon went with them and Lt. Simpson & Hall on board the *Britaigne* and were treated with the greatest civility & respect from all on board.

FRIDAY, 3rd July.—This day arrived a Schooner called the *Spy* from New London with Dispatches from Congress.

SATURDAY, July 4th.—This being the Anniversary of American Independence, was observed as such. Our Ship was dressed 13 guns discharg'd at 10 O'clock; at undressing 13 more; on drinking the Duke de Chartre's Health 9 guns were fired; a number of Patriotic Toast were drunk; and universal Joy was diffused throughout the Whole Ship's company.

FRIDAY, July 10th.—This Day the *Lively* Ship of war was brought into this harbour. On her refusing to comply with the commands of Capt. of the Frigate by which she was taken, she received a broadside from the cannon & the fire from the Swivels & musketry both from below and aloft, which was returned by 3 guns when she struck. Her loss was about 20 kill'd & 40 wounded most of whom are since dead.

FRIDAY, July 7.—This day was brought in here the prize Cutter *Alert* of 12 guns the same which took the *Lexington* Brig of 14 guns Johnson Commr. She was taken by a Frigate.

SUNDAY, 28 June.—Last were brought in here Two Cutters from Guernsea taken by Frigate *Snow*.

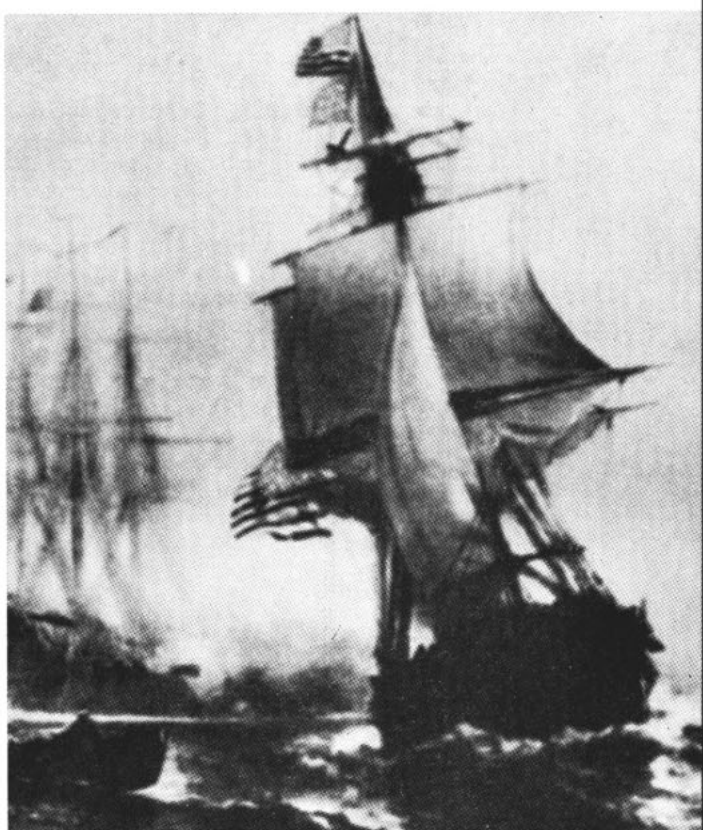
WEDNESDAY, July 22.—Rec'd the news of C. De Astangs arrival in Boston.

On the 27th of July, Captain Jones turned over Ranger *to Lieutenant Thomas Simpson who came on board with orders to take command.*

This change of commanders was at Jones' request made on the 4th of July. He wrote to the Commissioners at Paris: "When Congress thought proper to order me to France it was proposed that the Ranger *should remain under my direction . . . as the French ministry have now in contemplation plans which promise honor to the American Flag, the* Ranger *might be very useful in carrying them into execution . . . I will with your approbation . . . leave [Lieutenant Simpson] the command of the* Ranger. *By this means, and by some little promotions and attentions, I hope to be able to satisfy the* Ranger's *crew, so that they will postpone their return as long as the service may require."*

Ezra Green's diary continues, covering the movements of Ranger, *which returned safe in America. Green was to survive the war and live well into the middle of the nineteenth century.* Ranger *continued under command of Lieut. Simpson (for whom Captain Jones had little liking) until she was destroyed at Charleston. John Paul Jones himself had by this time already accomplished feats which were to establish his lasting reputation in naval annals.*

FIRST SALUTE ever paid by a foreign power to the American flag came from the French on 14 Feb. 1778.



TAFFRAIL TALK

THE REST OF THE NAVY can have its jet propulsion and nuclear power. The U. S. Naval Home, Philadelphia, Pa., will still go along with "Dexter," reported to be the only horse in the Navy. His keeper is believed to be the only Civil Service employee left with the classification of "stable-keeper and driver."

Dexter is 23 years old with an estimated useful life of two more years. His keeper is 68 and must also retire in two more years.

Back in 1954, the Inspector General of the Fourth Naval District scented out the presence of Dexter and his keeper during his annual inspection. As a result, consideration was given to the advisability of disposing of Dexter and eliminating the stable-keeper's position for reasons of economy.

Investigation revealed, however, that the horse renders important services around the grounds by hauling trash, debris, etc. The keeper performs additional light labor.

Furthermore, Dexter is considered a pet by the old sailors who live at the home. They feed him sugar and apples and frequently make him a topic of conversation. Thus, Dexter contributes to the morale of the residents of the home. Since the mission of the home is to make the residents comfortable and happy, it is felt that Dexter contributes to that mission, too.

Nevertheless, there was still the factor of economy to consider. The investigators found that during one year the total expense of the horse's upkeep came to $271.50. The stable-keeper's pay was $1.39 per hour. If his job were eliminated it would be necessary to hire a laborer at the higher salary of $1.46 per hour. Still, the cost of the new laborer, as compared to the cost of Dexter and his keeper, would have meant an estimated savings of $124 per year.

There was one more factor to be considered—the cost of a truck to haul trash and debris if Dexter were put out to pasture. That clinched it. The investigators decided Dexter's retention was justified on economic grounds and recommended that horse and keeper be retained until they reach retirement age.

Today the residents of the Naval Home are still plying Dexter with apples and sugar, and the horse, the keeper and the old sailors are all happy about the arrangement.

So is the the Inspector General.—CAPT J. R. McCormick, USN, Inspector General, Fourth Naval District.

★ ★ ★

As an item in your ever-hear-of collection—ever hear of the LST that was an aircraft carrier? The records show that USS *LST 525* actually did serve as an aircraft carrier during World War II. Fitted with a plywood flight deck, she carried 10 Piper Cubs and their Army pilots, and operated off the west coast of France in 1945.

The All Hands Staff

The United States Navy

Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and 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 keynotes 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.

ALL HANDS the Bureau of Naval Personnel Information Bulletin, with approval of the Bureau of the Budget on 23 June 1955, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information only and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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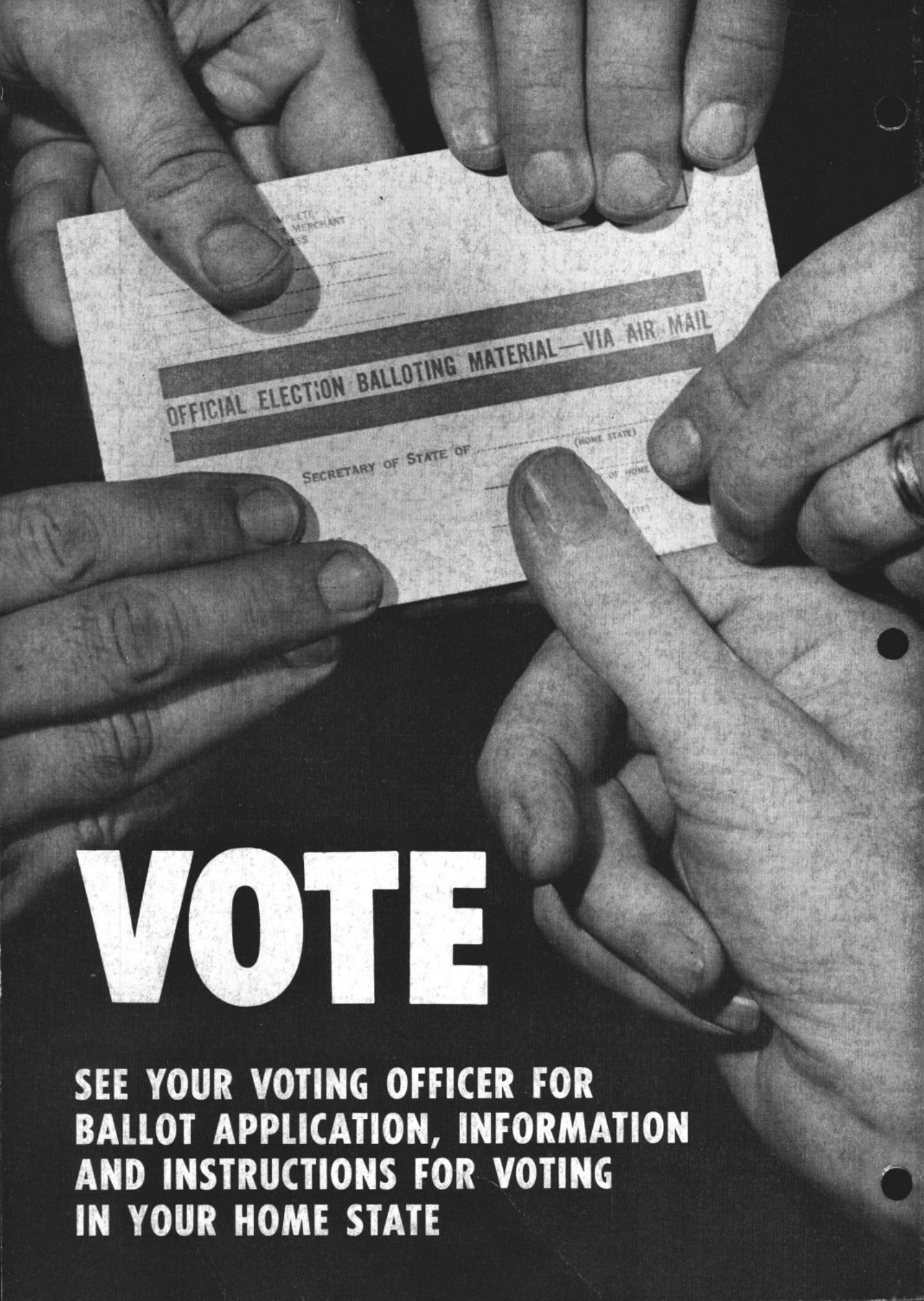
• **AT RIGHT: MORNING COLORS are raised at stern of USS *Markab* (AD 21) as she is made ready to rest alongside DDs she tended that are now part of the Reserve Fleet at Charleston.**


D 21



VOTE

SEE YOUR VOTING OFFICER FOR BALLOT APPLICATION, INFORMATION AND INSTRUCTIONS FOR VOTING IN YOUR HOME STATE