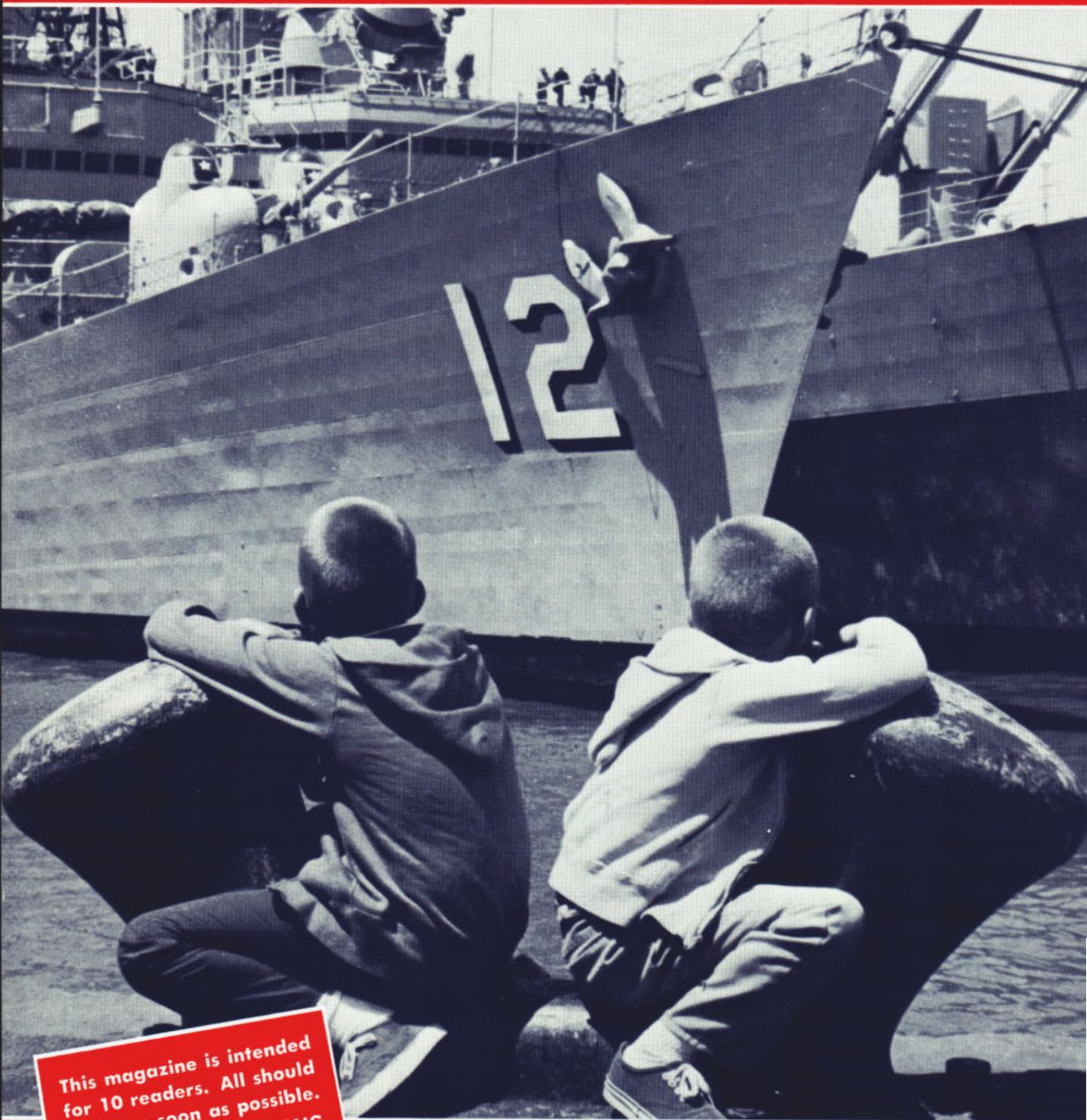


★ ALL HANDS ★

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION



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for 10 readers. All should
see it as soon as possible.
PASS THIS COPY ALONG

OCTOBER 1968





ALL HANDS

THE BUREAU OF NAVAL PERSONNEL CAREER PUBLICATION

OCTOBER 1968

Nav-Pers-O

NUMBER 621

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ALL HANDS

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John A. Oudine, **Editor**

Associate Editors

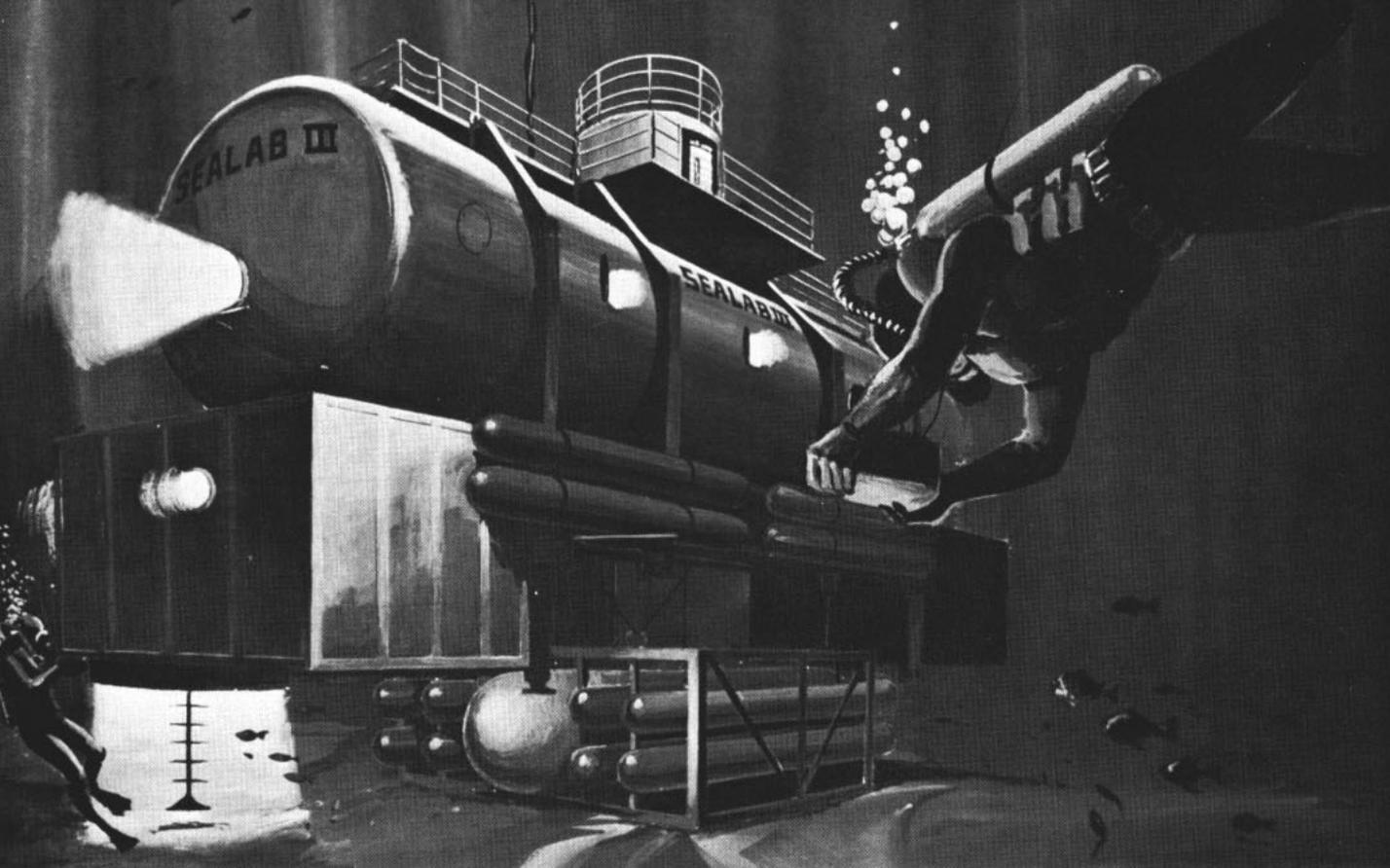
G. Vern Blasdell, **News**
Don Addor, **Layout & Art**
Ann Hanabury, **Research**
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• **FRONT COVER:** TOMORROW'S NAVY—Two boys admire guided missile destroyer USS Robinson (DDG 12) as she moors at pier 39 in San Francisco. Perhaps they are dreaming of the day when they might set to sea.

• **AT LEFT:** AT THE HELM—Quartermaster Douglas White stands the helmsman watch aboard the nuclear powered guided missile cruiser USS Long Beach (CGN 9).—Photo by LT Skiff, USN.

• **CREDIT:** All photographs published in ALL HANDS Magazine are official Department of Defense photos unless otherwise designated.





LIVING IT UP BELOW—Artist's sketch shows aquanauts at work in vicinity of Sealab III at a depth of 600 feet.

Way Down Yonder in

MAN LIVING and working in the sea for long periods of time smacks more of science fiction than of reality. Nevertheless, he has done exactly that, and largely because of the Navy's Man-in-the-Sea Program.

The basic reason behind the whole project is the need for longer underwater work periods.

A Navy diver using hard-hat equipment, for example, can work for no more than half an hour at about 400 feet. Before he can be exposed to surface pressure, he must undergo three tedious hours of decompression.

Although the situation couldn't be helped, the Navy was rather like the harassed boss whose employees took their 30-minute work break in the middle of a three-hour coffee period.

When scuba gear was developed, man was freed from his cumbersome hard-hat gear but not without some sacrifices. He could dive and work only in relatively shallow depths and his underwater time was limited to the capacity of his air tanks.

Captain George F. Bond, (MC),

USN, made a tremendous breakthrough while he was working on Project Genesis between 1957 and 1963.

Experiments first with animals and later with humans, breathing inert gases under pressure, demonstrated that gases such as helium and nitrogen saturate man's tissues and equalize with the atmosphere around him.

Captain Bond concluded that, once this saturation point is reached, man can remain underwater indefinitely and the decompression time needed upon ascending would be essentially the same as after a short dive.

THIS THEORY enabled the American inventor Edwin Link and scuba expert Jacques Yves-Cousteau of France to adopt a new approach to experiments in underwater living. The theory was also the kicker which led to the U. S. Navy's Sealab I experiment.

Sealab I enabled four Navy divers to live for 11 days in a steel habitat 40 feet long and 10 feet in diameter.

It was submerged in 192 feet of water near Bermuda.

It must be admitted that Sealab I was rather primitive. It was a structure fabricated from two floats which originally supported mine destruction gear.

Comparatively unsophisticated though it was, this underwater home-laboratory was completely self-contained except for its electricity. This came from a generator in a support ship moored above the habitat.

The occupants of the underwater dwelling observed their aquatic neighbors through two 12-inch portholes. The men entered through two manholes in the bottom of the chamber. Since the pressure inside the habitat was the same as that outside, no intermediate locks were necessary.

While the divers were below, they occupied themselves with house-keeping tasks, inspected a Texas Tower for underwater fouling and deterioration, photographed their neighborhood, made sound record-

ings of their neighbors, gathered biological samples and did some geological work.

They also experimented with the use of power tools, tested experimental instruments and did heavy work like pouring concrete.

MORE IMPORTANT perhaps, than any of its accomplishments, Sealab I pointed out weaknesses to man's safety in the sea, especially in life support and communications systems. Working from the known to the unknown, the Navy made plans for Sealab II which was conducted off the California coast near La Jolla at a depth of 205 feet.

This time, three teams each consisting of 10 aquanauts lived underwater for 15 days each. Two of the divers served two tours. One was CDR Scott Carpenter who was on leave from NASA and the other was a physician, LT Robert Sonnenburg.

While Sealab I took place in the warm clear waters off Bermuda, Sealab II was conducted in a dark, cold site. More men took part in the ex-

Sealab III

periment and they lived for longer periods at a greater depth in an environment that was far from ideal.

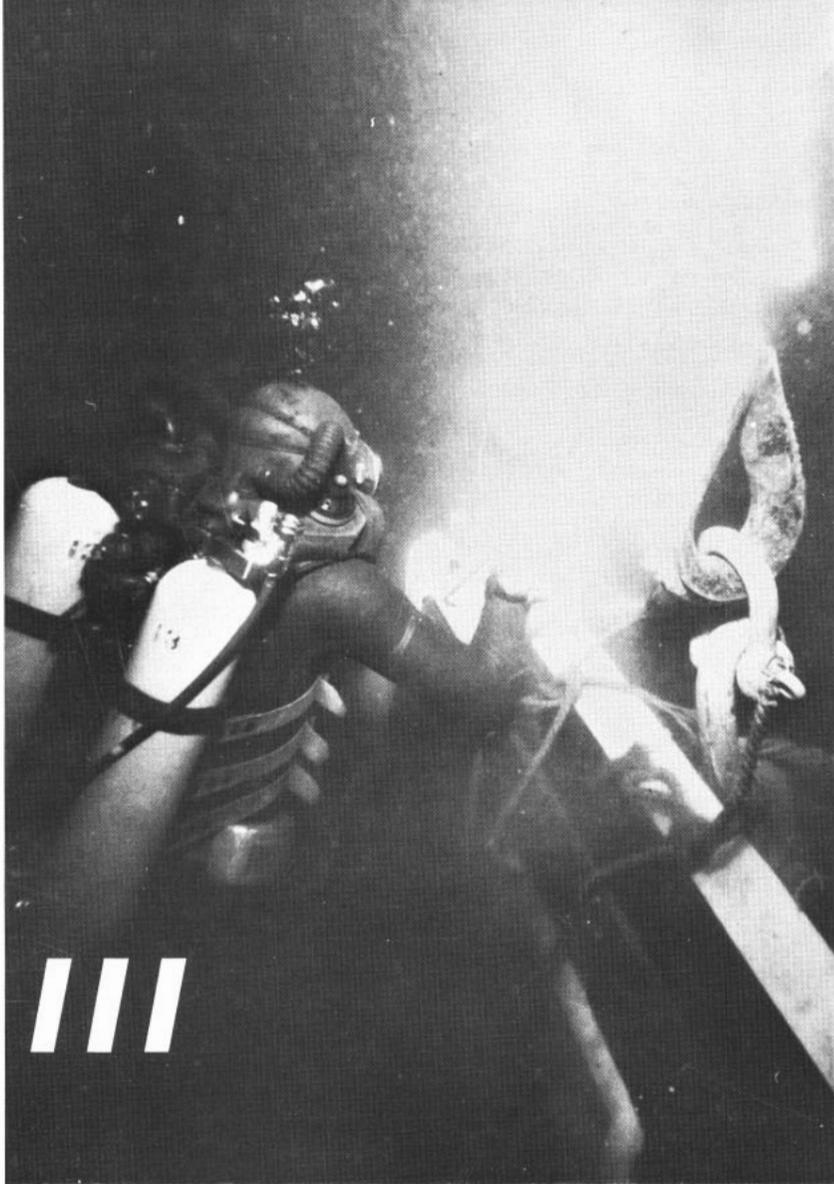
The combination home-laboratory used during Sealab II was larger (57 feet long and 12 feet in diameter) and it was better than its predecessors.

Heating cables imbedded in its concrete floor compensated for the high heat loss in the helium-oxygen atmosphere.

An anti-shark cage reduced a possible peril faced during the first Sealab. The cage was placed underneath the habitat near the entrance. Rather than keeping all the habitat's gear inside, provisions were made to stow gas bottles outside.

THE SUPPORT facilities for the second Sealab were also more complex. Two barges once used for staging *Polaris* missile pop-up tests were spaced 22 feet apart and connected by a covered structure. The result was a U-shaped vessel equipped with electric power generators, winches, compressors and a crane.

OCTOBER 1968



A WET WORLD—Aquanauts of Sealabs I and II were pioneers in the Navy's Man-in-the-Sea program to develop improved means to work under the sea.



The support ship also had a diver ready room and, perhaps more important still, it had a 10-man deck decompression chamber.

An elevator-like personnel capsule brought the men from the bottom and mated with the 10-man deck decompression chamber, making continuous decompression possible from the time the divers left their habitat.

Electrical power and water reached the undersea dwelling through lines from the Scripps Oceanographic Institution pier. Breathing gas, communications and instrumentation lines were received through an umbilical cable from the support ship as well as a line connected to a secondary power source.

Even though more Sealab II aquanauts spent more time underwater than before, they were, nevertheless, busier than their Sealab I predecessors.

The Sealab II aquanauts had more housekeeping tasks—not sweeping and dusting, but replacing leaky



LIKE A FISH—An aquanaut swims past his home beneath the ocean.

valves, repairing pumps and gauges and testing torque wrenches. There were other activities, too.

One of the more important of the other jobs was simply breathing. Sealab I aquanauts had inhaled an atmosphere consisting of 80 per cent helium, four per cent oxygen and four per cent nitrogen.

This blend was changed for Sealab II to a helium content which varied between 77 and 79 per cent, a nitrogen content of 18 per cent and an oxygen content of from three to five per cent.

Lithium hydroxide was used to remove carbon dioxide from the air and charcoal removed odors.

Such an exotic breathing mixture had some disadvantages. For example, it distorted sound to the point that everyone in the habitat sounded like Donald Duck, but it also had a compensating virtue—it promoted healing.

AT ONE POINT, a scorpion fish stung Aquanaut Carpenter, causing his arm to swell several times its normal size. The sting provided

How to Be an Aquanaut

Not just any diver can be an aquanaut. He must also be something of a biologist, ecologist, acoustics expert, oceanographer, salvager, photographer and communications man—to mention a few related fields.

In addition, he must be expert in the Sealab III habitat and in the use of its support equipment.

Sealab III aquanauts were drawn from the ranks of U. S. Navy first class divers with Fleet experience, all of whom had been trained at the Deep Sea Diving School in Washington, D. C.

Civilian aquanaut candidates, as well as those from the navies of British commonwealth nations have had similar training and experience.

Specialized instruction was also given to the aquanautical students at the Underwater Swimmers School at Key West, Fla., and at the Deep Submergence Systems Project Technical Office at San Diego, Calif.

In addition to standard dives using scuba and hard-hat equipment, prospective aquanauts are subjected to the pressures which they will experience at the 600-foot Sealab depth.

They become accustomed to the

breathing gas mixture which they will use, and are trained in the use and maintenance of the semiclosed Mark VIII scuba which will be tested, as well as the electrical and isotope heated wet suits to be used during the experiment.

Some of the men receive other special training. Photographers, for example, learn to install and maintain a special camera-lights package at the Sealab III test site. Hospital corpsmen learn to use special equipment for biomedical analysis in the Sealab and also how to monitor the habitat's atmosphere. Technical training is also given in the use of special underwater tools.

At a given point, the candidates for the aquanaut title are selected and divided into five teams of eight men each. Those who didn't make the underwater teams are assigned as support divers to be based in the Sealab support ship, *Elk River* (IX 501).

About six months before Sealab III was scheduled to begin, groups of aquanauts went to San Francisco to take part in the systems integration tests to make sure all parts of the equipment—the support ship, diving systems and habitat—func-

tioned properly in relationship to each other.

By this time, of course, each aquanaut was expected to know his own equipment and also a multitude of valves, gauges, levers, plugs, outlets, switches and indicators in the habitat and, to a lesser degree, in the diving system.

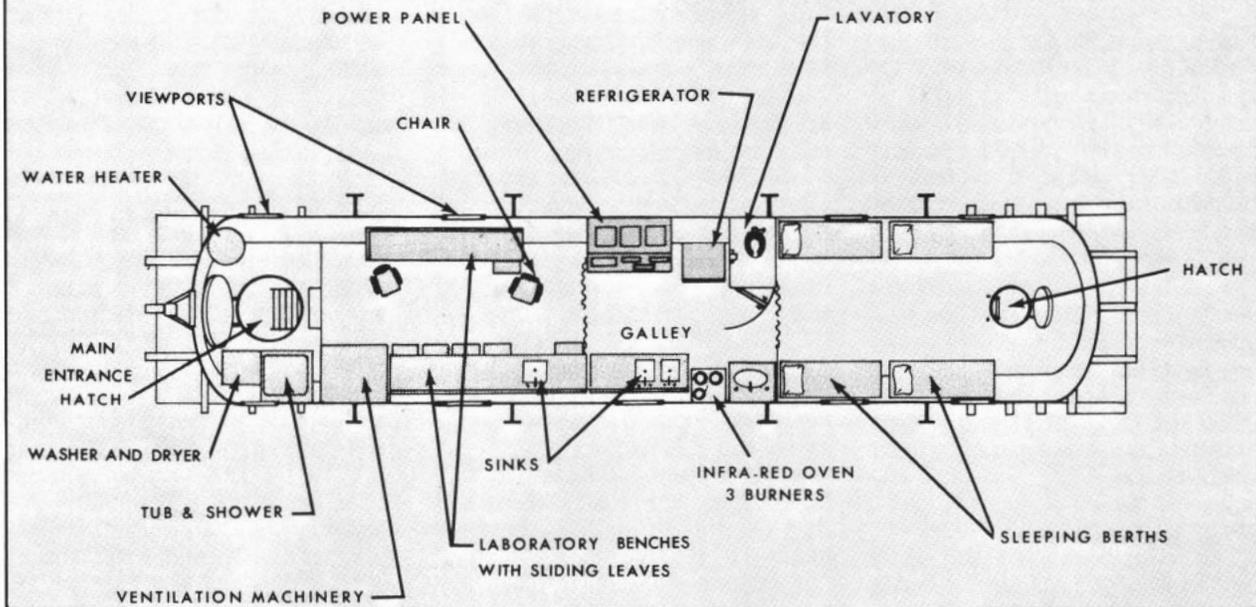
Two weeks before the experiment begins, the surface support ship and the habitat will be moved to the Long Beach Naval Shipyard for shallow water tests. Here the habitat will be lowered to a depth of about 45 feet and the entire Sealab III complex will undergo the same tests performed in San Francisco.

A few days before the experiment begins, the surface support ship, habitat, support craft and the aquanauts will move to the test site off San Clemente Island, where the habitat will be lowered to the bottom in 600 feet of water.

The aquanauts will help with this job and take a last-minute look at the status of the Sealab III components. That ends the training.

From then on, everything is for real. Man's most ambitious effort to explore the ocean depths by living on the ocean floor will be underway.

SEALAB III INTERIOR - TOP VIEW



an opportunity to test the effect of drugs in the pressurized atmosphere. The patient completely recovered within 24 hours.

Tuffy, an Atlantic bottlenose porpoise, also played a part in Sealab II. Tuffy demonstrated he could function as rescuer of a lost aquanaut and as a delivery boy for transporting tools, messages and other oddments between the surface and the habitat.

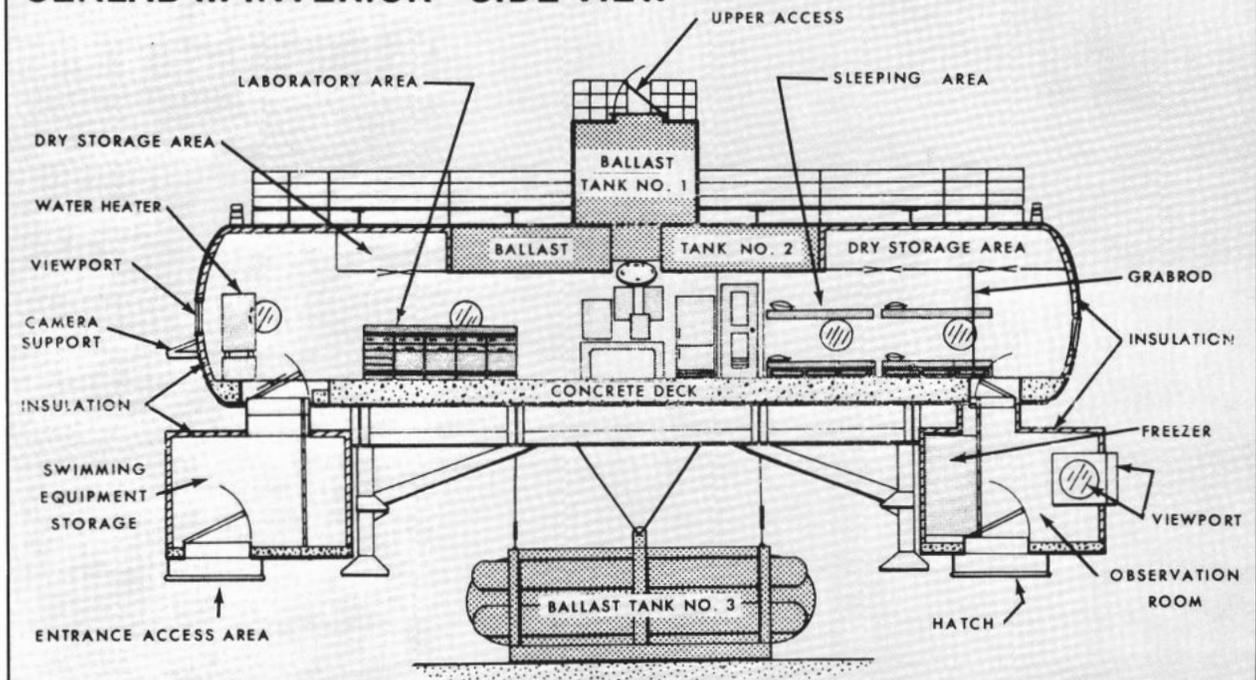
Spectacular though Tuffy's performance was, the show still belonged to the people-types. Tuffy, after all, was at home in the sea. Man was not.

By the time Sealab II had ended, 28 Navymen and civilians had spent more than 450 man-days on the cold, dark ocean floor as subjects for physiological experiments and underwater workers in salvage, oceanography, geology and construction.

In addition, the aquanauts experimented in the use of heated suits during their excursions outside the habitat, pointing the way to conquering the cold of the sunless sea bottom.

Sealab II proved what had already been strongly suspected—that man could live for a month in the water at least 205 feet deep, yet be reasonably independent of the sur-

SEALAB III INTERIOR - SIDE VIEW



face and capable of doing useful work without adverse effects.

THE EXPERIMENT also provided fuel for further investigations when the aquanauts discovered they could descend to depths considerably below the habitat. They also learned they could either adapt themselves to the cold of the ocean floor or warm themselves with the electrically heated suit they tested.

Work, of course, was one of the more important features of the Sealab II experiment. The divers proved they could do a variety of undersea jobs using improved tools and techniques to compensate for, among other things, the aquanauts' relative weightlessness. Tuffy proved an animal could be employed for useful jobs.

This year, Sealab III will apply the knowledge gathered during

earlier experiments in undersea living. The site chosen this time is off San Clemente Island, Calif., which has been developed into a permanent ocean engineering test range.

Sealab III will not present a radical departure from the course followed by its predecessors.

Aquanauts will continue to experiment in salvage techniques, do oceanographic and marine biological research, and offer themselves as subjects in a series of physiological and human performance tests.

NEEDLESS TO SAY, this program will require more and better equipment than has been used in any of the previous Sealabs.

Improvements began in the support ship—a World War II landing ship, *Elk River* (IX 501), converted to serve as a range support ship.

Elk River will have a 65-ton ca-

capacity traveling gantry crane, two deck compression chambers and two personnel transfer capsules. Each will accommodate four men for prolonged decompression.

The two transfer capsules will take the aquanauts directly to the decompression chambers without exposing them to the surface atmosphere.

While the aquanauts live and work in the sea, two vans mounted on *Elk River's* deck will function as a command center and a medical monitoring facility.

The vans will be equipped with everything necessary to measure and control factors affecting the safety and well-being of the aquanauts.

The men on the sea floor will communicate with the surface by means of an umbilical cable connecting the ship and the habitat. The cable will also carry water, breathing gas, television transmissions, electrical power and recording signals.

The divers who participate in Sealab III will, as in Sealab II, be selected from the ranks of Navymen and civilians. This time, however, the teams will be multinational—British, Canadian, Australian, New Zealand and the United States. They will remain on the ocean floor for 12-day periods at a depth of 600 feet.

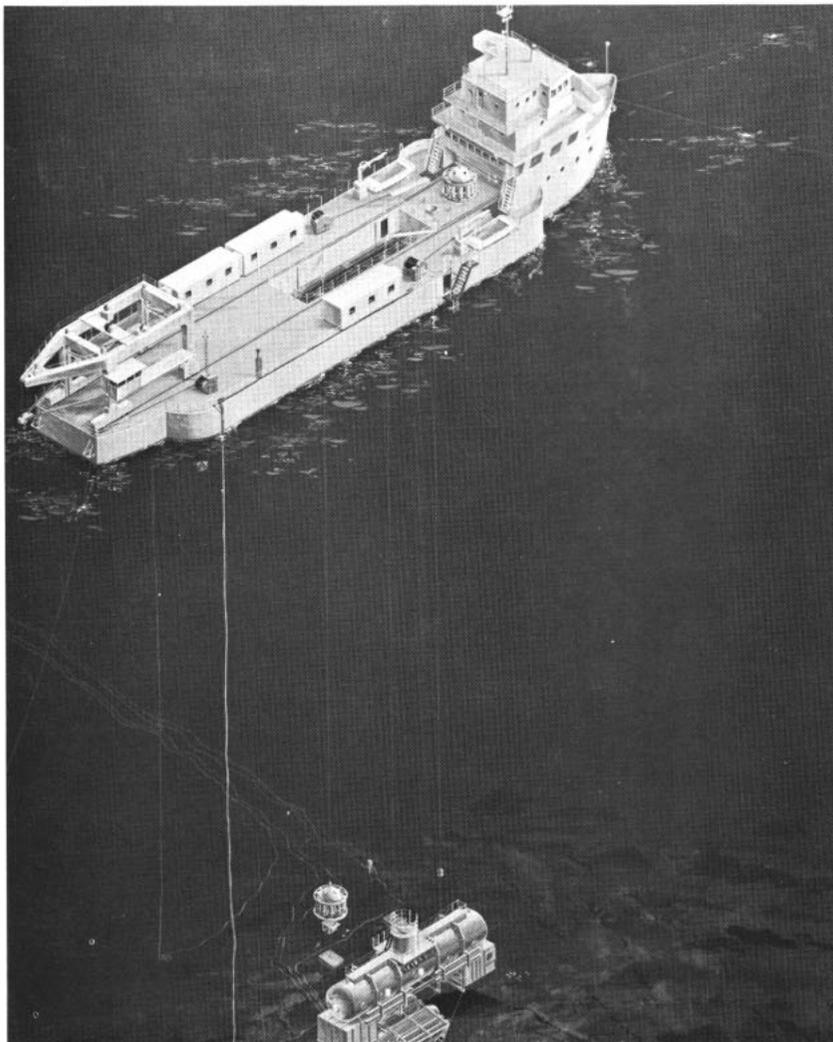
This depth is appreciably greater than that of former Sealab habitats. Extensive physiological testing will be conducted to inform observers on the surface of the men's reactions to work outside the habitat as well as living within. Work outside the dwelling will consist of experiments with foam and salvage jobs and taking part in underwater construction.

The aquanauts will also study marine biology and geology, conduct sonic research and evaluate thermal wet suits.

THREE TYPES of cold resistant clothing will be used. One will resemble a form-fitting electric blanket—an improved version of the underwater suit worn during Sealab II. Another suit resembles a tube through which warm water circulates over the aquanaut's body. Both suits will be electrically operated by power which reaches them through a cable linking the suits to the underwater chamber.

A third type being tested uses a radioisotopic heating device. The

THE WHOLE WORKS—Sealab III support ship, converted WW II landing ship *Elk River*, is shown at work in the Pacific 600 feet above men of Sealab III.



garment resembles a suit of long underwear — not a radical departure from any point of view, for such a garment has been worn, among others, by divers and also by NASA astronauts. However, the fabric of this suit will contain tiny plastic tubes which will circulate warm water over the diver's body.

The water will be warmed by a bottle-shaped heat exchanger which contains four capsules of plutonium-238 fuel.

In addition to new types of wet suits, a new kind of scuba equipment will also be tested. It is called Mark VIII and breathing gas reaches it through an umbilical attached to the habitat, although the aquanauts will carry a secondary gas supply on their backs.

The umbilical between the scuba gear and the habitat also will carry cables for electricity to power lights and communication and to provide warmth.

SEALAB III will have two rooms more than its predecessor. They will measure eight by 12 feet and be located at the bottom of the habitat. One will be used for a diving station, the other as an observation and storage compartment. The showers will be located in the diving room, and there will also be more space for removing the aquanauts' scuba gear.

The second level of the habitat will be divided into a laboratory, galley and bunk room.

The breathing gas will depend more upon helium than before. The aquanauts will breathe a mixture consisting of 95 per cent helium, three and one-half per cent nitrogen and one-half per cent oxygen.

As in Sealab II, a lithium-hydroxide scrubber will purge the atmosphere of carbon dioxide and odors will be removed with charcoal.

Humidity will be controlled electrically and the interior will be heated to 88 degrees by radiant heating cables imbedded in the floor. The high temperatures will compensate for the loss of body heat in the helium environment.

Sealab III will be the most ambitious Man-in-the-Sea project undertaken to date. If all goes well, it will continue for at least 60 days, during which five or six teams totaling 40 Navymen and civilians will live on the floor for 12-day periods.



ALL IN THE JOB—Biological specimens are collected and (right) Tuffy, who worked with men of Sealab II, is trained to respond to an acoustical device.

Tuffy the porpoise will also be a part of the Sealab III experiment and will be joined by two sea lions and a harbor seal for search and rescue purposes and delivery of small items. They will also be used as photographer's assistants and as propulsion aids.

Just as each Sealab has pointed the way for the experiment in undersea living which follows, Sealab III should help establish future goals and missions for continuing the Navy's Man-in-the-Sea program.

The goal is to enable swimmers to operate at 850 feet of water, covering the average depth of the continental shelf.

PERHAPS future technology will produce equipment which will make man capable of living and working at even greater depths. On the other hand, greater depths may prove too much for the human physique and mind.

There is also the possibility that technology will produce less expensive and more satisfactory methods of exploiting the sea than by using man.

At present, however, *homo sapiens* is the instrument for doing underwater work and the equipment being produced is oriented toward producing sea-floor habitats which are completely independent of surface support.

This means that man may one day live and work submerged, even under ice, yet be completely independent of surface support.

Movable habitats are also being developed, although the ultimate form they will take has not yet jelled.

They may be crawlers or they may be submarine-like vehicles. Whatever their appearance, they will enable aquanauts to cover a relatively large portion of the ocean floor without having to go through decompression.

The military uses to which the Navy's Man-in-the-Sea program can be applied are numerous and most are apparent, although some strain belief. The same thing could be said of future civilian benefits which could be reaped.

In the meantime, the Navy will continue to accumulate knowledge from past experiments and look toward the years ahead.

Even now, technologists have projected plans which will place man in water 1000 feet deep within two or three years. He will, if the projection proves correct, be able to exploit the sea as a source of protein as well as organic and mineral riches.

Some have speculated that it would be possible for a man to dive freely as deep as 10,000 feet for brief periods. If that day comes, the diver probably will breathe liquid which has been supercharged with oxygen and pumped directly into his windpipe and lungs. This technique has been suggested for present-day Sealab habitats.

Sealab III will be a fine mixture of the known being used to conquer the unknown—as have all the experiments which preceded it. Perhaps using this same procedure, man will someday walk the abysmal plain and look back to the Sealab experiments being conducted now as the first steps toward providing the human race with an entirely new dimension in which to live and work.



EATING ON THE BOTTOM—Aquanauts enjoy meal in Sealab I. Sealab III will gain from experiences of predecessors.

This Little Restaurant Has a Different Atmosphere

IT'S THE HELIUM that does it.

When Sealabs I and II were planned, everyone assumed that feeding the aquanauts would be no problem. If there's plenty of food available, what's so tough about feeding hungry men?

Nothing, really. But the helium in the atmosphere introduced certain unexpected problems.

Fresh eggs couldn't be served because their yolks exuded toxic sulfide gas. The shells of boiled eggs produced another toxic gas. Frying brought forth acrolein, which was also poisonous. So eggs were out.

This more or less reduced breakfast to toast and coffee, and anyone who thinks you can't go wrong on toast should live in a Sealab.

The helium atmosphere so sharply curtailed its occupants' sense of smell that they couldn't detect the odor of burning toast and anyone who can't smell burned toast, just can't smell. At one point, the entire crew was threatened by some unnoticed pieces of incinerated toast busily poisoning the atmosphere.

For those who couldn't start the

day without a good cup of hot coffee, Sealab was an unhappy experience. It was always cold. One of the characteristics of helium is its ability to disperse heat rapidly, including that in a cup of coffee.

Water refused to boil until it reached a temperature of 328°. Griddle cakes were uncooked on the top but burned on the bottom and so did the aquanauts' fingers.

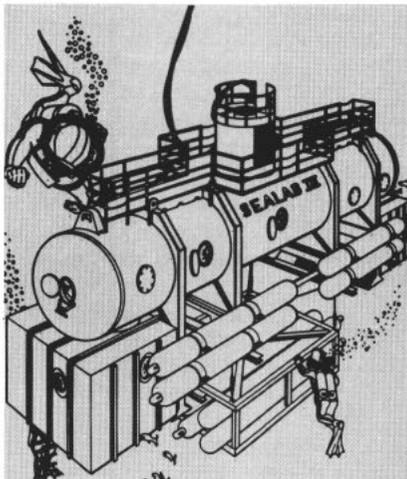
As the coils of the electric stove

failed to glow in the helium-charged atmosphere, fingers well done became a specialty of the medical department.

WITH SUCH LIMITATIONS—actual and self-imposed—the aquanauts supplemented the menu by harvesting the plankton floating past their home. Actually, they enjoyed the do-it-yourself food as much as anything, finding it had a pleasant, nutty and slightly sweet taste. Everything else, however, was doused with catsup and sprinkled with seasonings to raise the taste to an edible level.

There was at least one pleasant gastronomic surprise (besides plankton) during the first two Sealabs. The most spectacular occurred when a cake was sent below in a pressurized container in celebration of an aquanaut's birthday.

When the cake was removed from its container, it promptly collapsed and was put aside by the morose aquanauts. A few hours later, the cake rose in all its original glory. It was promptly seized and eaten. (The scientists are expected to come up



with an explanation for the cake's re-raising.)

Another surprise occurred when the aquanauts surfaced after Sealab II. With all their culinary difficulties, one might have expected them to lose weight. Instead, each gained an average of five pounds.

The planned diet included a daily intake of 4000 calories, high in protein and carbohydrates. Actually, the aquanauts wolfed down 6000 calories a day—most of it high energy food like peanut butter, which Tuffy the porpoise ferried between surface and Sealab.

The added weight put on by the aquanauts resulted from a steady increase in the diet of fat-producing food plus a growing rejection of canned or cartoned foods.

Sealab III will profit from the experience of its predecessors. The Navy Subsistence Office has developed a menu which provides a minimum of 4500 calories a day.

Meals will consist principally of precooked frozen entrees—meat items such as turkey and pot roast. Soups, fruits and vegetables will come from cans although fresh produce will also be available. Fresh bread will be sent below every four days in pressurized containers.

Frozen baked desserts—mainly cakes—will be featured on the menu and pre-frozen pies will also be used.

THE USE OF prepared foods pretty much eliminates the problem of burning and also the danger of poisoning the atmosphere. Since there is no professional cook aboard, cooking has to be simple. After all, even an aquanaut can simmer a frankfurter.

An infrared oven will be used in the Sealab III galley. It has the virtue of heating things quickly. Each food package will include dial settings for heating the contents a-la-infrared.

In addition to the infrared oven, the galley will also have a four-burner electric range, a double sink with hot and cold running water, 30 cubic feet of frozen food space and 10 cubic feet of refrigerator space for dry foods.

Dry storage foods for 60 days will be preloaded in the Sealab III habitat before it is lowered to the ocean floor. Frozen foods capable of feeding three teams (36 days) will also be placed aboard at that time.



COOKING in nitrogen and helium atmosphere presents numerous problems.

Frozen food for the last two teams will be sent down via a dumbwaiter system and loaded aboard.

THE AQUANAUTS were polled on their special preferences in food. This time, shrimp seemed to emerge as a favorite and it will be the only dehydrated edible in the habitat.

It isn't that the Navy is prejudiced against dehydrated foods. Any Navyman can tell you it isn't. It's just that such foods tend to powder when opened under high pressure.

To avoid becoming pulverized, the shrimp will be opened and preloaded before the habitat leaves the surface. Then the pressure of the shrimp

and the atmosphere of the Sealab III habitat will equalize as they descend to the sea floor together.

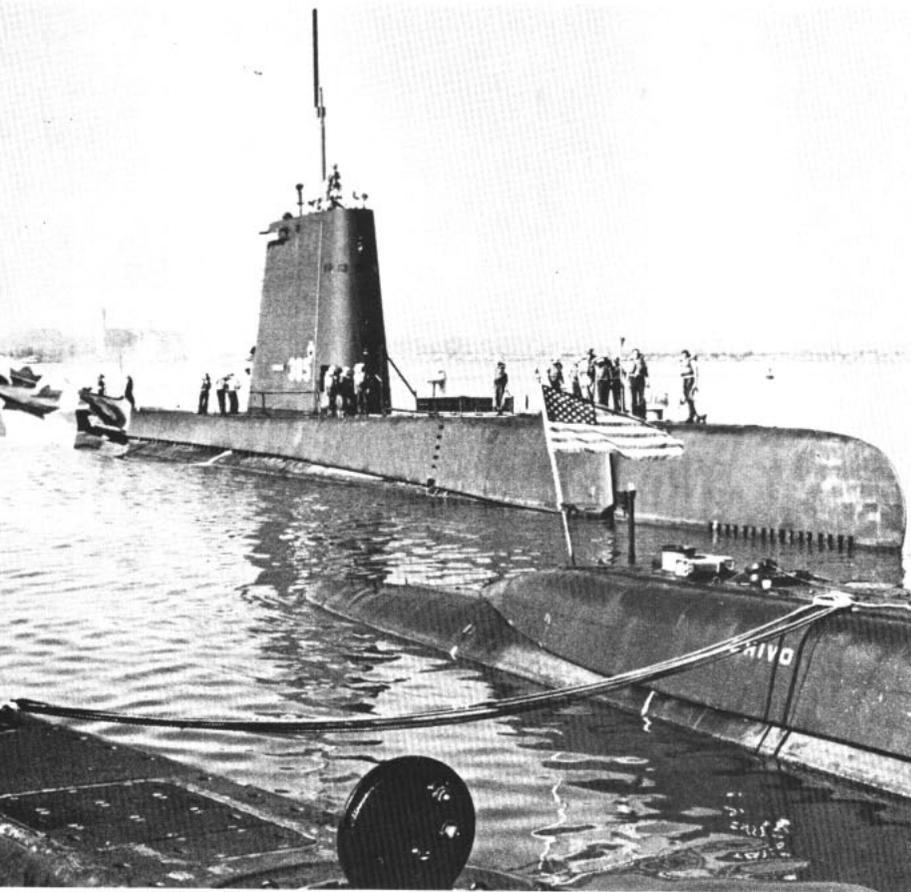
Monotony should be avoided this time, too. Menus have been planned on a six-day cycle so each team will repeat a meal only once. And everyone should find something, besides shrimp, that he likes.

The variety in the Sealab III cuisine includes items from hamburgers to veal parmigiana and baked lasagne. Desserts include pecan and lemon chiffon pie, spice cake and ice cream.

If, after all that, the aquanauts get hungry, they can snack on soups, cheese, crackers with jelly and drink fruit juices.

SEALAB III will provide aquanauts with a minimum of 4500 calories a day.





USS BANG (SS 385) moves into mooring at San Juan, P. R. Below: Subman checks his locker.



XO LCDR S. G. Alexander checks sub's operations; P. J. Moore, TM1, makes repairs; and G. A. Simpson, TMC, watches 'Christmas tree.'



the work and training required of them are arduous. Each man must know his boat . . . know her thoroughly, completely and intimately. The submarine's basic design makes her a complex piece of machinery and requires of her crew constant training to understand and operate her.

The enlisted submariner's training starts with basic schooling at New London, Conn. After graduation, the men are assigned to a submarine and begin a program of study assignments and qualification questionnaires. Every man, regardless of his job specialty, must be able to perform a number of shipboard duties before being eligible for his dolphins. After a man is completely checked out in every compartment of the submarine, which takes about six months, he is given an examination by the officers of the submarine. If he passes the exam, he is presented by recommendation to the com-

The Men

THE MEN who wear the gold and silver dolphins of the United States Navy Submarine Force are proud, dedicated and respected men. To earn the privilege of wearing the dolphins requires many long hours of study and training.

Life aboard a submarine is drastically different from that in other Navy ships. The safety and very lives of the entire sub's crew are dependent on each man's knowledge of his job and his ship.

All submariners are volunteers, for

manding officer as qualified for his silver dolphins.

Officers' qualifications follow the same general pattern, but are more detailed. Officers normally require at least 12 months to qualify for submarine duty. The officer is given a formal examination by a division commander and two submarine commanding officers. To qualify, he is expected to get the submarine underway and moored, conduct a submerged attack on a surface target, and dive and surface the submarine.



ALL HANDS



LTJG W. T. Cederholm, Conning Officer, takes a look; B. F. Calub and J. Zurr man controls; and (below) Bang pulls in.

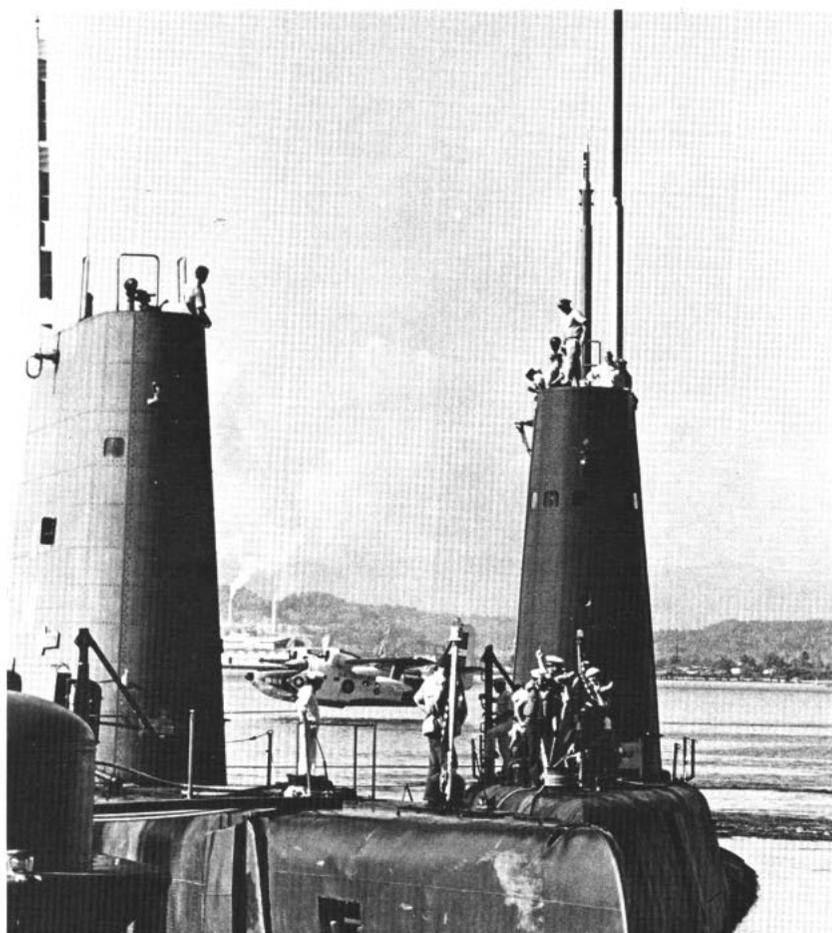
Who Wear the Dolphins

Everything a man has to offer mentally and physically is demanded of a submariner. A submariner must be able to live for extended periods of time in confined spaces with the rest of the crew. There is no room for personality clashes in a sub. He must be in top physical condition, for submarines carry no doctors, only a hospital corpsman. The submariner's body must be capable of withstanding the stress of a physical escape from 200 feet below the ocean's surface.

Some of the benefits a submariner receives include extra pay for hazardous duty and plenty of good food served six times a day. If regular meals are not enough, he can go to the galley and cook whatever he likes by just signing the food log book.

Perhaps the happiest day in the life of a submariner is the day his commanding officer presents individual dolphins at formal quarters. Each man knows he is now fully accepted as a member of one of the Navy's most elite services, the Submarine Force.

—Story and photos by
C. J. Wiitala, PHC, USN.





BIG JOB—Navy tugs push at bow of USS America (CVA 66) as she is eased toward pierside of Cubi Point, Philippines.

A SIGHT TO SEE *Tugmasters on*

IT'S THE RAINY SEASON at Cubi Point, Philippines, where stormy winds often blow up to 35 to 40 knots. Sometimes, visibility is so poor you can't see the stem of a ship.

Despite the weather conditions, ships of the Seventh Fleet continually find their way from the South China Sea through the torrential rains to dockside, but only with the help of a handful of tugboat skip-

pers and harbor pilots who literally get away with pushing the Fleet around even during a downpour.

The number of tugs used in any docking depends on the weather. As wind velocity increases, so does the number of tugs needed. Four to six is usually the number, especially when the customer ship is an aircraft carrier.

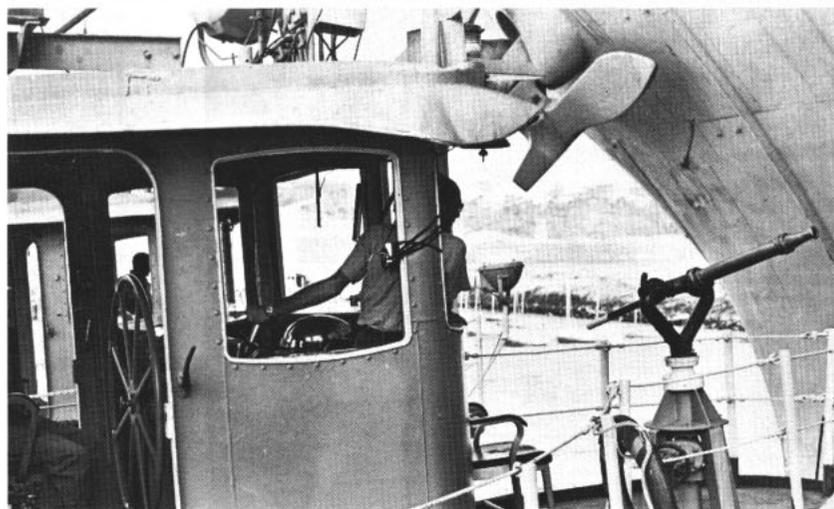
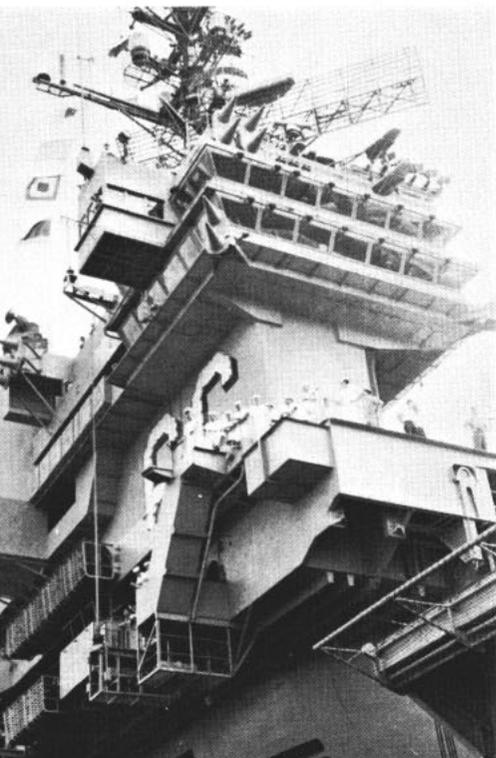
Like bandits waiting for a stagecoach, the tugs rendezvous in the middle of the bay while one of them picks up a harbor pilot at Port Services and intercepts the ship as it

passes Grande Island at the mouth of the bay.

Once on the flattop's bridge, the pilot takes charge of docking procedures and assists the OOD in giving commands to the helmsman.

As the carrier enters the protected waters, the pilot signals the tugs to move in and make-up, or tie up, with the ship as she rounds Cubi Point. Leyte Pier, the docking site, becomes the point of interest as the pilot guides the ship toward it at a 45-degree angle. By walkie-talkie he tells the tugmasters when to back

HIGH AND LOW—Looking down from pilothouse (right of signal flags) pilot guides carrier in. *Rt:* Down at water level tugmaster watches as he pushes bow.





HARBOR PILOTS and tug skippers go to work with precision as they bring large carriers safely through harbor to dock.

the Job

off or push forward, a touchy task in a brisk breeze.

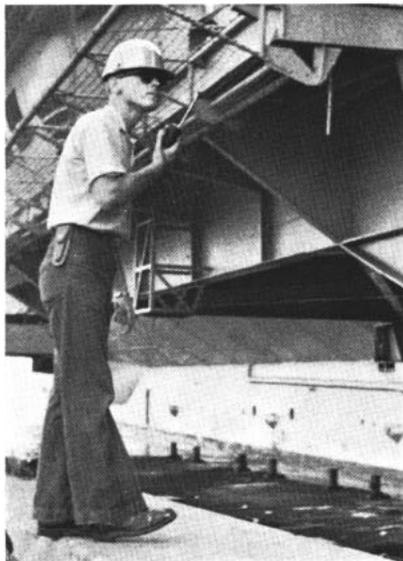
Meanwhile, boatswain's mates shoot or throw lines from the carrier to a dock working party as the warship eases close to the camels separating her from the pier. Tugs tied together at either end of the carrier respond to the steady control commands of their masters as they carry out the harbor pilot's instructions.

One of the three harbor pilots responsible for safely docking the fleet ships is a retired chief boatswain's mate, Jack Berry.

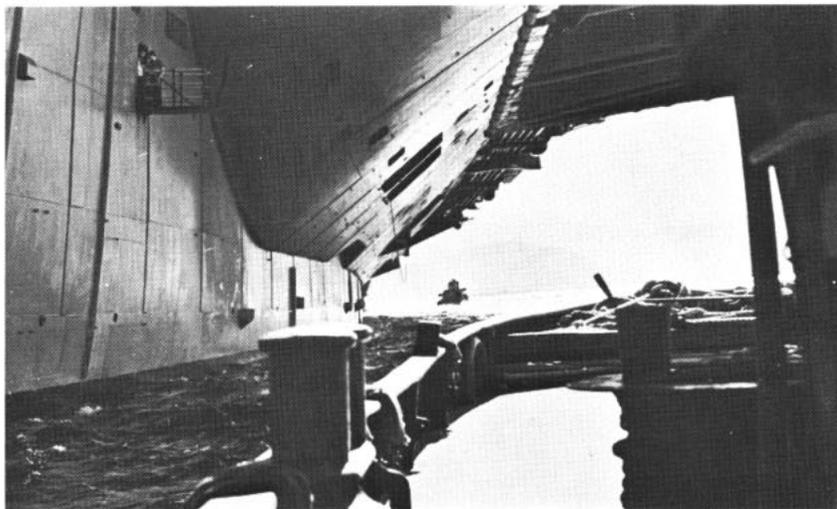
"Carriers offer no special problems, other than their sheer size," says the veteran seaman. This becomes a major factor, agree the tugmasters, for when a brisk wind turns the high-hulled ships into sailboats, the little tugs really have to flex their muscles. But the larger ships, such as the carrier, can help the tugs through the use of their four propellers by backing down on one set of screws while going forward on the other set. This aids the pilot in fighting the wind.

Usually within the hour, after a last gentle nudge by the tugs secures their charge next to the pier, all lines are doubled, telephone wires connected, water and fuel lines hooked up.

—Story and photos by
Kenneth B. Dalecki, JO3, USN.

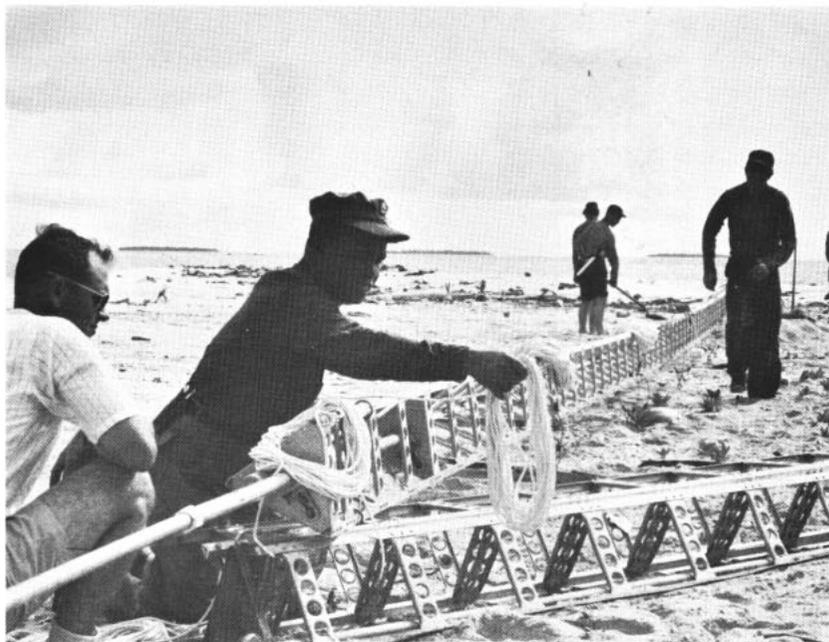


TEAM MEMBERS—Dockmasters communicate with pilot as they check ship's approach to the dock. Below: Carrier drops lines as Cubi tugs come alongside.





BOTTOM BUSINESS—Soundboat traces ocean floor. *Below:* Antenna is raised.



AS IN THE pioneering days, the Navy has a modern day trail-blazer. In this instance, it is *uss Maury* (AGS 16).

Officially designated as an auxiliary general survey ship, *Maury* is charged with the job of charting the ocean depths and shipping lanes, and producing those charts which serve as navigational guides to Seventh Fleet vessels and other mariners.

As a result of the Vietnam build-up, it became necessary to bring up to date the pre-World War II navigational charts to ensure the safe passage of the increasing number of ships plying the waters off the coast. *Maury's* original six-month deployment in 1967 was extended to nine months to permit her to cover the

USS Maury:

areas which the U. S. Naval Oceanographic Office felt it needed charted.

By the time *Maury* had completed the job she had covered nearly 15,000 miles, many of them in rough weather or in the vicinity of the enemy in river waters.

The general area of the surveys included the northern half of the Mekong Delta from Vung Tau to the Bassac River. From these surveys, 14 four-color field charts have been made—the first since World War II.

Producing these charts was an all-hands effort. It included the boatswain's mates and seamen in the 52-foot soundboats which do the bulk of the actual survey work; the Seabees and Marines in the hydrographic division; and the lithographers and photographers working in the print shop.

ATYPICAL day of operations would see the soundboat crews rising at 0430, loading their boats and striking out for their designated areas before dawn. When they reached their position (precisely determined by signal from beach camps located on shore), the soundboats would begin collecting their raw data.

This information is gathered from two main sources—the fathometer

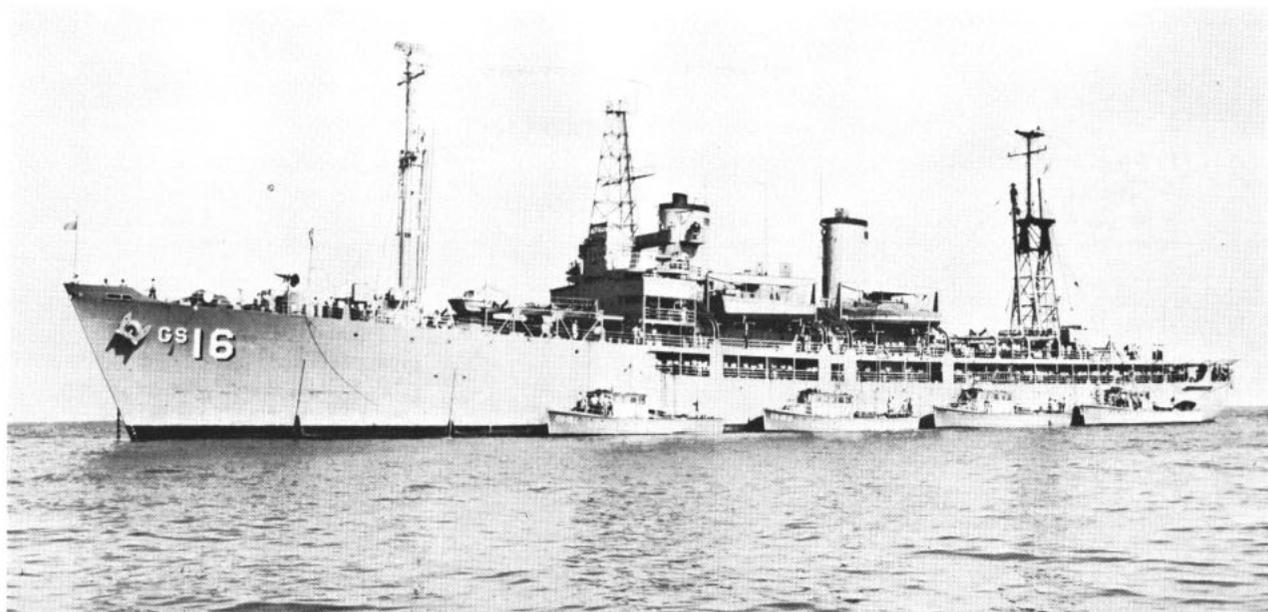


CHART HEADQUARTERS—USS Maury (AGS 16) rides at anchor off Mekong Delta with her four soundboats alongside.

Ocean Map-Maker

and from the Raydist navigator.

The fathometer records the depth of each sounding on a graph, and fix numbers are written at certain intervals as check points.

The Raydist is an electronic device for pinpointing geographic position by coordinating the signals received from beach camps at the time each fix is taken. This information is recorded in graph form on the Raydist tapes.

Data is recorded in the sounding journal, which is basically an information sheet containing position and depth of each sounding.

The drafting room takes over from here. When the figures are checked and proven correct, the soundings are plotted on a smoothsheet.

Hundreds of soundings fill this sheet, delineating a precise picture of the ocean bottom. Contour lines and shorelines are drawn. The sheets are then photographed and reduced to the scale of the chart.

The draftsmen then trace the shoreline and other prominent geographical features on the translucent "drafted original." This is again photographed and from the resulting negative, lithographic plates are made.

AS A FINAL touch, IBM cards are punched which give time, fix

number, position coordinates and soundings. These are sent to the Oceanographic Office in Washington, D.C., for processing into complete hydrographic charts.

It's tricky work under the best of circumstances. Because there are so many variables, an error or equipment failure can upset the entire operation and nullify days of work. Rain and rough seas can interfere with radio signals and make it difficult to stay on course.

The enemy provides another annoyance. At one time, a soundboat took a direct hit from a 75-mm shell while operating close inshore along one of the Bassac River branches. Her Coast Guard cutter escort ship suppressed the fire and towed the crippled soundboat back.

The crew was back at work the next day.

—Text by Jack McBride, JO3.
Photos by S. C. Wyckoff, PH2.

ON SHORE—Electronics technicians man signaling gear at the beach stations.



THE RIVERINE

A MUTTERED WARNING from a breathless Vietnamese who appeared to be fleeing the Viet Cong had signaled the beginning of a fierce action fought by elements of the Navy's River Assault Flotilla One in the Mekong Delta.

Operating in support of U.S. infantry, a group of flotilla craft was sweeping the water crossroads of the Ba Lai River and the Giao Hoa Canal about 10 miles southeast of My Tho. In the process, a crewman on the lead boat—an Assault Support Patrol Boat (ASPB)—sighted a swimmer. The craft slowed and took him aboard.

"He claimed to be an ARVN interpreter," recalled Engineman 3rd Class Arthur L. Mann, "and kept muttering 'Beaucoup VC!' and pointing to the beach ahead."

Not yet certain of the man's true identity, the crewmen led him to a compartment, then remanned their battle stations. They proceeded with caution, but quickly learned how accurate the swimmer's warning had been.

"I remember going through the door to question the ARVN some



SCOUTING—Monitor Boat Captain M. Hanbrick, BM1, eyes shoreline.

more," continued Mann, "when we took a direct hit in the conning station from a 75-mm recoilless rifle. The concussion blew me out the door and onto the stern."

The boat's engines went dead and all electrical power was cut off. Wiring burned in several places. The

power loss disabled both the 50-caliber machine gun mount and the 20-mm cannon mount. On top of that, the steering failed.

OUT OF CONTROL, the boat made a long arc and ran up onto the beach about 15 yards from the VC bunker that was pouring on most of the fire. In a matter of minutes, the boat had taken four B-40 rocket hits. All seven crewmen, including PO3 Mann, were wounded, but only the boat captain was unable to man a gun.

"The rest of us grabbed anything that would shoot," continued the engineman. "And that is just what we did—shoot."

For 15 minutes the crew poured hundreds of rounds of 30-caliber machine-gun fire, 40-mm grenades, M-16 rounds, and even 12-gauge shotgun rounds into the VC positions. This discouraged any attempts by the enemy guerrillas to approach the beached boat's bow settled in the mud.

Meanwhile, another ASPB tried to reach the beach and take the besieged boat in tow, but the enemy

CLOSE WORK—Armored troop carriers (ATC) maneuver up narrow canal during operations in the Mekong Delta area.



FORCE

fired another barrage of rockets and recoilless rifle fire which drove the would-be rescuer back, heavily damaged.

"We finally were pulled off by a monitor gunboat," concluded Mann. "With its heavy firepower and armor, it was the only thing that was able to reach us. They put lines across, then passed more ammo so we could keep firing."

After awhile, the ASPB was free of the beach and the monitor towed it into midstream where a medical aid boat equipped with a helicopter came alongside. The seriously wounded crewmen were evacuated to nearby Navy ship medical facilities.

Twenty-five minutes had passed since the swimmer had given the initial alert sending the patrol craft and other river assault boats into one of the heaviest concentrations of Viet Cong firepower yet encountered in the Delta. Altogether, 10 Navy-men had been wounded—four boats badly damaged. The only fatality was killed by the first round to hit the ASPB.

THE NAVY MONITOR that pulled the assault boat clear isn't sleek or fast. It's almost ugly. But, when it comes to keeping the rivers clear of VC, or assisting troops ashore, or lending fire support to sister craft in trouble, it has no equal. As the riverine battlewagon, she bristles with guns.

Sitting on the bow is a 40-mm automatic cannon enclosed in an armored turret that looks somewhat like the turrets mounted on the ironclads of Civil War fame. The rest of her arsenal consists of a 20-mm cannon, an 81-mm mortar, two 50-caliber machine guns with automatic grenade launchers mounted above, two 7.62-mm machine guns and a large assortment of small arms. One monitor is equipped with a flamethrower.

Together with four other types of riverboats, the modern-day ironclads arrived in the northern sector of South Vietnam in March of this year to make up River Division 112, Squadron 11, of the river flotilla.

OCTOBER 1968



Armored Troop Carrier (ATC) carries platoon of combat-ready infantrymen.



Assault Patrol Boat (ASPB) performs as a swift river destroyer.



Command and Communications Boat (CCB) carries communications gear.

Monitor carries the big guns of the Riverine Force.





MONITOR MEN—Gunners rest during break in action. *Rt.* U.S. Advisor LT Robert Van Nice, USN, checks operations.

The squadron is based at the Naval Support Activity Detachment in Cua Viet, four miles from the DMZ. Their job is to keep the river route to the detachment's Dong Ha ramp open to utility craft which haul supplies to troops fighting in I Corps, the five northern provinces of South Vietnam.

BEFORE RIVER BOATS moved into the northern sector, they had proven themselves in the Mekong Delta. They continue to do so as

part of the Mobile Riverine Force now traversing nearly all of the waterways spanning the small South-east Asian country.

The MRF operates under the guidance of a U. S. naval commander who directs units of the Army and Navy, and who works hand-in-hand with the Vietnamese River Assault Groups, known as RAGs.

One-third of the U. S. naval strength in Vietnam is represented in this joint force by River Assault Flotilla One, known also as Task

Force 117. It operates five different types of specially designed river craft, such as the armored troop carriers (ATC), the command communications boat (CCB), the refueler, the monitor and the ASPB.

Each was developed to meet certain demands peculiar to riverine warfare, including the ability to deliver infantry troops in combat zones set back in the shallow waters of the Mekong Delta. Each is designed to present as small a target as possible, be highly maneuverable, yet heavily armed and heavily armored.

Except for the ASPBs, the diesel-powered assault boats were built on the hulls of LCM-6 landing craft, boats which have been one of the basics of the Navy amphibious fleet since the beginning of World War II. However, the only apparent similarity between the old and new boats is the bow ramp, retained on the ATCs so troops can be unloaded swiftly.

RIVERINE MOTEL—Armored troop carriers tie up alongside *USS Colleton* (APB 36) in Delta. Barracks ship houses infantry and River Assault Squadron.



ALL BUT the ASPBs are protected by armor plating, thick layers of styrofoam and steel rods called bar armor. The bar armor is installed outside the boats' armor plating and styrofoam sections and has proven effective in causing rockets and recoilless rifle rounds to explode, lodging the fragments in the foam before they can strike the plating.

This special armor plating, foam and bars are not carried by the ASPB since she serves as the swift destroyer and moves at a greater rate of speed than do the other boats of the flotilla. She is, however, armed similarly to the monitor, with a 20-mm cannon, an 81-mm mortar,



RIVER RIDERS—Navy mortar crew fires from monitor. Rt: Helicopter lands aboard armored troop carrier in river.



40-mm grenade launchers and 7.62-caliber machine guns. When not performing as a river DD, the ASPB serves as an all-round minesweeper, since her five-man crew can maneuver her in small streams and canals where the other boats cannot operate.

The ATC, operated by a seven-man crew, carries a platoon of combat-ready infantrymen together with their supplies and additional ammunition. The troop carrier is heavily armed with 20-mm cannon, 50-caliber machine guns, 40-mm grenade launchers, 30-caliber machine guns, shotguns and small arms. In other words, a floating arsenal.

The monitor, however, is the real heavy, with more firepower than any of the other boats in the flotilla. Its basic mission is to protect the ATCs and their troops during assault operations. Its armament is manned by a crew of 11.

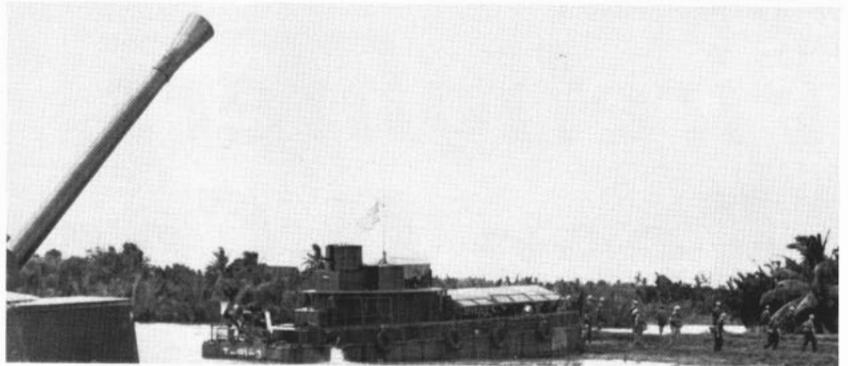
SOPHISTICATED communications equipment on the CCBs is used by squadron and division commanders to control other boats while on search and destroy missions. It also is used by the Army which favors the CCB as a mobile forward command post. The 11-man crew protects its craft with 40- and 20-mm cannon, grenade launchers and machine guns.

Although it looks like the other ATCs, the refueler has special equipment in its well-deck to carry fuel for the Army's outboard engines used in small runabouts, and for helicopters. Some of the riverine boats have been modified to carry a flight deck on which helos can land

to deliver supplies or to evacuate wounded. These helicopter boats give the MRF the flexibility to move troops either by water or air to and from battle zones.

To support the riverine boat crews and army troops, the Navy uses two barracks ships (APBs), a number of barracks barges (APLs), and repair craft (ARLs), in addition to LSTs

used primarily for hauling cargo from supply depots. The barracks ships — *uss Benewah* (APB 35) and *Colleton* (APB 36) — are air-conditioned and offer the maximum comfort possible for the crews and troops. Hot meals, hot showers and clean, fresh bunks rate high on the comfort index by troops returning from a mission. —Marc Whetstone, JOC.



UNDER COVER of monitor's guns troops offload from ATC. Below: River boats tie up alongside pontoons, waiting for service from *USS Askari* (ARL 30).





FOG ON DECK—Students pour water and foam on simulated hangar deck fire during firefighting school exercise.

Firefighters Keep It Cool

SHOW BY DOING—Hose handling is elemental in firefighting. Instructor helps student at right.



IT TAKES MORE than raw courage to fight fires. Each man who is involved must know what to do and how to do it quickly.

The Naval Training Group's firefighting school at Pearl Harbor, Hawaii, is one of the places sailors learn firefighting.

Here eight veteran instructors train over 50 students per week in the most modern techniques of firefighting.

After a morning of classroom instruction on the ABCs of fire, the students don protective clothing and learn to fight fires face to face.

A large tank filled with diesel fuel is lighted and the flames quickly leap to over 30 feet into the air. The instructor shouts,

"Hose on, move in, get it!"

The wary student moves in on the growing fire, sweeping the nozzle back and forth to extinguish the flames.

This exercise is designed to build the confidence of each student. He now knows that a large fire will retreat before him if he handles himself and his equipment properly.

While still in his first day of instruction the student pauses and reflects on his efforts as his classmates, each in turn, step forward and dampen the raging flames.

As his next phase of training, with hardly a moment of rest, the student heads for some quick indoctrination in the use of various pumps the Navy uses on its ships.

As the instructor explains the action of the pumps, many students nervously glance at the black, smoke-covered building directly behind them. This building is a replica, in brick, of a boiler room on a ship.

The fuel for the boiler room fire lies in a pool directly under the steel grating used as decking in the building. This means the student must douse flames shooting up from directly in front of him before he can enter the building and extinguish the fire completely—a grim prospect for a student in his first day of instruction. But it pays off, NTG says.

ALL HANDS

AFTER THE LECTURE on pumps has been completed, the instructor assembles the students around the ominous black building and explains exactly how this fire must be fought. Each man listens intently.

"This fire is the real thing—one mistake and we'll all be in the hospital.

"We haven't lost a student or an instructor yet, and we're not going to start now," says Chief Shipfitter Al Merz who has worked these fires each week for over two years. He has no time for mistakes.

The men are split into two hose teams, with other students standing by with auxiliary hoses just in case.

Chief Merz, the senior instructor and field chief at the school explained, "These fires must be extinguished quickly, because the fuel may present us with the threat of an explosion."

As the instructor finishes his lecture on fighting the boiler room fire, Chief Merz carries a flaming torch inside the building and ignites the pool of fuel.

The fire burns slowly at first but the oil heats up quickly, and within seconds searing flames engulf the interior of the building and shoot from the doors and portholes.

The teams beat the flames back from the doors, each of the two hoses pouring 50 gallons per minute of high pressure fog on the fire. As soon as they get the fire away from the door they move in quickly as the mist from the hoses begins to extinguish the dying fire.

Extinguishing the boiler room fire takes only about three minutes, but in the words of one student, "You feel as if you'd been born and raised in there by the time you get out."

After each man has had an opportunity to fight the boiler room fire the class is dismissed.

EARLY THE NEXT morning the men return for more instruction on fire-fighting agents such as foam, CO₂, and Purple "K" powder. Later in the day the men put everything they have learned to use when they fight the biggest fire at the school, in a simulated hangar.

The building used to depict the hangar deck on an aircraft carrier contains a pool of mixed aviation gasoline and jet fuel, a highly volatile mixture, about three feet deep, covering the entire floor.

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DAMAGE CONTROLMAN 1st Class Troy Coleman explains use of jet pump to students. The pump is used to extract water from flooded compartments.

The students stand back from the building with water and foam hoses as an instructor moves in to light the fire.

It takes less than 10 seconds for this fire to burst into 50-foot flames and envelop the building in a searing heat.

The students move in even more quickly to fight this monster because it can't be allowed to burn for more than a few minutes, owing to the heat of the burning fuel and the ferocity of the flames.

Two teams of students attack the fire first with water fog to cool the air and beat the flames back into the building. Then two more teams move in with foam hoses to finish off the fire. The foam covers the fuel like a blanket, depriving the fire of oxy-



STUDENTS enter three-story smoke chamber during an exercise to familiarize them with workings of an Oxygen Breathing Apparatus.



gen and preventing further production of flammable fumes.

WHEN THE GIANT fire is extinguished, the men roll up their hoses and settle down for a few minutes. The heat is gone now, but the memory of it will linger in their minds for a long time to come.

Each man realizes that he has experienced a transformation. He is no longer limited to merely saying that he believes he can successfully extinguish a large fire. He knows he can. He has done it. He has laid siege to an inferno and personally forced it to surrender.

The remainder of the final day is almost anticlimactic as the men witness the instructors demonstrate the newest techniques and equipment used in firefighting.

Chief Merz looks on as the class

is dismissed and the men return to their ships or shore stations, another 50 men better trained to handle any fires that could threaten their ship or station.

The chief comments, "We just can't teach them everything, but we like to think that we may have saved a few lives."

The school, one of many operated at Pearl Harbor by the Naval Training Group, is commanded by Lieutenant J. V. Matyasovics, a veteran of more than 20 years of service in the Navy.

"Firefighting schools have an important responsibility," he says, "and an important effect. You feel more at ease on any ship with men who are qualified firefighters."

Story by Glenn E. Huey, JO2, USN.
Photos by Leonard Martin, PH1, USN.



PROPER use of mechanical foam nozzle is explained to student.

'Deep Fryer' Fat Fires: Don't Use Water

TODAY'S U. S. NAVYMEN fight fires with some of the best equipment made, and the Navy is carrying on constant research to improve that equipment. At the same time there is a constant need for well-trained men capable of using this firefighting equipment.

The Fleet Training Group, Western Pacific, has set up a vast firefighting refresher school in Yokosuka,

INSTRUCTOR at the firefighting school demonstrates how it's done as he emerges from the smoke chamber during exercise.



ka, where U. S. Seventh Fleet Navy-men, shore based personnel, Military Sea Transportation Service crewmembers and, occasionally, Coast Guardsmen are taught to use the firefighting equipment on their ships or stations.

More than 4300 students went through the one-day school last year. It is hoped this figure will be doubled by 1970 to cope with the Navy's rotation of personnel aboard ships.

Students are instructed on the types of firefighting compounds and equipment and how to use them. A large number of shipboard fires now are the "deep fryer" type, that is, fires involving burning grease. Although they are usually minor, they can endanger the entire ship if they

are not extinguished quickly and properly.

It is impossible to put a deep fryer fire out by pouring water on it. In fact, the grease actually explodes when water is poured on it.

Mornings at the school are devoted to classroom instruction and movies, while the afternoons are concentrated on actual firefighting and the smoke chamber.

In the smoke chamber, students are taught to use the oxygen breathing apparatus (OBA) which enables them to breathe fresh oxygen even in a smoke-filled room. They then enter the room without the breathing apparatus to simulate actual fire conditions.

—D. J. Mrachek, JO3, USN.

CREWMEMBERS of USS Providence and USS Annapolis extinguish a Class B fire using low velocity fog. The fog keeps firefighters cool near the fire.



NAVAL SAFETY CENTER

AN ISOLATED INCIDENT occurred aboard USS *Newport News*, but it was identical to an incident aboard *America* and similar to incidents aboard *Guam*, *Navasota* and *Mullinix*.

Before 1 May 1968, the incidents could not have found a "home." Now the information will be sent to the Naval Safety Center, where analysis will be made and information or recommendations will be returned to the sender—and all others concerned—to prevent the incident from happening again.

The sequence of events outlined above is hypothetical, but the procedure for handling it does exist. The diagram on these pages depicts the flow of information from *you*, shows what happens when it reaches the

Naval Safety Center (NavSafeCen), and what the NavSafeCen does with *your* report.

By way of explanation you, who are in the Fleet, experience a hardware malfunction—or the result of an operating procedure is not safe. What do you do about it?

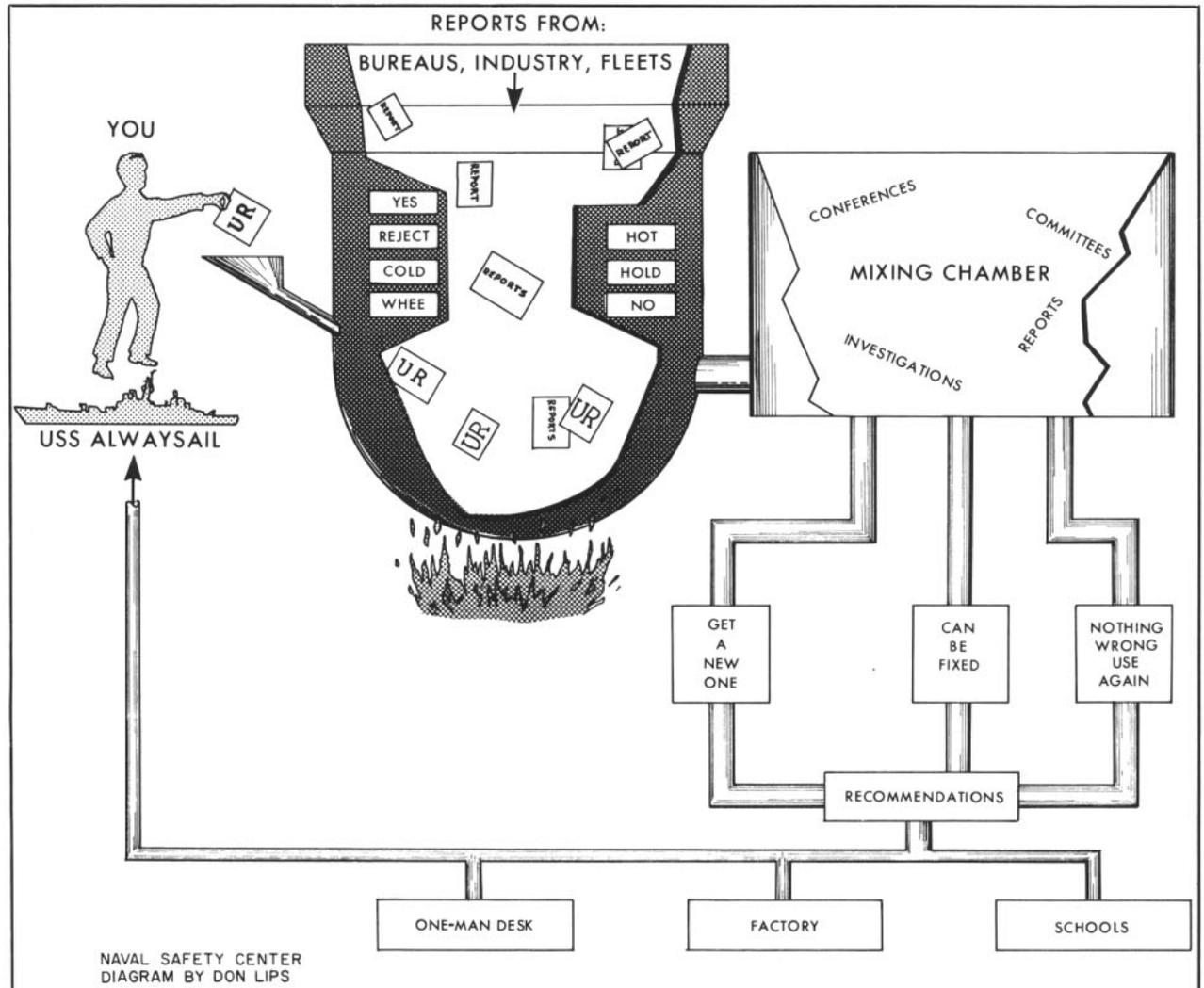
You report it. The NavSafeCen (with reports coming in from many sources) examines your problem. After analysis, a report is made back to you. You also may get a change of instruction or a modification in hardware design if it is necessary.

Rescues at sea are near and dear to everyone's heart—especially to the rescued. No matter what ship is involved certain equipment has to be ready for instant use, certain procedures have to be followed and cer-

tain drills or training cycles have to be conducted frequently. In the matter of rescues (man overboard drill) constant attention is given to the equipment to be used, to the rescue techniques, to shiphandling and to recovery. If you have trouble with some equipment or with some procedure the NavSafeCen wants to know about it. Perhaps others have had the same trouble or similar trouble and now is the time to do something about it. You can help by reporting any malfunction. The NavSafeCen will then pick up the ball and run with it.

What is it? Where is it?

The Naval Safety Center was established 1 May 1968 by CNO at the same time that the Office of the



Assistant Chief of Naval Operations (Safety) was created. These were two of the recommendations which were implemented as the result of a SecNav study group which reviewed the entire Navy safety program.

The Naval Safety Center located at the Naval Air Station, Norfolk, Va., is a merger of the former Aviation Safety Center and the Submarine Safety Center. The latter, now located at New London, Conn., is in the process of moving to Norfolk. The mission of the NavSafeCen is:

"To collect and evaluate information pertaining to safety, publish statistical data concerning accidents, maintain a repository for accident and safety reports, maintain direct liaison with all levels of command within the Navy and other government and private agencies engaged in safety work and other aspects of the Department of the Navy Safety Program in order to advise and assist the Chief of Naval Operations in promoting and monitoring safety and the prevention of accidents.

"Initiate and conduct informal investigations into all phases of safety

to develop information to make recommendations for the formulation of safety policy necessary to maintain the highest practical level of combat readiness."

Accident Prevention

The NavSafeCen exists to provide greater effectiveness in accident prevention throughout the Navy Department. From the experience gained in the aviation and submarine fields it is intended to extend safety coverage to the surface ships which have not had a formal program previously. Further, industrial safety expertise generated over the years by industrial centers will be phased into all levels of shipboard operations and into aircraft operations ashore and afloat. This will complete the reorganization of the Naval Safety Center.

Personnel of the NavSafeCen consists of Naval officers and enlisted, Marine officers and enlisted, representatives of the FAA, Army, Air Force, and civilians. Many specialties are represented by the personnel: aviators, submariners, surface

ship experts, engineers, maintenance types, psychologists, doctors and medical service specialists, analysts, investigators and automatic data processors.

The work of the NavSafeCen is to find out what causes accidents and what can be done to prevent them.

The NavSafeCen never assigns blame.

It tries to determine why an individual and others like him had an accident. When there is an aircraft accident or a collision between ships the NavSafeCen tries to figure out why. It is necessary in the investigation of facts to determine what circumstances existed. Was it day or night? Was weather or tide a factor? What was the physical condition of the man? Did equipment fail? Were other personnel involved? All of these and many more questions are answered and for one purpose only—to make meaningful recommendations to CNO or CNM or a Force Commander to make something safer and to prevent the accident from happening again.

—C. B. Weisiger.

Competition Is Strong In This DC League

AS ALMOST anyone who's been to sea knows, continuous drilling and training are necessary to achieve a state of readiness, whether it's in a gun tub or in Secondary Conn.

Particularly in the field of damage control, a repair party's response to emergencies should be instinctive.

Aboard the nuclear powered aircraft carrier *USS Enterprise* (CVAN 65), the instinctive response and the spirit of coordination, both necessary in an hour of crisis, are being developed among repair parties through a system of damage control competition.

To meet training needs and to promote enthusiasm, a number of measures have been instituted by the ship's commanding officer, Captain Kent L. Lee, USN. His damage control assistant, Lieutenant Commander L. S. Gifford, USN, enumerated the measures which are part of the carrier's training program:

Damage control parties are divided into three leagues. Repair units from the stern and main deck sections of the ship compete with those from the second deck and those assigned to main repair lockers.

Each unit is judged on its performance over a predetermined period, usually lasting about two months. This allows enough time for each unit to be observed and graded at least twice by the *Enterprise* Damage Control Training Group.

TEN DAMAGE CONTROL experts make up the group which focuses sharply on each unit's preparedness and ability to handle situations involving ship buoyancy, stability and flood control, watertight integrity, fire-fighting and repairs to both structural and mechanical damage.

Actual damage would likely affect several adjacent units. Therefore, future drills will incorporate problems requiring two or more units working together. Such drills help to strengthen as well as widen the flexibility and experience of the single unit should it have to assume responsibility of another area or handle several areas at one time.

To help slow down the turnover rate of repair party members, billets have been placed on a more permanent basis. Approval of the Executive Officer is now necessary for a

change in personnel. This results in a more carefully chosen permanent team.

While each repair unit is judged on its performance, its individual members also receive proper recognition. Plans are to take more formal notice of individual achievement by having noteworthy damage control performances entered in officer fitness reports and enlisted evaluation records.

But the real emphasis for recognition is placed on teamwork, as was the case recently when the carrier's commanding officer awarded letters of commendation to *Enterprise's* Damage Control Unit No. 34 which earned the highest score during operational readiness inspection off Hawaii.

As a result of the competition system, interest in doing the best job possible among the repair parties has grown to the point that no one unit has a monopoly on top status. "Enthusiasm and aggressiveness," according to the damage control assistant, "are all that separate them now."

—John F. Chapman, JO3, USN.



ON HIS OWN—Chief Hospital Corpsman James J. Oakley sterilizes instruments and bandages leg of crewmember.

Corpsman on Call

TAKE A DOCTOR, a nurse, an orderly and a hospital administrator, roll them into one, and you might describe a Navy independent duty hospital corpsman.

Such a man is Chief Hospital Corpsman James J. Oakley, serving aboard the destroyer *uss Taylor* (DD 468) operating with the U. S. Seventh Fleet off Vietnam.

"I've had very few major problems to cope with on this tour of duty," Chief Oakley explains. "We had one man who severed some fingers and another who broke his leg. We were able to transfer both of these to a hospital in Hawaii."

But he is well trained to operate independently of a medical officer.

He has attended a five-month school learning minor surgery, pharmacy, materia medica, therapeutics, nursing, laboratory techniques, anatomy, chemistry, and administration.

A typical day for Chief Oakley will start with morning sick call, followed by a daily check of the fresh water on board for chlorine content, sanitation inspection of all messing facilities, routine log entries, medical equipment inspection and sick call again in the afternoon and evening.

"I see an average of 15 patients a day. Ailments will normally include burns, headaches, colds and minor cuts and abrasions.

"I feel that independent duty is

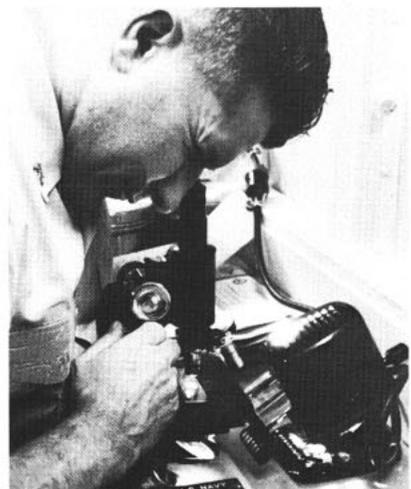
one of the best assignments available to a hospital corpsman. We are forced to make decisions and are in a constant training situation. We conduct classes for the crew in first aid, self-aid, chemical and biological warfare and evacuation procedures," he said.

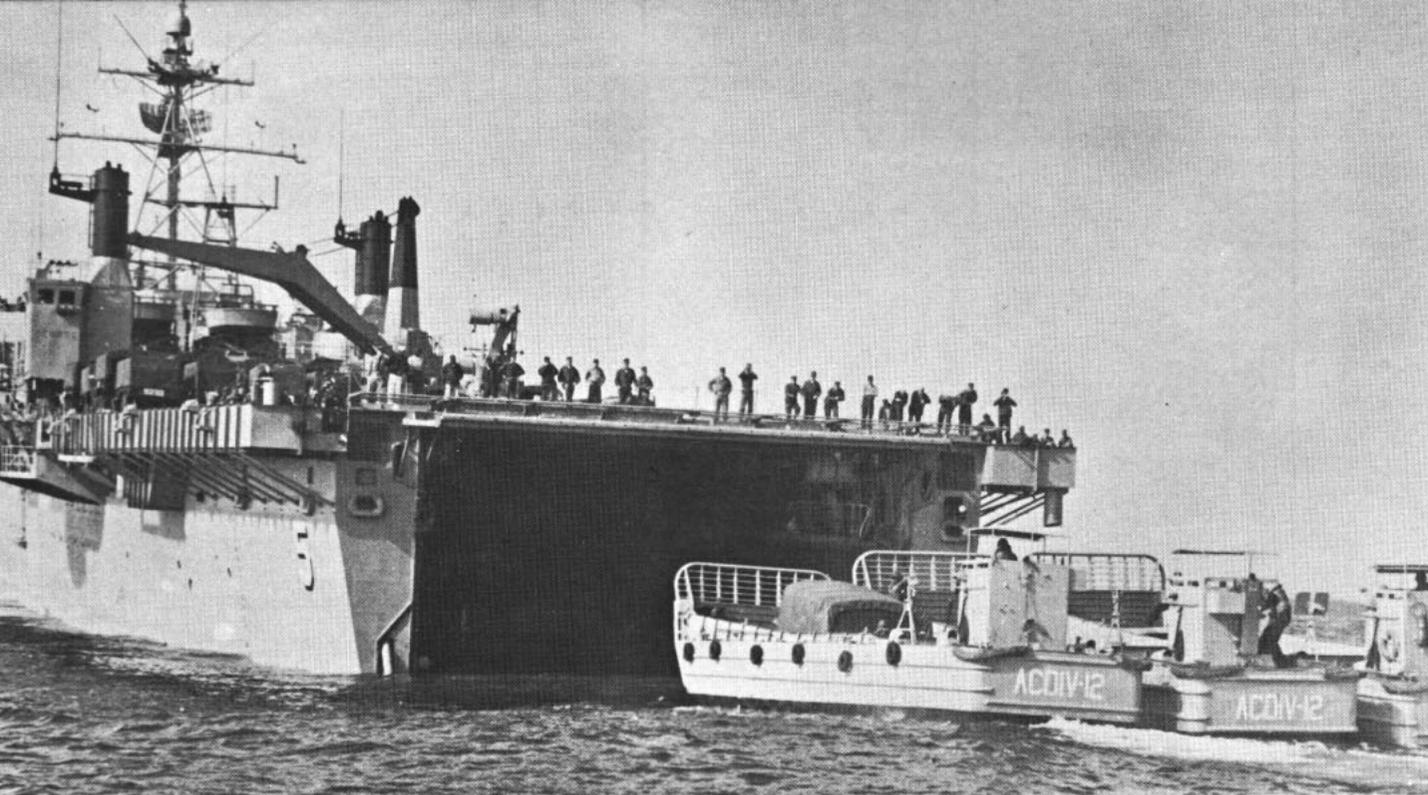
A qualified parachute jumper, he made over 80 jumps while on duty with the Marine Corps at Camp Pendleton, Calif.

The chief entered the Navy in 1948 and has spent the greater part of his career with the Marines. He served in Vietnam in 1960 and again in 1961 with Marine units.

—Story by Bill Case, JOC, USN.
Photos by Don Grantham, PH1, USN.

DESTROYER 'DOC'—Blood sample is checked, book is drawn from ship's medical library for study and shot is readied.





SHIP TO SHORE—Boats approach well deck of *USS Ogden* (LPD 5) after offloading men and supplies on the beach.

Beach Group One

LANDING—*USS Jerome County* uses forklift trucks and an 800-foot pontoon causeway to offload supplies.



HISTORY'S first amphibious assault was a relatively simple affair. Oarsmen rowed to shore and soldiers did not even have to worry about getting their spears wet.

Today's amphibious operation involves a highly complex coordination of ships, troops, and supplies. A smooth flow of men and material over enemy beaches is most important.

One of the organizations assuming this task in the Far East, including Vietnam, is Naval Beach Group One, Western Pacific Detachment in Yokosuka, Japan. The group consists of elements from three highly specialized units: Assault Craft Squadron One, Beachmaster Unit One, and Amphibious Construction Battalion One.

During a waterborne assault, ships of the Seventh Fleet Amphibious Force rest off shore while Assault Craft Squadron One carries Marines and their battle necessities—from C-rations to tanks—to shore in closely timed waves. These landing craft, mechanized (LCM) and landing craft, utility (LCU) are loaded with leathernecks or cargo within the well decks of special large amphibious ships. These ships lower their stern

gates, flooding their hollow section below the main deck to allow the smaller supply boats to enter.

When the Marine special landing force, with its trucks, tanks, jeeps, ammunition and other supplies, hits the beach, the Beachmaster Unit takes over and puts every man and piece of equipment in its proper place. This unit, like traffic policemen, immediately organizes beach activity by directing all movement according to proven methods and months of planning.

Once a hostile beach is secured, the Amphibious Construction Battalion takes up its major work. These amphibious Seabees create "instant" harbors in all types of coastal geography. They install pontoon causeways which serve as floating bridges to the beach allowing tank landing ships to offload cargo, and lay fuel lines from ship to shore to keep combat vehicles running.

From its inception before Korea's Inchon landing, through the more than 50 amphibious landings in Vietnam, Naval Beach Group One has proven itself to be an efficient unit of the 7th Fleet Amphibious Force.

—R. Felicio, JOSN, USN.

LETTERS TO THE EDITOR

Constellation Welcomes Visitors

SIR: The United States Frigate *Constellation* has just completed a \$180,000 restoration program (paid for by contributors from the public and friends of the Navy). The ship will be open to the public at Pratt Street at Longdock, Baltimore, Md., on the following schedule:

Now Through Memorial Day
(30 May)

Tuesday through Saturday (closed Mondays) 10:00 am to 4:00 pm
Sunday 12:00 noon to 5:00 pm
(Closed Christmas day and New Year's day)

30 May Through Labor Day
(first Monday in September)
Mondays through Saturday
9:00 am to 6:00 pm
Sundays and holidays
12:00 noon to 6:00 pm

Constellation has been open to the public since 19 Jun 1968 and has averaged 2000 visitors a week.

As you are probably aware, *Constellation* today is considered by many to be the oldest ship in the world continuously afloat and the first commissioned ship of the United States Navy. By Act of the Maryland Legislature, *Constellation* has been recommissioned as the flagship of the State of Maryland. Maryland is one of the few states that has maintained an armed flotilla continuously since 1775.

I find it interesting to note that *Constellation* was in active commission during every American war, excluding only the American Revolution and Vietnamese conflict. She was decommissioned by the Navy on 12 Feb 1955 and remained out of commission until being recommissioned by the state of Maryland on 22 June 1967.—D. F. Stewart, *Constellation* Restoration Committee.

Combination Correspondence Courses

SIR: I recently visited my command's Educational Services Office and tried to order a correspondence course entitled Math I. I was told that, since this was a combination enlisted and officer course, I must submit a special request chit via the chain of command before the course could be ordered for me.

This procedure seems very strange to me. Can you explain why I can order a course for enlisted personnel with no special request requirement, yet if it is a combination enlisted and officer course, a special request chit must be submitted and approved?

Why the big difference? I thought we were all in the same Navy, and could

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, Pers G15, Bureau of Naval Personnel, Navy Dept., Washington, D.C. 20370.

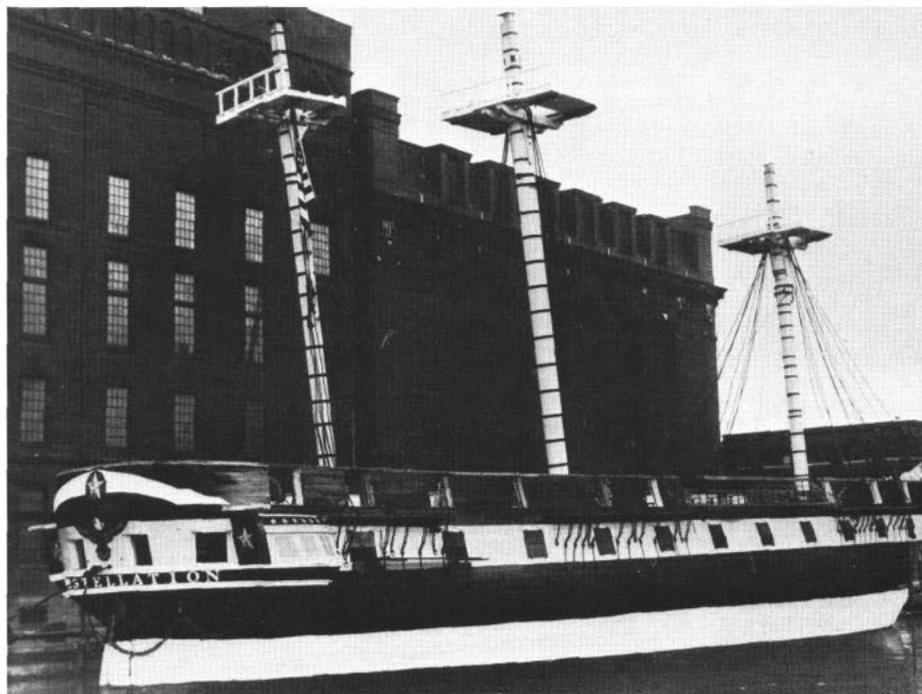
make use of the Navy's study material whether we are enlisted men or officers.—M. L. R., GMT2, USN.

• We join you in your state of incredulity.

Our friends in the Bureau's Correspondence Course section tell us that no specific instruction was published regarding procedures to be followed by enlisted men applying for such combination courses.

Many commands have been processing applications for the courses as special requests to be forwarded through the chain of command. No such restriction was intended when the courses were established. Instructions to this effect will be published in the next issue of List of Training Manuals and Correspondence Courses, NavPers 10061-AB.—Ed.

BACK IN SHAPE — The first commissioned ship in the United States Navy, *USF Constellation*, is in Baltimore, Md., harbor, open to the public after completion of restoration program. She is now flagship of state of Maryland.



Standing By for Inspection

SIR: There is a discussion among the petty officers of my division concerning the correct way to present a shipboard space for inspection.

When I first joined the Navy I was instructed to salute, give formal greeting, identify myself and the space, and say "... ready for inspection."

Some of my fellow POs say I should never state that I am "ready" when presenting a space. The correct procedure, they say, is to state that I am "... awaiting your inspection." Who is right?—V. J. G., RM2, USN.

• It is hoped that your side of the argument is not heavily backed. You are the victim of a revision.

Change Three to NWP 50(A), Shipboard Procedures, which became effective recently, states:

"The enlisted man responsible for the cleanliness and preservation of each space will present himself to the zone inspector by saluting and saying 'Good morning, Sir. Doe, (rate), Compartment C-304-L, 2nd Division, standing by for inspection.'"

The phrase "standing by for inspection" is a change from the old procedure which stated, "ready for inspection."—Ed.



AT-SEA DELIVERY—Fast combat support ship *USS Camden* (AOE 2) transfers fuel and ammo to Navy cruiser and Coast Guard cutter off coast of Vietnam.

More *Big Horn*

SIR: In reference to your comments in the April 1968 issue of *ALL HANDS* concerning *USS Big Horn*:

I suppose there is a word other than "effective" to describe the Q-ship's contribution to the ASW effort in the North and South Atlantic during World War II. However, I have yet to hear one.

Both the ship and the crew did their best to come to grips with the enemy. In each instance, she came through the encounter unscathed.

Those of us who were there know that on at least three occasions, our mission of "search for and destroy" was carried out to the letter. However, to secure credit for a kill, it almost seemed necessary to bring back the signed log of the unlucky sub that had been clobbered. "Proof required" became quite a joke among ASW forces, and inspired many a corny pun in those days.

However, the fact remained that even before the advent of the baby flattops, the real answer to the problem, the sea was becoming much safer for convoys and cripples alike. The DDs, PCs and, in fact, all the ASW craft were becoming more proficient in their work.

Although she was patterned along the lines of the Q-ships used by the British Navy during World War I, *Big Horn* was better equipped to carry out the ASW mission. Radar, sonar, HFDF, electrical recorder, phones to all parts of the ship, hedgehogs, K gun devices and nine 4-inch/50-caliber guns were some of the things we had that previous Q-ship skippers never even dreamed of. But there were similarities.

We had smoke devices to simulate severe damage, we wore civilian clothes, no more than 20 men were permitted topside during daylight hours, collapsible plates and bulkheads concealed our main battery until the big moment for action, and heavy charges were placed

along the keel to destroy *Big Horn* if necessary.

We could, and did, change her profile from time to time by moving phoney kingposts and booms. Also, we purposefully showed small lights at night and made smoke by day, hoping to coax a nosy U-boat to come in for a closer look.

However, it must be remembered that *Big Horn* was a slow, cumbersome ship with a turning circle that would make one stop and ponder. Therefore, it speaks well of the gear we had and the people who manned it that we did bring at least three, perhaps more, submarines right under our bow where we wanted them.

To make *Big Horn* virtually unsinkable, her holds had been filled with empty, sealed 50-gallon steel drums. As I recall, there were between 13,000 and 14,000 of them. Fresh water then was pumped into the spaces between the drums to provide ballast. Despite the weight of the water, she was so super-buoyant that I won't even mention the degree of roll she took on several occasions for fear of starting a round of pooh-poohs that might put you on the spot.

I take issue with a couple of points you made in your April discussion. You stated that "like most Q-ships, *Big Horn* was also formerly a merchant tanker." To the best of my knowledge, we were the only ex-tanker on this special assignment.

You also stated that *Big Horn* joined forces with "a pack of PC boats." Forgive my nit-pick, but I believe that at no time did we have more than two PCs with us—numbers 617 and 618. Tough and rugged as they were, I don't believe two PCs could properly be called a "pack."

Also, you fixed our beat as "north of the Azores and as far south as the latitude of Dakar." The fact is we never

did get north of the Azores, but we did get as far south as Recife, Brazil, when we put into port for a new set of recognition lights. (We had been at sea for more than 60 days and our recognition lights had run out.)—R. J. G., LT, USNR (Ret).

• Sorry, but we are not prepared to argue the effectiveness of Q-ships. We weren't there, and not a great deal of an official nature has been written about them. What we said in April was paraphrased from *Big Horn's* official history. *ALL HANDS* also reported that the Q-ships were noted for patrolling in hazardous waters and that their presence indubitably served as a deterrent to the enemy.

Let's take another look at your ship. *Big Horn* first was known as the merchant tanker *ss Gulf Dawn*. The Navy acquired her early in 1942, and designated her AO 45.

However, during her conversion, *Big Horn* actually became a Q-ship—a disguised merchant ship operated by the Navy for antisubmarine warfare. She served as such until January 1944, and then was assigned to the Coast Guard for North Atlantic weather patrol.

In February 1945, *Big Horn* had her designation changed to IX 207, and two months later began to serve as a shuttle tanker in the Southwest Pacific. She next was assigned as a station tanker in Japan, and then returned to the United States for transfer to the Maritime Commission in November 1946.

With regard to her effectiveness, the record states that *Big Horn* attacked two undersea contacts with depth charges in May 1943. Following the attack, which continued for four hours, an oil patch was visible over a wide area of the attack zone and it was presumed, but never confirmed, that one submarine had been destroyed and that another had moved out of the area.

The record also shows that during a five-day period in November 1943, *Big Horn's* group was in the midst of a pack of 10 to 15 German submarines. The tanker's commanding officer reported that nine contacts, sightings or attacks on the U-boats were made just within her immediate vicinity. He believed that the German raiders were wary of attacking an independent tanker and because of the presence of *Big Horn* many other independent merchant ships in the area escaped attack.

One school of history maintains that no U. S. Q-ships were credited with sinking enemy submarines during World War II. Therefore, it is argued that the Q-ships were effective in patrolling hazardous waters, but that their value in ASW was overrated.

At any rate, since you were there, we're inclined to think your version of Q-ship effectiveness sheds new light on a little-discussed subject.—ED.

Firefighting Assistant Cross

SIR: Who is authorized to award the Firefighting Assistant "Cross" and where can this authorization be found?—S. L.

• Unfortunately, the answer to your question isn't completely covered by present Navy regulations but that situation soon will be rectified.

Article C-7412 of the BuPers Manual is being revised and should answer questions on who is to award the Firefighting Assistant Insignia, a Maltese cross, and specify the qualifications which must be met by those receiving it.

At this point, it appears that all rates will be eligible for the award and that qualifications will be determined by the individual command, based upon an examination and exhibited proficiency in practical factors. Requalification for the "cross" would be the same as for the original award.

When the change is published and complete information on the subject is available, it will be announced in ALL HANDS.—ED.

Double Duty

SIR: A man on board my ship asked me a question regarding his transfer status which I could not answer. I checked the *Transfer Manual* and an appropriate Pacific Fleet directive, and came up with two different answers to the same question. The man who asked it now is twice as confused as he was in the first place, and so am I. Here's the hangup:

I interpret CinCPacFlt Inst. 1306.9A to say that a man may submit requests for preferred sea duty and overseas shore duty simultaneously. However, the *Transfer Manual* indicates that a second request for transfer may not be submitted until final action has been taken on the first. I'd appreciate some clarification.—R. G. S., PN2, USN.

• Your interpretation of the CinCPacFlt instruction is misleading.

It really says that your man may request either overseas shore duty (including preferred overseas shore duty) or preferred sea duty. If he wishes to change his request from one to the other, he must cancel his request for the first. This helps to insure that two sets of orders will not be issued to the same individual. Take another look at Article 6.33 of the CinCPacFlt directive.—ED.

Would You Believe \$21 Per Month?

SIR: Young Navymen find it difficult to believe the enlisted pay rates which existed when I joined the Navy during the depression.

I entered boot camp at San Diego on 17 Oct 1933. A short time later, the President was forced to close the banks temporarily and declare a 10 per cent reduction in all federal pay.

This reduction cut my salary from the

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, Pers G15, Bureau of Naval Personnel, Navy Department, Washington, D. C. 20370, four months in advance.

• *Great White Fleet* — The 24th reunion will be held December 16, at the U.S. Grant Hotel, San Diego, Calif. Those interested contact Harry S. Morris, 5070 Marlborough Drive, San Diego, Calif. 92116.

• *Enlisted Reserve Association* — Annual conference will be held at the Sheraton Park Hotel, Washington, D. C., on 18 and 19 October. For details, write NERA National Headquarters, Box 7111, Ben Franklin Station, Washington, D.C. 20044, ATTN: Duncan Forsyth.

magnificent sum of \$21 per month to a less princely \$18.90. Nowadays, an apprentice seaman makes \$102.30. Has the cost of living really increased this much?

If you have the basic pay scales in effect during the 1930s, it would be interesting to see them.—H. B. de L., Jr., SKC, USN.

• The cost of living has risen since 1933 and so has the standard of living. Just look around any well-equipped living room, kitchen or laundry and count

the items which didn't exist in 1933, then list those which have been improved during the intervening years.

Needless to say, Navy pay, allowances and fringe benefits must keep abreast of comparable schedules in civilian life so that Navymen can cope with increased prices and have a standard of living comparable to that enjoyed by other segments of the population.

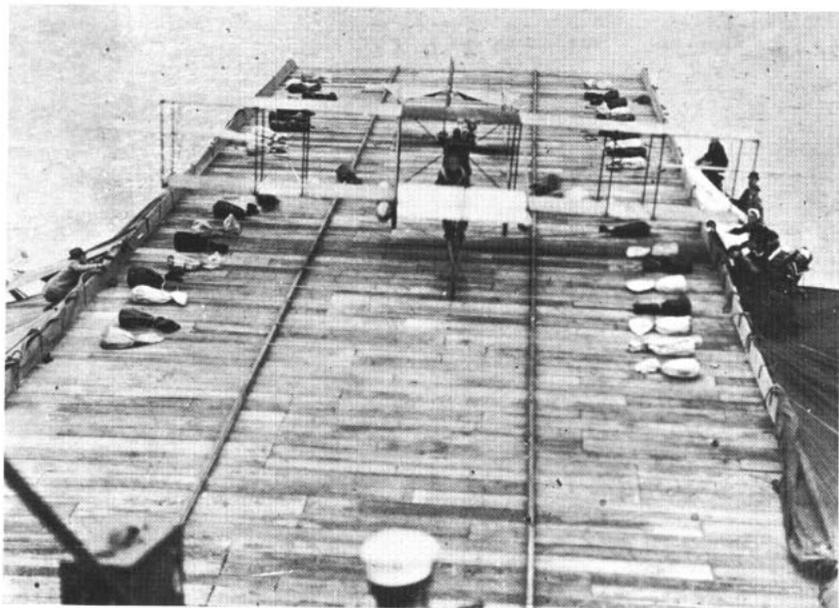
If you want to compare the difference in pay schedules today with those of the depression years take a look at the basic pay scale for the '30s (less reductions effective during various periods), then compare the amount with what you are receiving today:

Chief petty officer—\$126; chief petty officer (acting appointment)—\$99; petty officer first class—\$84; petty officer second class—\$72; petty officer third class—\$60; nonrated, first class (SN)—\$54; nonrated, second class (SA)—\$36; nonrated, third class with over four months—\$30; nonrated third class with under four months—\$21.

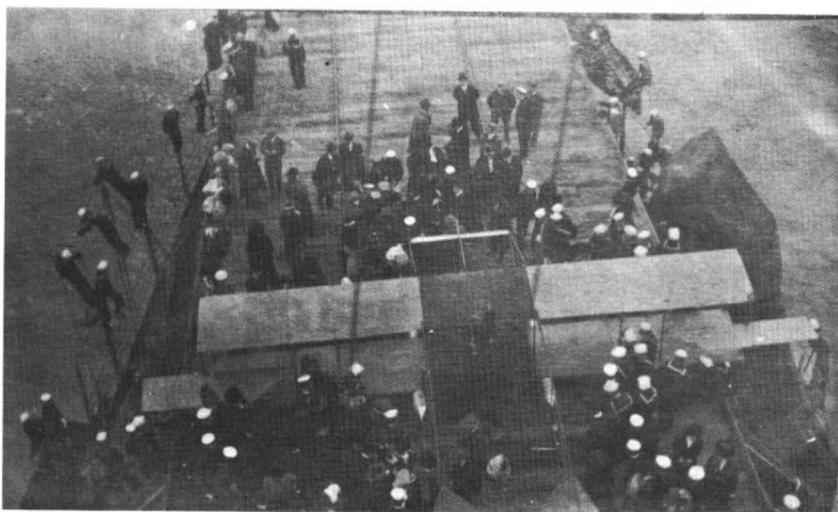
This schedule was adopted in 1922, a period of relative prosperity. Pay of all military personnel was reduced 15 per cent by the Act of 20 Mar 1933, effective 1 April. However the Act of 28 Mar 1934 amended the 1933 law to provide for a 10 per cent reduction for the period 1 Feb 1934 through 30 Jun 1934, and a five percent reduction between 1 Jul 1934 through 30 Jun 1935.—ED.

BROTHER ACT—Twin brothers William and Samuel Weibel, both aviation electrician's mates, receive handshake from LCDR L. H. Anderson after being presented Aircrewman wings. They are aboard USS Shangri-La with HC-2.

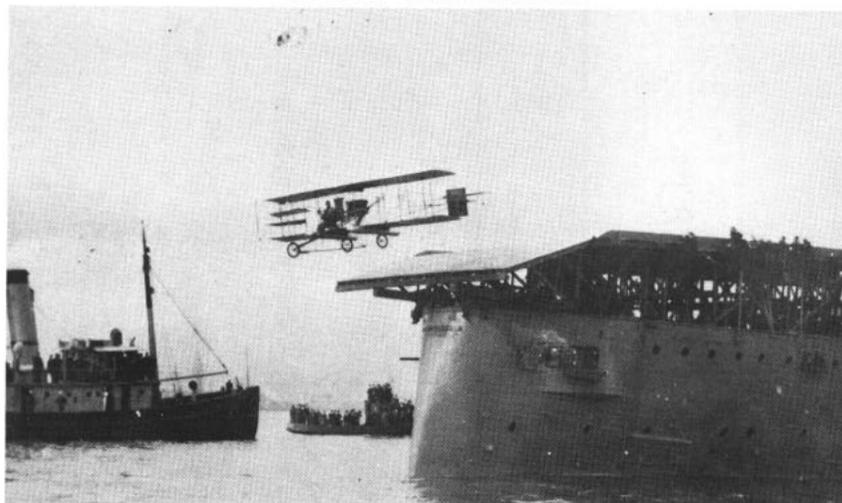




Eugene Ely makes historic landing on USS Pennsylvania in 1911.



Newly discovered photograph shows Ely's Curtiss pusher biplane being readied for takeoff. Below: the takeoff.



Cameras Were Busy on Historic Day

SIR: I discovered this old photo (left, center) in a book store. It may be a picture of one of the early A-1 airplanes. Notice the rails or track on the platform ahead of the plane, presumably used to aid the plane on takeoff.

Perhaps you can help me identify the ship, plane, pilot, date and circumstances surrounding this photo.—George T. Hubbard, CWO-W2, USNR.

• With the help of the Aviation History Unit in OpNav, we can. The plane is the Curtiss pusher biplane used by Eugene Ely in his historic landing on, and takeoff from, the battleship USS Pennsylvania in San Francisco Bay, 18 Jan 1911.

Ely's landing, as you may know, completed the cycle he had started a little over two months earlier, when he took off from the deck of the cruiser USS Birmingham. The two events demonstrated the feasibility of carrier aviation.

As you can see from the photo above, Pennsylvania had rigged a wooden deck above her main deck, which reached from stern to superstructure.

Twenty-two lines stretched across the platform about four inches off the deck provided a simple arresting gear. The two rails you mentioned were used to hold the lines off the deck. Fifty-pound sandbags on each end of the lines supplied the necessary drag to stop the aircraft. In your picture you can see the sandbags stowed on the side of the platform.

Three hooks were affixed to the aircraft's underbelly to snag the arresting lines. Just in case they failed, a canvas barricade was strung across the end of the platform.

Ely wore a life preserver consisting of a bicycle inner tube around his chest, and several swimmers stood by on the ship ready to attempt to haul him out of the water in case of a mishap.

Shortly before eleven that morning Ely took off from a nearby airfield, and a few minutes later the aircraft appeared over San Francisco Bay. A short turn to the left pointed the plane up the ship's deck and in a few seconds the wheels touched down. The hooks caught several of the arresting lines and the plane slowed to a stop within 30 feet.

The picture you sent us is a new and rather rare view of the event showing the plane after it had been turned around in position for takeoff. A little less than an hour after landing, Ely was again airborne, thus proving that aircraft could use a ship's deck for an airfield.—ED.



FIRST CRUISE

THE NAVY guided missile cruiser USS *Springfield* (CLG 7) took on a different type of mission than her usual one during the ship's last deployment.

On this cruise, *Springfield* was assigned the task of helping to train more than 130 midshipmen. There were 17 first class and 122 third class midshipmen that for a while became part of *Springfield's* crew.

First class midshipmen were given the same duties and consideration as those of junior officer while the junior midshipmen assisted in cleaning of the ship and other enlisted duties.

The third class midshipmen found out that life at sea is an active one. They were kept busy with such

tasks as polishing brass, scrubbing decks, working in engine rooms and standing phone talker watches.

Bigger and operationally more important items were found on the training schedule of the senior midshipmen. These future Navy leaders found themselves charting course on the bridge, in CIC tracking targets, and in the engine room standing throttle or bell watches.

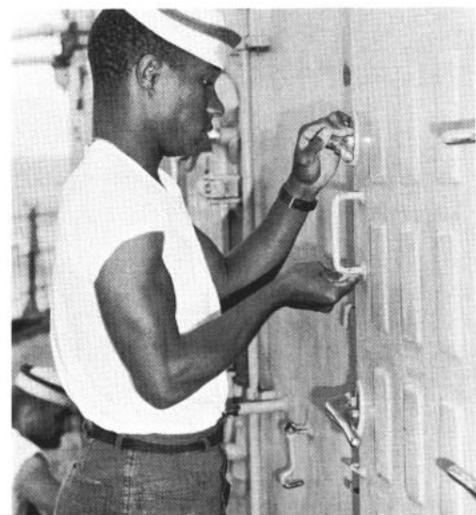
While in port, the first class stood OOD watches (under instruction) JOOD, Tactical Assistant Watches, and assistant Combat Information Watch Officer duties.

All first class were rotated to different departments after one week to broaden their over-all operational knowledge. The third class were ro-

tated after a period of 18 days.

The 30-day deployment not only improved the efficiency of *Springfield* cruisemen, but helped train some of the Navy's future leaders.

Clockwise from Top Left: (1) Third class midshipman discusses a problem with *Springfield* crewmember. (2) Midshipman J. M. Hebson watches Quartermaster 3rd Class John G. Yeager, USN, chart ship's course. (3) Third Class Midshipman William F. Butler helps Seaman Apprentice Robert J. Weiner, USN, with deck chores. (4) Third Class Midshipman John F. Porter is assigned duties in the quarterdeck area.



SECOND

Sam E. McCrum, JOC, USN



THIRD

Gregory L. Stevens, CYNSN, USN



"Chief, what do you think BuPers wants with 247 roulette wheels?"

FOURTH

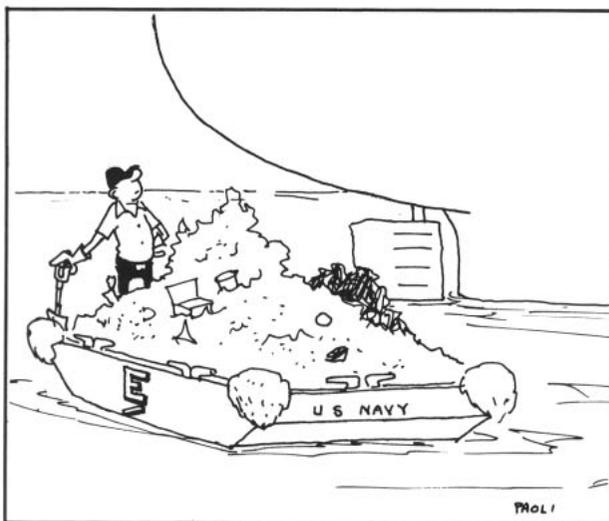
Melville C. Murray, LCDR, USNR



"Excuse me, gentlemen, but could I interest you in a job flying with a larger outfit?"

FIRST

Jeremiah H. Paoli, ICI, USN



ALL-NAVY CARTOON CONTEST—

Here Comes

WHAT'S SO FUNNY? The answer, we've discovered, is not always easy to explain. While some people consider a pie in the face to be a real knee-slapper, others find a wry, subtle joke more to their liking. This disparity between tastes is what makes judging the ALL-NAVY Cartoon Contest such a mind bender.

This year's panel of judges has, nevertheless, provided us with a good selection of sea service humor.

Judges in this 13th contest ranged in rank from commander to seaman. Two officers, (including a Wave), a warrant officer, and two enlisted men constituted the panel.

First place went to Jeremiah H. Paoli, ICI, USN, currently serving aboard *uss Perry* (DD 844). Petty Officer's Paoli's cartoons have appeared in these pages numerous times in the past few years, and he had two

FIFTH

John M. Schantz, LT, USN



"... This time, Grobnik, it has really hit the fan."

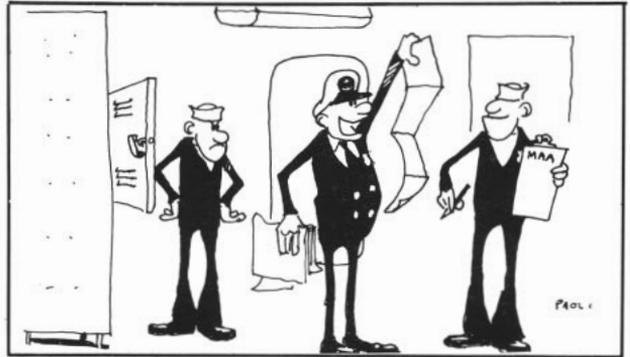
FIRST HONORABLE MENTION Sam E. McCrum, JOC, USN



"Gracious! I do believe I've got the old maid."

SECOND HONORABLE MENTION

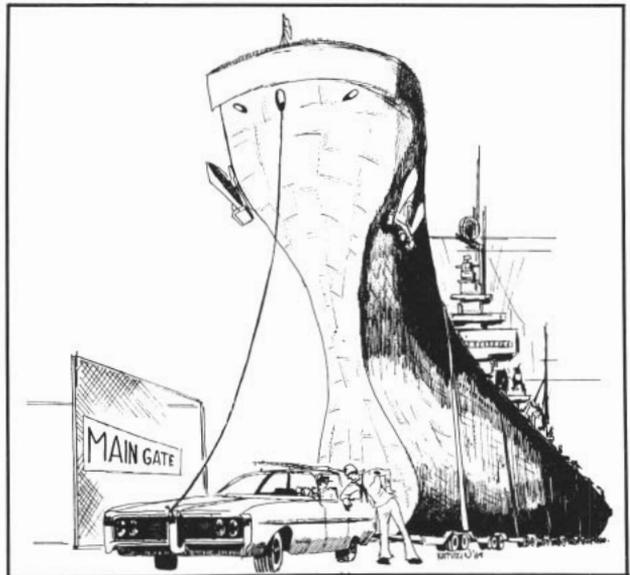
Jeremiah H. Paoli, ICI, USN



"Well! I'm going to have to confiscate these disgusting pictures!"

THIRD HONORABLE MENTION

Richard A. Katuzin, AN, USN



"Going fishing again this weekend, Sir?"

the Judge

among the top 10 in last year's cartoon contest.

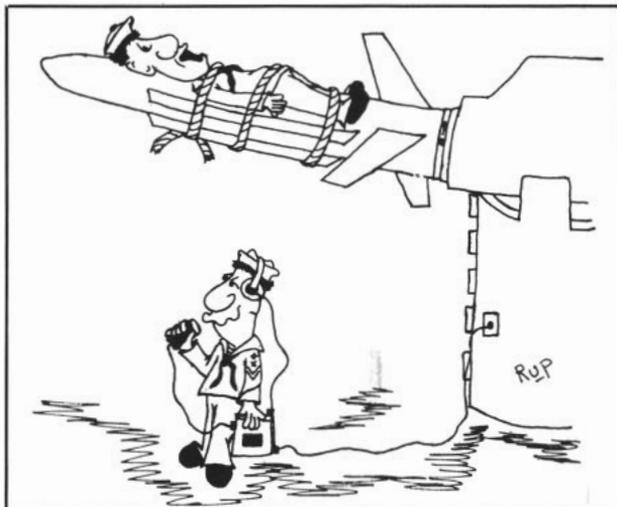
Sam E. McCrum, JOC, USN, of the carrier *USS John F. Kennedy (CVA 67)*, took second place, while Gregory L. Stevens, CYNSN, USN, stationed at Cam Ranh Bay, Vietnam, came in third. LCDR Melville C. Murray, USNR, a frequent contributor, won fourth place, and LT John M. Schantz, USN, was fifth.

The Bureau of Naval Personnel sponsored the annual competition through its recreation program, and hundreds of good cartoons were submitted by Navy-men around the world. The best of the non-winners will appear in *ALL HANDS* during coming months.

All-Navy championship awards will be forwarded to the appropriate commanding officers for presentation to the winners. Runners-up will receive certificates. For other entries, check the following pages.

FIFTH HONORABLE MENTION

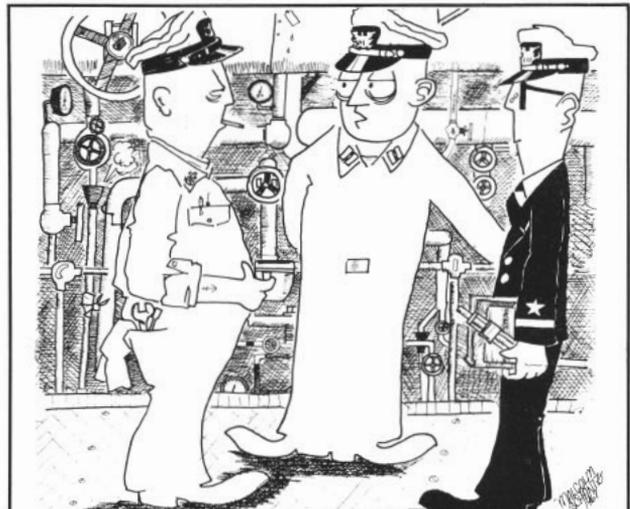
Richard J. Rupert, CT2, USN



"... listen Benson ... I didn't mean it ... Benson! ... a joke's a joke but ... Benson! ..."

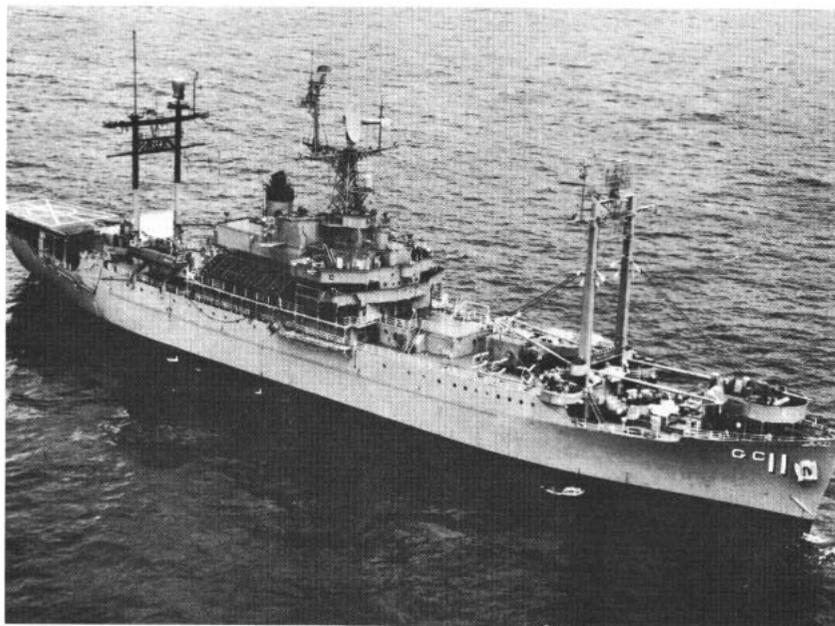
FOURTH HONORABLE MENTION

John M. Schantz, LT, USN



"You and your new division officer should get along real well, Chief ... he's an engineer too."

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



AMPHIB HQ—Amphibious Force Flagship *USS Eldorado* (AGC 11) makes way through Pacific. She holds Meritorious Unit Commendation for Vietnam action.

Orions on Patrol

Now patrolling the northern coastline of South Vietnam are the Navy's newest patrol aircraft, the P-3 *Orion* of Patrol Squadron 50 (VP 50) from the Naval Air Facility at Cam Ranh Bay.

This is the first time that a P-3 squadron has flown from South Vietnam soil in support of Operation Market Time, a series of anti-infiltration air and surface patrols conducted by the Navy along the entire coastline of South Vietnam, guarding against enemy vessels trying to deliver supplies to the Viet Cong in the South.

This also marks the first time that the VP 50 crewmen have flown a land-based plane since the squadron's commissioning, 18 years ago. The squadron started out with PBY-5As, the *Catalina*, then switched to PBM *Mariners* in 1951. In 1956 it changed to P5M-1 *Marlins* and then in 1967 to P-3s. The PBYs, PBMs, and P5Ms were all seaplanes.

VP 50 had flown patrols off Vietnam in the P5M-2s early last year, but after the squadron returned to the U. S., all the Navy air pa-

trols from Cam Ranh Bay were conducted by P-2 *Neptunes*, the plane that is flown by the other Navy squadron at the Bay, VP 42.

Both the P-2 and P-3 are anti-submarine warfare planes, performing the same mission. Newer, the P-3 is the Navy's version of the *Electra* with certain improvements over the older P-2. These improvements include a larger fuselage for crew comfort and four turboprop engines which push the plane to speeds greater than 450 mph.

On station the P-3 is usually flown with only three engines, allowing the plane to remain airborne for extra hours.

Both planes leave the Bay's facility several times a day, so the patrol area is covered day and night.

Surface contacts, most of which are noted by radar, are investigated and information about the vessel or vessels is relayed to various naval headquarters. This relay method was used last March when the enemy was caught trying to bring supplies into South Vietnam by using four trawlers. When three of the trawlers refused to turn back, they were sunk by surface craft. The fourth retreated.

Although the P-3s are new to Vietnam, about 50 per cent of the squadron's crew was there last year. Most of the patrol squadrons spend six months in Southeast Asia before rotating back to the States.

The crew of four officers and eight enlisted men per plane return every two weeks for about 10 days of R & R and plane maintenance.

Home port for VP 50 is NAS Moffett Field, Calif., while VP 42 is home-based at NAS Whidbey Island, Wash. —T. S. Storck, LT, USN.

Catamaran on Drawing Board

An oceanographic research ship with a catamaran hull is scheduled to join the scientific Fleet.

The yet-to-be-built T-AGOR 16, designed by the Naval Ship Engineering Center, will be equipped with standard oceanographic and scientific equipment—but more of it because of the twin-hull catamaran design.

The ship will have twice the laboratory and storage space found in earlier research vessels. Her twin-hull design permits more clear-deck work area, plus additional enclosed spaces for heavy equipment such as winches.

Manned by approximately 70 oceanographic scientists and MSTs employees, the T-AGOR will do acoustic research related to antisubmarine warfare. The center well between her two hulls will be used to stream gear and launch and recover deep submergence research vehicles.

The catamaran hull also will give the ship increased transverse stability, or less rolling motion, and will allow a wide distance between reversible-pitch propellers to insure good maneuverability.

She will measure 246 feet in length and 75 feet at the beam, and will displace 3080 tons under full load. Her cruising speed will be 15 knots.

Fiber Glass Igloos

Every day large commercial airliners fly a load of igloos into Da Nang.

The igloos are not made of ice or

snow, and no Eskimo ever lived in one. They're made of fiber glass and they are used to haul mail directly from the U. S. to Da Nang.

Service from these mail flights has been so good that some letters have been delivered to Vietnam-based servicemen two days after they were sent from the U. S. That's what some officials at the Naval Support Activity Post Office say.

The postal officials also say that the new containers have reduced theft and have greatly cut the time element in mail delivery. Each plane can carry as many as 25 of the igloos. They have replaced the heavy metal boxes which were once used to carry mail from the States.

Specially built electric and hydraulic ramps are driven to the airliners when they arrive. The igloos are unloaded to waiting mail trucks for delivery to the field while ground crews refuel the plane.

The Navy's mail fills two five-ton trucks each run. Postal clerks pick up mail three times a day from Da Nang's Air Base, which claims to be the second busiest airport in the world.

—Steve Wulff, JO3.

Skimmer on Trial

The coxswain cuts the wheel hard starboard and the boat spins around in its own wake, barely slowing.

Boatswain's Mate 1st Class Jerry C. Blevins, USN, smiles as the craft responds to his directions.

For the past few weeks Blevins has put the boat through some rug-

ged tests. He's part of U. S. Naval Inshore Undersea Warfare Group One at Naval Base, Long Beach.

The group has designed modifications for a fast new fiber glass boat to be used in Vietnam.

Blevins is one of the key figures in testing and evaluating the craft's performance.

Called a "skimmer," the 18-foot boat is powered by a 155-horsepower marine engine and is capable of speeds over 25 knots.

It gets its name for its ability to skim through high waves at maximum speed without falling in the trough.

Blevins, a 21-year Navy veteran, says the craft will be used for fast emergency-type trips across crowded harbors.

His group is in charge of harbor surveillance operations, aiding the South Vietnamese government in protecting its harbors and making them safe for shipping.

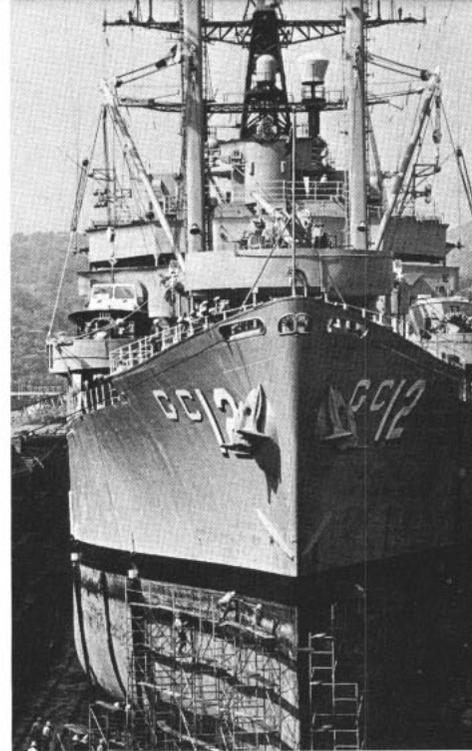
The boatswain recently returned from Vietnam where he served in the attack transport *uss Renville* (APA 227). During the Korean conflict he served in a hospital ship.

Blevins is aided in putting the skimmer through its paces by experience he gained working with landing craft at Little Creek, Va.

Some of the modifications made to the boat for military use include thicker skin, larger gas tanks, a lower deck and a forward gun mount.

"We can also use the skimmer in very shallow water," Blevins says.

The boat is equipped with an in-



TIME OUT—USS *Estes* (AGC 12) rests in drydock in Yokosuka, Japan, while undergoing routine maintenance.

board-outboard type rudder and prop which can be raised electrically.

Its forward gun mount can accommodate either a light machine gun or an automatic grenade launcher.

"I expect to be deployed to Vietnam again soon," Blevins says. But he says he probably won't get to use the skimmer there since it is still uncertain whether the boat will be accepted by the Navy.—James D. Randall, JO1, USN.

BOUNCING BABY—Prototype boat for Vietnam use makes a quick turn and skims across the surface during tests.





GOING UP—Warrant Officer Charles H. Kennedy proudly displays his new shoulder boards. Kennedy went from second class PO to WO while serving aboard *USS America* (CVA 66).

Fast Mover

Drivers who hit a series of green lights can appreciate how Charles H. Kennedy felt when he progressed from petty officer second class to warrant officer while serving in a single ship.

Here's how it happened. In July 1964, Kennedy reported aboard *uss America* (CVA 66) as an aviation boatswain's mate second class in the carrier's precommissioning crew. The following February, he passed his first class examination and was advanced.

About three years later, Kennedy took the E-7 exam. Again, he not only passed but was advanced to chief.

Almost before he could say "pay raise" Kennedy was notified he had also made warrant officer.

Warrant Officer Kennedy now has two choices, either of which could lead to a youthful retirement in about 10 more years. With slightly more than a decade of service to his credit, Kennedy can retain his warrant and probably retire as a W-4. He can also try for a commission and, if he makes it, retire after 10 years of commissioned service.

Whichever route he takes, it appears that Warrant Officer Kennedy is now on the freeway speeding happily along a Navy career.

Camden Serves Off Vietnam

The second of the AOE class of logistic ships, *uss Camden*, (AOE 2)

is now serving the Seventh Fleet off Vietnam.

The fast combat support ship began her first deployment to the combat zone by meeting 47 ships and transferring ammunition and three million gallons of fuel.

Like her sister ship, *uss Sacramento* (AOE 1), *Camden* delivers fuel, food, and ammunition from 18 stations and a helicopter deck on the fantail. Her two UH 46D *Sea Knight* helicopters can lift up to 8000-pound loads and carry them more than a hundred miles to the customer ship.

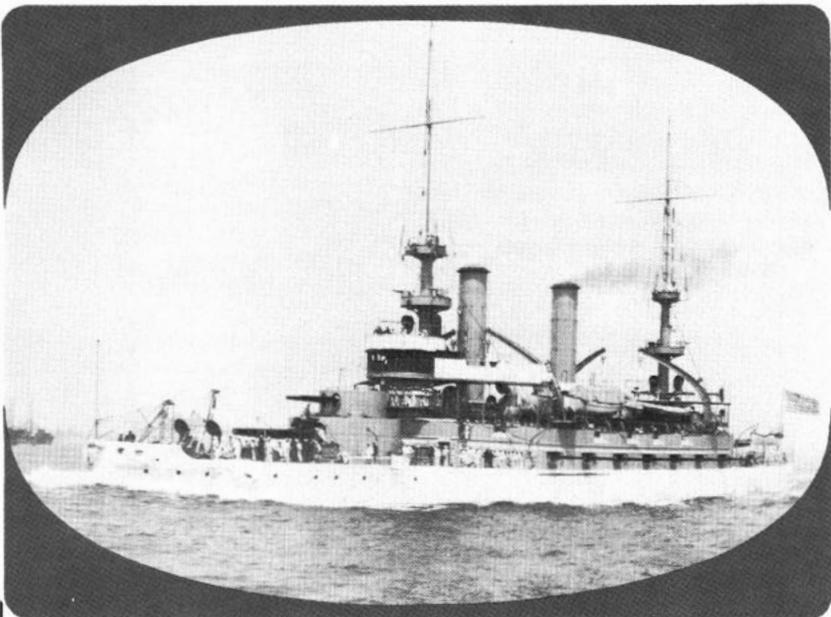
Camden is called a fast combat support ship because she is fast enough to keep up with fast carrier task forces.

The 795-foot ship carries enough fuel to supply 644 gasoline stations for 30 days, more than any conventional oiler in the Navy. She carries half the load of the average reefer, and as much ammunition as an AE 12 class ship. She is also rigged with Fast Automatic Shuttle Transfer system.

The all-purpose supply ship is homeported in Long Beach. She carries a crew of 488 enlisted men and 23 officers.

The ship was built, appropriately, at Camden, N.J. Her keel was laid in February 1964, and she was launched on 2 May 1965. *Camden* was put into commission 1 Apr 1967.

—D. L. Minnich, JO2, USN.



NAVY'S PHOTO ALBUM

The second U. S. Navy ship to be named Kearsarge was battleship number 5, authorized by Congress in March of 1895 and commissioned on 20 Feb 1900.

The 375-feet-long, 11,540-ton ship had a complement of 40 officers and 513 enlisted men. Kearsarge was a member of the "Great White Fleet" which departed Hampton Roads on 16 December 1907 for the famed trip around the world.

During 1909 and 1910 she underwent extensive modernization, which included the addition of basket masts instead of pole masts shown above. She was used as a training ship throughout World War I. In 1920, she was decommissioned and converted to a crane ship. In this capacity she helped raise the sunken submarine Squalus. During World War II, she helped outfit battleships Indiana and Alabama and cruisers Savannah and Chicago. Later, she assisted in work on the aircraft carriers Hornet, Boxer and Saratoga. She ended her career in Boston where she was stricken from the Navy Register of ships in 1955.



RESEARCH IN RESERVE—Attendees and staff of ONR Research Seminar pose for photo at U. S. Naval Academy.

Naval Research—In Reserve

This is about a little known Navy capability—the hidden part of the Research iceberg. The Office of Naval Research has a research component with a big capability—one of the best in the world. It is the Research Reserve.

This Reserve component consists of some 1725 officers, grouped in 97 companies in almost every state of the union. It has experts in every form of science, technology, learning and endeavors.

These experts come from universities, industries, laboratories, government, medicine and law. They have an accumulation of advanced degrees which reads like *Who's Who in American Learning*. Fifty per cent of the Research Reserve officers have master's degrees or higher, with half of these being PHDs. And of the PHDs, seven officers have two or more such degrees.

The capability of the Research Reserve is illustrated by a recent seminar conducted at the U.S. Naval Academy, Annapolis, Md., by the Naval Reserve Research Company 3-14, Poughkeepsie, N.Y. This ONR seminar was dedicated to the military applications of data processing, and is believed to be the first of its kind.

Seventy-nine Reserve officers from the First, Third, Fourth, Fifth, Sixth, and Eighth Naval Districts attended. NRR Co. 3-14 had worked for one year to define the seminar objectives, arrange the technical program, and to obtain logistical and administrative support.

On 10 Jun 1968 at 1000, the

Chairman, Commander Norman J. Smith, USNR, called the seminar to order. Captain Van Hess, USN, Deputy Chief, Office of Naval Research, representing Rear Admiral Thomas B. Owen, USN, Chief of Naval Research, delivered the keynote address, describing the scope of what has been accomplished by the military services in regard to data processing, pointing to the long road of requirements which must be met and calling on the attendees to pick up the challenge.

Following this report, the Army, Air Force and the Marines made presentations on some outstanding applications in their own services.

The Defense Supply Agency, the National Oceanographic Center, the Naval Command Systems Support Activity, the Department of Defense Computer Institute, Naval Commu-

nications, and the General Planning and Programming Division of OpNav presented reports of developments in their agencies.

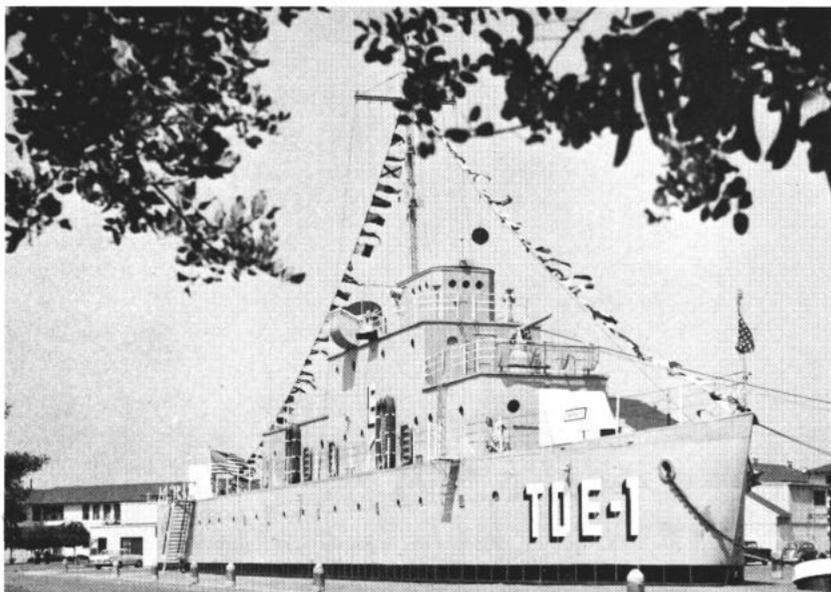
The Goddard Space Flight Center of NASA, Greenbelt, Md., was the scene of an interesting tour and presentation. Even the Royal Navy participated, sending LCDR D. M. MacKendrick of the Admiralty Surface Weapons Establishment to present a paper on the Royal Navy's Small Ship Data System with emphasis on CAAIS (Computer Assisted Action Information System).

Upon completion of this training duty, the 79 attendees had gained a military/technical capability which will stand them in good stead in the event of their mobilization because today's Navy and data processing are co-extensive.

—N. J. Smith, CDR, USNR.

MEMBERS OF Naval Reserve Research Company 3-14, Poughkeepsie, N.Y., receive a briefing on Computer Assisted Instruction System used at Annapolis.





HAPPY BIRTHDAY—Landlocked scale model of a destroyer escort, *Recruit* (TDE 1), has been training Navy recruits at San Diego NTC for 19 years.

Recruit Has a Birthday

Cake-cutting ceremonies were held recently on board *Recruit* (TDE 1) at NTC San Diego in honor of the ship's 19th birthday.

Recruit, a two-thirds scale model of a destroyer escort, is a landlocked ship sitting in a sea of concrete and is used for seamanship training of Navy recruits.

The ship was commissioned in 1949, just like any other ship in the Fleet. However, due to complications caused by a computer that couldn't comprehend a commissioned ship without a crew, *Recruit* was decommissioned in March 1967. Nevertheless, she has been recognized as one of the famous landmarks on the San Diego skyline for the past 19 years.

On board *Recruit*, the Navy's largest training aid, shipboard line-handling, ship's organization, basic seamanship and flashing light signals are more meaningful to the new Navymen.

The ship's birthday was celebrated by the assigned instructors, with Chief Boatswain's Mate Peter B. Bocko cutting the cake with a sword in traditional Navy fashion.

Cohoes Joins Service Force

A retired World War II net tender has recently emerged from the mothball fleet to become a salvage river craft in Vietnam. *uss Cohoes* (AN 78), which laid antisubmarine

nets during World War II, has had her horned bow retrofitted and is now fitted with a bow thruster.

Her bow thruster, which places her in the "only one of its kind" class, consists of a five-foot propeller which permits *Cohoes* to move sideways and position her bow during salvage operations and when maneuvering in close quarters. The thruster is powered by a 500-horsepower electric motor.

Complementing her bow lift and bow thruster, *Cohoes* carries two sets of beach gear, comparable to that carried by Fleet tugs and salvage ships.

She carries 10 divers as part of

her 46-man crew and is equipped with a double-lock decompression chamber in addition to deep-sea, shallow water and scuba gear.

Cohoes is powered by two diesel engines which develop 1500 shaft horsepower. She cruises at 10 knots and has a top speed of 12 knots.

NCM for Wave Officer

It's not unusual for naval personnel to earn the Navy Commendation Medal, but when the occasion is for saving a life, and the recipient is a WAVE, that is something out of the ordinary.

Ensign Dona L. Kerr was presented the Navy Commendation Medal by Captain E. F. Higgins, Jr., Commanding Officer of the Norfolk Naval Station, for her action in saving the life of a small child. The incident occurred on the Jamestown, R. I., ferry on the afternoon of 28 Nov 1967.

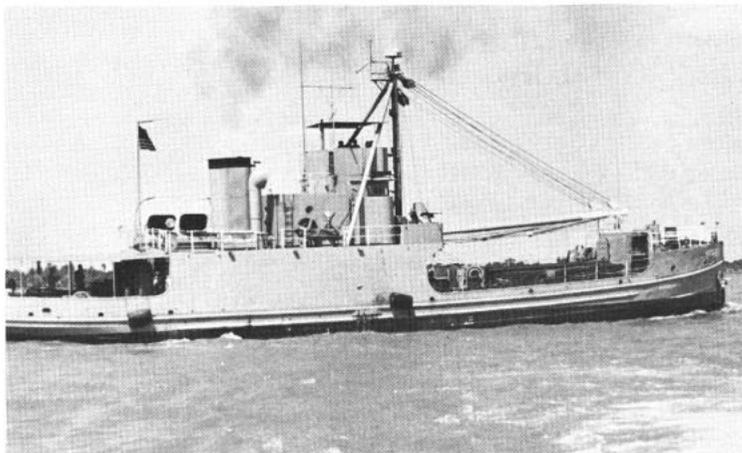
The citation that accompanied the medal reads as follows:

"Upon hearing the calls for help by the child's mother in an adjacent automobile, ENS Kerr dashed to the scene and, noting that the child's complexion was turning blue from an apparently insufficient oxygen supply, she immediately administered mouth-to-mouth resuscitation until the child's color and breathing returned to normal.

By her prompt and efficient actions in saving a life, ENS Kerr upheld the highest traditions of the United States Naval Service." ENS Kerr entered the Navy on 17 Oct 1967. She is Ship's Personnel Officer at NS Norfolk.

NEW JOB—*USS Cohoes* (AN 78) has undergone a facelifting which included a bow thruster for better maneuvering in her new Vietnam salvage job.





Supply ship YFR 890 cruises up Mekong River.



Truck in landing craft is loaded in midstream.

Refrigerator Craft – At Battle Station

OKAY MEN, let's watch it close. We're approaching another bottleneck. This is where the VC hit us last time."

Warning his men is the skipper of a U. S. Navy craft moving along a river in South Vietnam's Mekong Delta on a resupply mission to the Navy's Operation Game Warden bases. He is Chief Boatswain's Mate Gideon W. Almy III, craftmaster of YFR-890.

A 23-year-old refrigerated harbor craft, YFR-890 was built for hauling cargo from shallow water piers to large, deep-draft ships. The 133-foot craft is now used to resupply the Navy's bases in the Mekong Delta. With a 330-ton full load draft of only nine feet, she is ideal for transiting Vietnam's narrow, shallow rivers.

Sailing up and down the rivers of the Mekong Delta is a hazardous job, as river craft are attacked almost daily by the VC. The 14-man crew of YFR-890 does it each week as if there was nothing to it.

Her refrigerated holds were filled with fresh meats, fruit and vegetables at Saigon. On 890's decks and in her wing-walls are stacked dry and canned provisions, ammunition, and other cargo.

Transiting the Saigon and Long Tau Rivers, 890 enters the South China Sea bound for the My Tho, Ham Luong, Co Chien, Mekong, and Bassac Rivers, which lace Vietnam's southern Delta region.

As she leaves the sea and enters the mouths of the rivers, she usually is alone. Seldom is an escort provid-

ed. YFR-890 can take care of herself. Two .50-caliber machine guns are on each side of her pilothouse. Members of her crew also man M-60 machine guns, grenade launchers, M-16 automatic rifles, and other small arms. Recently, portable anti-tank rockets were also added to 890's arsenal.

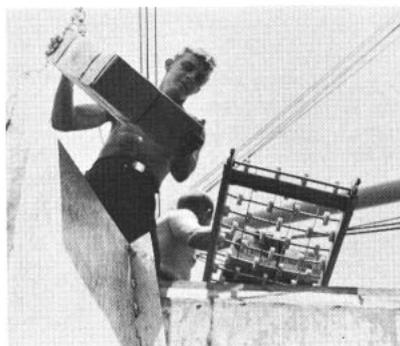
As the refrigerated supply craft moves from one base to the next, her crew stays at battle stations, always ready for attack. With the craft spending about seven out of 10 days moving up and down the Delta's rivers, these men spend much of their time at battle stations.

When passing through narrow channels and canals of the various Delta waterways, crewmembers sometimes throw apples and oranges to the children who line the shore. This act of sharing has made many friends for YFR-890 — friends who mirror the situation at times. If the riverbanks are lined with people, there is little fear of enemy attack. If there are no people on hand to greet the craft, the crewmen know they are likely to get shot at.

YFR-890 is ready in either case.

—Story by Tom Tomkins, JO1, USN.

Photos by John M. Sperling, PH3, USN.



Topside, crewmembers load YFR's hold.



Jackets are needed in frozen food hold.

Operation Game Warden ship is supplied near mouth of a Mekong Delta river.





SKIMMER TESTER, Jerry C. Blevins, BM1, USN, mans his craft pierside at Long Beach NB, following evaluation tests of the new fiber glass boat.

Brave Men, Bold Ships

Navy ships and units continue to perform outstanding service during their tour in Vietnam. Here's a list of those who have most recently received the Navy Unit Commendation and the Meritorious Unit Commendation during the cited periods for actions "in keeping with the highest traditions of the United States naval service."

Those receiving the NUC are:

U. S. Naval Communication Station, Philippines (and component activities) was commended by the Secretary of the Navy for exceptionally meritorious service from 2 Aug 1966 to 1 Sep 1967 in direct support of combat operations of the Seventh Fleet, Marine units and other U. S. forces.

USS Goldsborough (DDG 20) was commended by SecNav for exceptionally meritorious service from 29 Aug 1967 to 17 Feb 1968 in connection with operations against enemy forces in the Republic of Vietnam while serving with the Seventh Fleet. During 88 days of operations in the coastal waters of Vietnam, *Goldsborough* provided naval gunfire support to allied forces, interdicted enemy lines of communications and attacked targets off the hostile shores of North Vietnam.

USS Newport News (CA 148) was commended by SecNav for excep-

tionally meritorious service from 2 Oct 1967 to 26 Apr 1968 while engaged in operations against enemy forces in the waters contiguous to the hostile coastline of both North and South Vietnam. Although heavily engaged on 17 separate occasions by enemy shore batteries, the officers and enlisted men of *Newport News* demonstrated outstanding resourcefulness and tenacity.

USS Providence (CLG 6) was commended by SecNav for exceptionally meritorious service in combat operations against enemy positions in both North and South Vietnam while serving as flagship for Commander Seventh Fleet during the period 25 Nov 1966 to 1 May 1968. Participating in more than a dozen major offensive operations, *Providence* compiled an admirable record by every standard of excellence.

U. S. Coast Guard Division 12 was commended by SecNav for exceptionally meritorious service from 1 March to 1 Sep 1967 in the performance of military operations off the coast of the Republic of Vietnam and near the demilitarized zone.

U. S. Coast Guard Division 13 was commended by SecNav for exceptionally meritorious service from 1 May 1966 to 30 Apr 1967 in the performance of operations off the Southeastern coast of Vietnam.

All personnel attached to and serving with the units cited above during the designated period, or any part thereof, are authorized to wear the Navy Unit Commendation ribbon.

Units receiving the MUC are:

Airborne Early Warning Squadron One (VW 1) was awarded the Meritorious Unit Commendation by the Chief of Naval Operations for meritorious service from 15 July to 1 Dec 1967 in support of the typhoon warning program and combat operations in Southeast Asia.

USS Long Beach (CGN 9) was awarded the Meritorious Unit Commendation by CNO for meritorious achievement while participating in support of combat operations in Southeast Asia during the period 19 Nov 1966 to 8 Jun 1967. As a unit of TF 77, *Long Beach* served as a PIRAZ ship and provided forward air traffic control center services for all Navy, Marine Corps and Air Force aircraft on strike missions over North Vietnam.

Coastal Surveillance Centers and Staff of Coastal Surveillance Force (TF 115) was awarded the Meritorious Unit

Commendation by CNO for meritorious service from 1 January through 31 Dec 1967 while conducting coastal surveillance operations along the entire coastline of the Republic of Vietnam to counter insurgent sea infiltration.

USS Duluth (LPD 6) was awarded the Meritorious Unit Commendation by CNO for meritorious service from 28 May to 15 Nov 1967 while serving as a unit of Amphibious Ready Group Alfa, Seventh Fleet (CTG 76.4) in connection with operations against enemy forces in the Republic of Vietnam.

Fleet Tactical Support Squadron 30 (VR 30) was awarded the Meritorious Unit Commendation by CNO for meritorious service from 1 January to 30 Nov 1967 in providing tactical airlift support essential to Fleet mobility during operations in Southeast Asia.

USS Valley Forge (LPH 8) was awarded the Meritorious Unit Commendation by CNO for meritorious service during the periods 30 Aug 1965 to 9 Apr 1966 and 7 September to 1 Dec 1966 while engaged in logistic support operations in the Western Pacific and combat operations against enemy forces in the Republic of Vietnam.

USS Hermitage (LSD 34) was awarded the Meritorious Unit Commendation by CNO for meritorious service from 26 May to 29 Nov 1967 as a unit of the Amphibious Force, Seventh Fleet, serving consecutively as a member of Amphibious Task Groups 76.4 and 76.5 in connection with operations against enemy forces in the Republic of Vietnam.

Naval Reserve Intelligence Unit 3-1-8 was awarded the Meritorious Unit Commendation by CNO for meritorious service from December 1966 to December 1967 in connection with the Fleet Projects Program and in support of the U. S. Atlantic Fleet.

Naval Air Reserve Intelligence Unit 861 was awarded the Meritorious Unit Commendation by CNO for meritorious service from January 1966 to December 1967 in connection with the Fleet Projects Program and in support of the U.S. Atlantic Fleet.

Special Project P2E Flight Unit, NAF, Johnsville was awarded the Meritorious Unit Commendation by CNO for meritorious service from 1 Oct 1966 to 1 Jul 1967 in support of a national defense project of the highest priority which was conducted

by the Naval Air Development Center at Naval Air Facility, Johnsville.

USS Maury (AGS 16) and Serrano (AGS 24) of (Task Unit 73.8.2) were awarded the Meritorious Unit Commendation by CNO for meritorious service from 14 January to 19 Sep 1967 in conducting extensive oceanographic survey operations in the coastal and inshore waters of the Republic of Vietnam.

U. S. Naval Supply Depot, Subic Bay, Luzon, Philippines was awarded the Meritorious Unit Commendation by CNO for meritorious service from July 1966 to January 1968 in providing logistic support to naval forces in Southeast Asia.

USS Mount McKinley (AGS 7) was awarded the Meritorious Unit Commendation by CNO for meritorious service from 30 Jul 1967 to 21 Feb 1968 in support of military operations involving conflict with an opposing foreign force in the Republic of Vietnam. While serving as flagship for Commander Amphibious Force, U. S. Seventh Fleet (CTF 76) during this period, *Mount McKinley* participated in 14 amphibious operations in the Republic of Vietnam.

USS Rupertus (DD 851) and embarked staff was awarded the Meritorious Unit Commendation by CNO for meritorious service during the periods 1 to 16 August and 9 to 24 Oct 1967 in contributing to the interdiction and destruction of North Vietnamese waterborne logistics craft and military targets ashore.

Seabee Team 1108 was awarded the Meritorious Unit Commendation by CNO for meritorious service while conducting civic action work in support of the Revolutionary Development program in Binh Duong province from 12 April to 18 Sep 1967. During this period, Seabee Team 1108 carried out the construction of public support facilities and the training of local Vietnamese in construction skills.

USNS Barrett (T-AP-196) (USN military department) was awarded the Meritorious Unit Commendation by CNO for meritorious service from 11 Jul 1967 to 23 Jan 1968 in the performance of assigned missions.

All personnel attached to and serving with the units cited here during the periods indicated, or any part thereof, are authorized to wear the Meritorious Unit Commendation Ribbon.

Presidential Unit Citation

The Delta River Patrol Group (Task Group 116.1) was awarded the Presidential Unit Citation by the President for exceptionally meritorious and heroic service from 9 May 1966 to 30 Jun 1967 while serving with friendly foreign forces engaged in armed conflict with Viet Cong forces in the Mekong Delta region of the Republic of Vietnam.

Charged with patrolling the major waterways of the Mekong Delta, Delta River Patrol Group has encountered the enemy daily in an ever-continuing struggle for control of this area. From the outset of its operations, Delta River Patrol Group has met with determined enemy resistance, and has undergone repeated attacks, at point-blank range, from the Viet Cong.

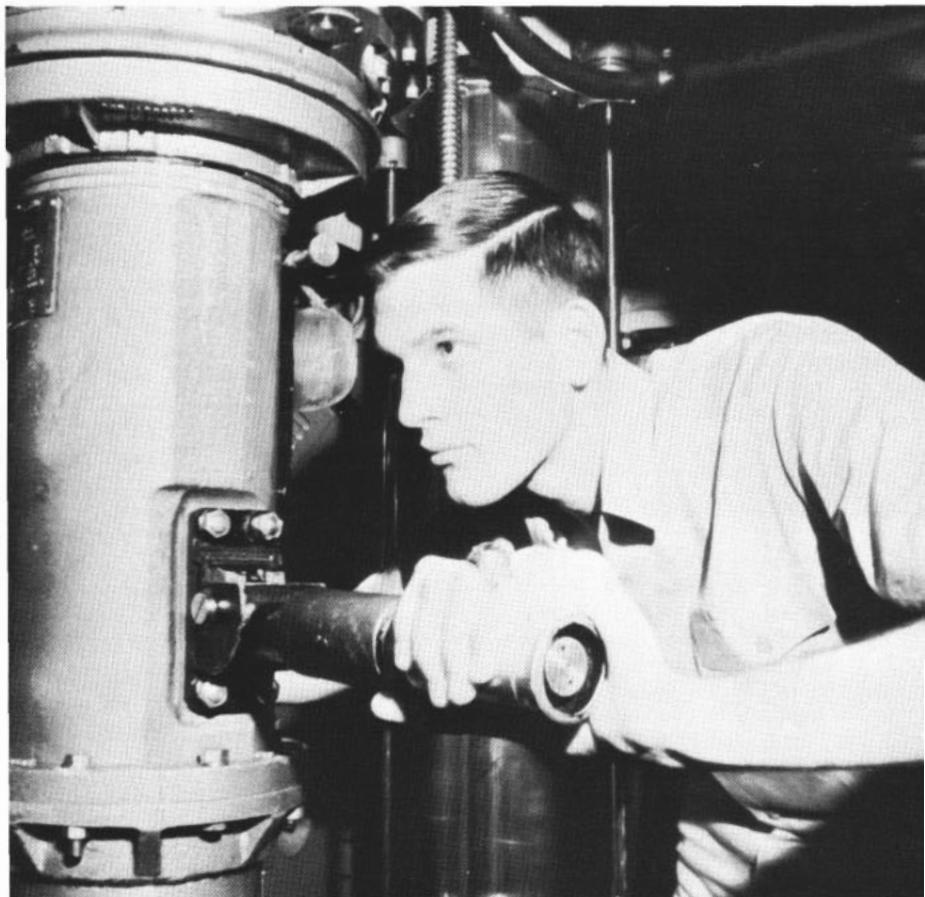
Among the battles waged by the Patrol Group are the fiercest engagements ever fought in the Mekong Delta.

Delta River Patrol Group has met the enemy on every occasion with courage and valor, wresting



FLOATING SHIPYARD—Clifton Beyer, MR3, shapes brass for a hose aboard *USS Vulcan (AR-5)*. *Vulcan* provides industrial potential comparable to a shipyard.—Photo by J. Pare PH2.

from the Viet Cong control of the rivers of the region, and regaining for the Vietnamese civilian much of his traditional freedom of movement along the waterways.



THE EYES HAVE IT — Midshipman First Class Robert E. Lawrence mans the periscope aboard *USS Raton (AGSS 270)* during his at-sea training period.

THE BULLETIN BOARD

What a Life! Navy Duty in San Francisco

IF YOU'RE ATTACHED either to the First or Seventh Fleet, rest assured that sooner or later you'll become intimately acquainted with the San Francisco Bay Naval Shipyard.

It really consists of two areas—Mare Island in Vallejo and Hunters Point in San Francisco. The Shipyard encompasses all the industrial, administrative and support activities at both places.

As the Shipyard's mission is to design, construct, convert, repair and maintain naval ships, whether submarine or surface, conventional or nuclear, a trip to the Yard is almost inevitable.

This summary of the scene will help give you an idea of what to expect. Other than variations created by local conditions, it's not greatly different than any other Stateside military establishment, according to some well-traveled experts. But to others, it's choice duty.

(Note: Reports on housing are subject to change, and the information printed below may well have been revised by the time you read this or by the time you receive orders. With these reservations (housing—reservations. Get it?) in mind, you may find this report on housing helpful. However, check with the Family Services Center nearest you when you receive your orders to your next duty.

Transient Family Accommodations—There are 22 officers' units located at Marcus Village, Mare Island. These quarters are available for forces afloat while their ships are assigned to the Shipyard or undergoing overhaul in a private repair facility. No enlisted facilities are available.

Hunters Point has 270 units for enlisted men and 76 officer units. These quarters are available for forces afloat while their ships are assigned to the Shipyard or undergoing overhaul in a private repair facility.

Bachelor Officers' Quarters—The Commissioned Officers' Mess (Closed) is referred to as the BOQ

and the BOQs at both sites have been declared inadequate for BAQ determination.

The BOQ at Mare Island is located in Building 926 at the south end of the Shipyard and is in walking distance of the Officer's Club. Lodging and messing are available for permanent and transient officers. Monthly meal tickets are available for permanent members; transient officers may purchase individual meals.

The BOQ at Hunters Point is located in Building 500 at the south end of the Shipyard. Lodging only is available; messing is provided through the general mess. With the exception of four suites for captains and flag officers, BOQ space is assigned on a first come, first served basis.

Mare Island Housing—There are 480 sets of adequate public quarters on the Shipyard proper available to officer and enlisted personnel. Except for key and essential billets, these quarters are available to officers and eligible enlisted personnel of pay grades E-4 with four years' service and above.

Personnel of ships under construction and homeported ships will be

assigned public quarters on an equal basis with shore stationed personnel.

Requests for officer public quarters should be addressed to the Commander, San Francisco Bay Naval Shipyard, Vallejo. Requests for enlisted public quarters should be forwarded to the Housing Office, Building 487, SF Bay Naval Shipyard, Vallejo.

Inadequate public quarters (Roosevelt Terrace) is located outside the Shipyard in Vallejo. There are 72 units for lieutenant through warrant, and 528 units for enlisted personnel. Requests for these quarters also should be made through the housing office.

The Housing Office, located in Building 487, has a listing of civilian houses for rent and sale. This list is kept current from information furnished by local realtors. Information is posted on the bulletin board in the Housing Office.

Hunters Point Housing—Public quarters in the Shipyard proper are limited. Requests for officers' public quarters should be addressed to the Deputy Commander, SF Bay Naval Shipyard, San Francisco. There are no adequate enlisted public quarters available.

Inadequate public quarters (Solomons Village) is adjacent to the north boundary of the Shipyard with access on Donahue Street and consists of 190 units for enlisted personnel on active duty at the Shipyard and tenant commands. There are 11 inadequate public quarters available for officers.

Housing kits that include dishes, cooking and eating utensils, linen and blankets are available at Mare Island at the rear of the Housing Office. Check-out fee and monthly fee information is available at the Housing Office.

There are no housing kits at Hunters Point.

The household goods section at Mare Island is located in Building 483. If your property is lost or damaged en route to Mare Island, advice and assistance in submitting

All-Navy Cartoon Contest
Donald L. Winans, CT1, USN



carrier, insurer or government claims may be obtained.

Services at Hunters Point are limited to assistance in preparation of the application for movement of household goods and are available at the Shipping Office, Building 406. All other services pertaining to household goods are normally performed by the Naval Supply Center Oakland.

You may not live in a trailer in the Shipyard. However, if you have one you may park it in the Yard upon the approval of the Shipyard Chief of Police or Security Superintendent. They will tell you where to park it.

Transportation

If you are a permanent resident of California, your private auto must bear valid California license plates. If your permanent home is in some other state, you may display plates issued by either California or your home state.

However, if the license plates from your home state are not renewed within time limits set by the state, you lose your option and must acquire California plates.

Also, you may continue to display valid license plates issued by any other state if issued while you were stationed there under orders, but when they expire, you must acquire new plates from California or your home state.

Driver's License—If you're a resident of California, you must have a California driver's license. If a non-resident and you're over 21, you may use a valid license issued by your home state as long as you maintain a non-resident status. Once you establish residency in California, you have 10 days to apply for a California license.

If you're under 21, you have until 60 days after arriving in the state to obtain a California license or a certificate of compliance with the California Financial Law. (In the case of minor dependents who wish to drive, the California license or certificate of compliance must be obtained within 10 days of entry.)

Parking—Like most everywhere else you can drive a car, parking space is at a premium. Parking your private auto is permitted only in specifically marked areas at both Mare Island and Hunters Point.

Areas posted as "miscellaneous" for parking are open to all vehicles at any time. Spaces and areas marked "reserved" mean just that, but at Mare Island, reserved spaces designated by numbers are available to other vehicles, yours included, at any time other than between 0630 to 1530 on normal Shipyard work days.

At Hunters Point, reserved parking spaces may not be used for general parking at any time.

You are advised to avoid parking your car for more than 10 days in any one spot without moving it. Private cars left unattended for 10 days within the confines of the Shipyard may be disposed of as property abandoned to the United States.

Traffic—Maximum speed limit anywhere on the Mare Island Shipyard is 30 mph, with lower limits posted as traffic, weather and other conditions dictate. The speed limit at Hunters Point is 25 mph, with

NOW HERE'S THIS

Oceans of Fingerprints

A U. S. Naval Academy research project in which "fingerprints" of seawater are collected may hold the key to pinpointing fertile areas of the oceans. Additionally, ocean areas with a record of fraudulent sonar echoes may be catalogued.

There are good and bad areas of the sea, just as there are fertile and barren lands. The problem is to know which are where.

Marine plants and animals live and die. From those organic processes come both beneficial substances, such as vitamins and harmful ones, such as toxins.

These chemicals are then dissolved in the waters around them. Until recently, it was assumed that the chemical makeup was basically the same at all depths.

Scientific evidence now seems to indicate there can be wide differences between layers of water separated only by natural temperature barriers.

The biggest factor in evolving these new theories has been the development of sophisticated and ultrasensitive devices capable of measuring very minute quantities.

One such instrument—a fluorescence spectrophotometer—was taken to sea last summer.

Operating on the same general principle as the common fluorescent light, this device measures the natural, blue fluorescence given off by chemical substances when bombarded by ultraviolet light.

The measurements are then translated into a line graph, producing an individual tracing or "fingerprint" which identifies the substance.

Because the research is in a new area, plankton specimens were first grown in the laboratory at Woods Hole Oceanographic Institute.

Using a recently developed filtering technique, microscopic plants and animals were removed and the remaining water analyzed, to establish a standard for comparison.

Later readings taken aboard ship in various areas of the Atlantic perfectly matched the laboratory "fingerprints."

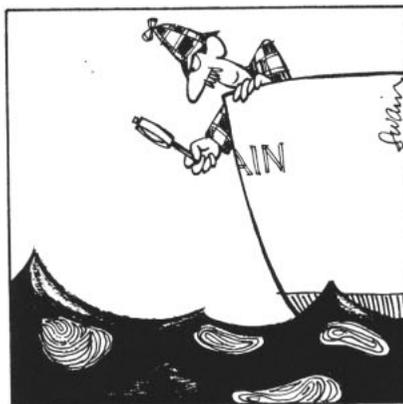
It is hoped that such information could be of great importance, not only to future marine prospectors, but also to the Navy in antisubmarine warfare techniques.

It is now accepted that marine life can create false sonar targets and unidentified sound sources.

Whales, porpoises and some fishes are suspected of making misleading sounds, and other sea life, such as floating masses of seaweed and dense concentrations of plankton also can cause deceptive echoes.

Continuous chemical "fingerprints" could be used not only to locate buildups of organics and nutrients likely to stimulate growth of special types, but also to identify marine life in a given area.

The study is being conducted by Dr. Eugene Traganza, Associate Professor of Naval Science, at the Academy. He will continue his research this summer in the Chesapeake Bay aboard a specially equipped yard patrol craft, which has been outfitted for oceanographic studies by the Naval Science Department. His work is supported by the Academy's Research Council.



lower limits to be observed as posted. Maximum speed on all piers, waterfront work areas, driveways, alleyways and parking areas not specifically posted is 10 mph.

Bus—Municipal buses operate into the Shipyard at Hunters Point. Civilian taxis operate into Mare Island. Additional transportation services of various types are available to move you on and off the Shipyard. These include ship-to-shop express taxis and pickups during working hours, U-drive service any time, ferry services, and a variety of base and inter-site bus routes. If you find yourself in need of transportation, pick up a telephone and ask the operator for the transportation information office.

Vehicle Passes—Auto decals are issued during regular working hours at the Badge and Pass Office, Bldg. 569, Mare Island, and the Motor Vehicle Pass Section, Bldg. 102, Hunters Point. You are subject to the financial responsibility provisions of the California Vehicle Code; you must have valid auto registration, driver's license and proof of insurance at time of application. (Minimum auto insurance coverage is \$10,000 and \$20,000 for public liability and \$5,000 property damage. Insurance which covers "on base" driving only is not acceptable for obtaining a base sticker.)

Recreation

Those who've been there say the San Francisco area is one of the finest in the world for recreation. However, don't overlook the variety of entertainment facilities available at the Shipyard. Count 'em.

Mare Island has picnic grounds, athletic fields, bowling alley, golf course, gymnasium, hobby shops, library, photo lab, sailing club, fishing boats, swimming pool, theater, wrestling and weight rooms, varsity and intramural sports, camping and sports equipment, slot car raceway, tennis courts, and athletic gear issue room.

Hunters Point has nightly movies, a library, music room, hobby shops, gymnasium, bowling alley, tennis courts, softball and baseball fields, sailing club, and provisions for checking out camping and sports equipment.

The San Francisco Recreation De-

All-Navy Cartoon Contest
Robert D. Scribner, AN, USN



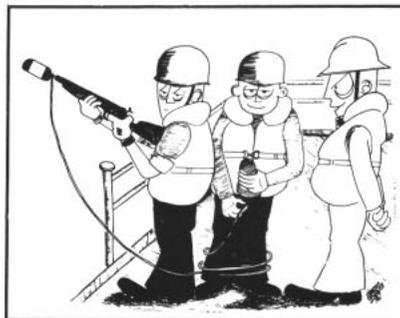
"Gee, what luck!—I was selected as 'sailor of the month' again this month!"

partment operates golf courses at Harding Park (Lake Merced), Lincoln Park (34th and Clement), Sharp Park (Ocean Highway), Golden Gate Park (47th Ave. and Main Drive), McLaren Park (Sunnydale Ave.), and the United Service Golf Club (Presidio).

A Summer Fun program for dependents aged six through 12 is administered by the Mare Island Special Services department. The program normally runs from the last week in June through the first week in August, 0900 to 1200 daily, and offers swimming instruction, arts and crafts, indoor and outdoor games and field trips for the kiddies.

Officers' Clubs—The Commissioned Officers' Mess at Mare Island (Bldg. 396) offers food, bar and package store service daily except Monday. The Mess schedules a variety of events announced in a monthly bulletin and by special flyers. Dinner reservations and special party arrangements should be made with the Club manager. From late May to late September, weather permitting, the Club swimming pool is open during school vacations and

All-Navy Cartoon Contest
John Malcolm Schantz, LT, USN



"... Mind if I offer a suggestion?"

weekends. Pool hours are 1200 to 1800.

The Officers' Club at Hunters Point is located atop a hill in Bldg. 901—there's an excellent view of the Bay and San Francisco. Food, bar and package store service is available daily except Monday, with happy hour twice a week and dancing on Saturday. The Club takes reservations for weddings, receptions, cocktail parties, showers, luncheons, etc., with details of both regular service and special functions handled by professionals.

CPO Clubs (Open)—The Chiefs' Club at Mare Island (Bldg. 41) is open from 1100 to 1300 and 1600 to 2330 on Tuesday, Wednesday and Thursday; 1100 to 0130 on Friday; 1000 to 0130 on Saturday; and 1300 to 2330 on Sunday. Usual Club activities include game night once a week, dancing on Fridays and Saturdays, and periodic happy hours. Baby sitting service is available at the Club on Tuesday, Friday and Saturday beginning at 1800. Lunch is served 1100 to 1300 daily except Sunday and Monday; dinner is served Tuesday, Friday and Saturday at 1700 and at 1600 on Sunday. The package store is open 1000 to 1800 Tuesday through Saturday.

The CPO Club at Hunters Point offers much of the same. This one's in Bldg. 196 on Donahue street. Happy hours are observed from 1630 to 1930 each Wednesday; on Friday and Saturday you may demonstrate how light you are on your feet by dancing to live music from 2100 to 0100. Game night is Tuesday beginning at 2000. The Club has a package store, plus facilities for private parties.

EM Clubs—The Neptune Club at Mare Island (Bldg. 753) near the North Gate opens at 1630 Monday through Friday and 1200 on Saturday and Sunday. Club facilities include snack bar and game room, with separate dining room and bar areas for petty officers first and second. Game nights are Monday and Thursday, dancing to live music is scheduled each Friday and Saturday.

The Reef Club in Bldg. 120 at Hunters Point has a snack bar, dancing room and two party rooms. The latter may be reserved for private parties. There's an Acey Deucey Club on the second deck. Dancing to live

music three times a week; game night each Thursday. The EM Club has a barber shop which is open during regular working hours.

Teen Club—Chaperoned club facilities for teen-age dependents are located in Bldg. 737, Mare Island, and Bldg. 501, Hunters Point. The Teen Clubs have snack bars and activities which include dancing, ping-pong and other events. The Teen Club at Mare Island is open from 2000 to 2300 Fridays; the hours at Hunters Point are 1900 to 2300 Friday, and 0900 to 2300 Saturday.

Fishing—Rod and reel enthusiasts at Mare Island are permitted to fish in designated areas. A California fishing license is required and State game laws must be observed. At Hunters Point, fishing is permitted subject to State game laws, and children must be accompanied by an adult. A license is not required if fishing is confined to designated berths and piers; all persons 16 or older must have a license while fishing from the shore line in the Shipyard.

Firearms—It is necessary to have a firearm permit before you may take a private rifle or pistol into the Shipyard. Application forms and rules for use are available at the base police station. (Note that Mare Island has been designated a wild life refuge and hunting or taking of game is prohibited.)

Commissary, Exchange

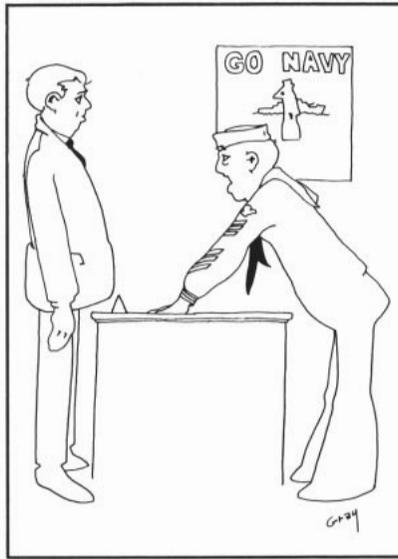
Commissary and exchange facilities are plentiful at both Mare Island and Hunters Point. The commissary at Mare Island, located outside the North Gate, is open daily except Sunday. (Bread, milk and snack items also are available in the Navy Exchange Location store, Bldg. M-34.)

The Hunters Point commissary is in Bldg. 803 on "I" street. The store is open Tuesday through Saturday, with a brief list of "must" items such as bread and milk available on Sunday and Monday at a Dairy Drive-In located in front of the commissary.

If eating-out without leaving the base is your pleasure, you'll find four cafeterias at Mare Island and eight cafeterias and snack bars at Hunters Point.

Other exchange facilities include:
Mare Island—A main store, Bldg.

All-Navy Cartoon Contest James A. Gray, EM2, USN



"Then after four years, if you are not thoroughly satisfied . . ."

773, offers the usual line of Navy Exchange items; an Annex (Country) store located adjacent to the main exchange carries beverages, garden supplies, hardware, tools and paints. The Exchange Location store already mentioned opens at 0830 Monday through Saturday. A third exchange store is located in Bldg. H-89, Schools Command.

For that squared-away look, barber shop services are available at four locations on Mare Island. The main exchange (Bldg. 773) also has a check cashing service, plus laundry, dry cleaning, shoe repair, tailor and watch repair shops. Rodman Center is the site for a beauty shop and fountain. The Mare Island gas station is located behind Rodman Center.

Bldg. H-89 has the Schools Command Exchange, fountain, laundry and dry cleaners and shoe repair shop. Bldg. M-34, the Location Exchange, also offers check cashing service, plus laundry and dry cleaning facilities, and shoe repair and tailor shops.

Hunters Point—The Main Exchange is in Bldg. 505 on "H" street. An Annex (Country) store is located next door. Services and facilities available in the two-building complex include barber shop, beauty shop, check cashing, fountain, laundromats, laundry and dry cleaning, shoe repair, tailor, and watch repair.

The Hunters Point gas station, located in Bldg. 709 on "I" street, is an exchange outlet for beverages.

Bank Facilities—The usual banking services are available at Bldg. 816, Mare Island, and Bldg. 915, Hunters Point. On payday, you may cash your check at the Mare Island banking site, on board *uss Pelias*, or at the Schools Command canteen building.

Mare Island and Hunters Point have Federal Credit Union offices you may use for saving or borrowing money. Membership is limited; you should check with the credit union offices (1415 California Ave., Mare Island; Bldg. 214, Hunters Point) for details.

Both Shipyard sites have Navy Wives' Clubs and Navy Relief Thrift Shops, plus offices for the Navy Relief Society as well as the American Red Cross.

Religious facilities are available on-base to provide regular Catholic, Protestant and Jewish services and Sunday School.

Post offices are located in Bldg. 103 (Mare Island) and Bldg. 102 (Hunters Point). Both Shipyard areas have clothing and small stores to fill your uniform needs, and the usual general mess facilities which provide three square meals a day.

Medical, Dental

Dental facilities are located in Bldg. 764, Mare Island, and Bldg. 520, Hunters Point. Complete services are available, including dental prosthesis.

Dental treatment for dependents is not authorized except in emergency cases. Dental officers attached to ships undergoing overhaul or conversion may use auxiliary facilities to provide treatment to members of their ships' companies.

Dispensaries are located in Bldg. H-73, Mare Island, and Bldg. 210, Hunters Point, complete with outpatient clinics for eligible dependents and retirees. "Walk-in" patients are seen on a first-come, first-served basis, and no appointment is necessary for an initial visit.

Here are some additional notes about Mare Island and Hunters Point:

Cameras—Active duty personnel and dependents may carry photographic equipment on and off the

Shipyard; others must have camera permits. You may not take pictures in waterfront and industrial areas, warehouse and storage areas, and posted security areas.

Dependents' ID—Your dependents age 10 or older may receive ID cards, after certified application, from the Badge and Pass Offices, Bldg. 569 Mare Island, and Bldg. 102, Hunters Point.

Domestic Help—If you employ a domestic while residing on base, you must first send the employee to the Badge and Pass office to apply for a pass. Upon termination of the domestic employment, you must return all passes to the Badge and Pass office.

Pets—If you reside in the Shipyard, you must register your pets with the base police, and, if the pet is a dog, provide proof of inoculation for rabies. Your pet must be supervised at all times; animals found wandering about will be turned over to the SPCA and the owners must pay any charges levied.

Property Passes—No material of any kind may be removed from the Shipyard unless authorized by a property pass or permit signed by the cognizant authority. (You may, of course, remove your private property without a pass.)

Nursery School—Dependent children ages three through five may attend an approved nursery school program at Bldg. 735, Mare Island, from 0900 to 1130 on regular school days. Arrangements may be made to have the child picked up at nursery school and then fed and cared for at the Day Care Center until picked up by the parent. Information concerning tuition is available at the school office.

Day Care Center—Working mothers may have dependent children ages six months to eight years cared for in Bldg. 735, Mare Island, Monday through Friday. Hot lunches are served at minimal cost, and a free snack is served in the mid-morning and mid-afternoon. The Center has both outdoor and indoor play areas, plus cribs and cots for nap-time. Rates are as posted in the center.

Hunters Point has limited day-care facilities in Bldg. 532. Hours are 0830 to 1700 Tuesday through Friday, and 0830 to 1400 Saturday.

Requirements Eased For Proficiency, Superior Performance Pay Groups

Some changes have been made in the administration of the Enlisted Proficiency Pay Program. One makes additions to the list of military specialty skills eligible for proficiency pay (specialty) on a continuing basis. Another makes an addition to Navy men eligible for superior performance pay while a third concerns eligibility for specialty pay.

Several factors establish eligibility for specialty pay. One specifies a Navy man must be qualified for, assigned to and serving in an authorized military specialty billet which is reflected on his command's manpower authorization.

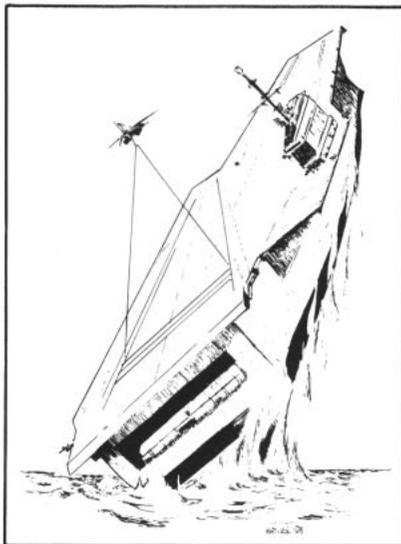
This eligibility requirement remains the same. However, the circumstances under which the requirement may be waived have, in some cases, been changed. For example:

Now, the requirement may be waived for Navy men attending a formal course of instruction (including temporary and temporary additional duty for instruction).

Formerly waivers were granted only when such duty was in connection with courses directly relating to the Navy man's proficiency pay.

Another change in the Proficiency Pay Program covers those inactive Reservists who have reported for active duty (not to be confused with active duty for training). These

**All-Navy Cartoon Contest
Richard A. Katuzin, AN, USN**



"Whoops!"

Navy men must have completed 24 months of active service or they must have completed their eight-year service obligation as prescribed by Section 651, Title 10, United States Code.

Still another requirement which has been altered required a Navy man to serve for six months of active duty before becoming eligible for specialty pay.

Now, however, those who have been discharged and reenlist yet still maintain their continuous service (by reenlisting within 90 days or less) may still receive specialty pay provided their commanding officer determines, after they report for duty, that they meet the military requirements to which they have been assigned. This also applies to members of Reserve components ordered to active duty.

Except for the changes listed above, the conditions under which Navy men may collect specialty pay remain the same.

In the realm of military specialty skills eligible for pro pay (specialty) on a continuing basis, five additions were made in the \$75 (P-2) specialty award level. They are:

- The Aviation Antisubmarine Warfare Operator (AW) rating.
- In the Rating Series NECs, RD-0335 (Electronic Warfare System Specialist) has been added with men in the RD rating eligible.
- Rating Series NEC ST-0424 (SSN Integrated Sonar System (Retrofit) Technician) has been added with men in the ST rating eligible.
- Also added are AQ 7973 (A6A Avionics Weapon Systems Technician) with men in the AQ and AT ratings eligible as well as
- Rating Series NEC 8394 (Drone Anti-Submarine Helicopter (DASH) Technician) with men in the EN, ET, AT and AD ratings eligible.

In addition to these changes, Navy recruit company commanders at Orlando, Fla., are eligible for superior performance pay as well as the others filling BuPers controlled "I" billets at recruit training commands in San Diego, Great Lakes, and Bainbridge.

As heretofore, they must be directly connected with instructing and supervising recruits.

All changes given above were found in BuPers Inst 1430.12H.

Here's a How-To-Do-It For Do-It-Yourselfers Who Just Can't Wait Any Longer

A new pennant for the Meritorious Unit Commendation may be displayed by ships and other units which rate the award, but those who wish to fly the pennant will temporarily have to make their own.

This, in essence, is the word on the MUC pennant from the Naval Ship Systems Command, which developed the design, and the Decorations and Medals Board, which discussed its display.

Official versions of the pennant probably will not be available for issue through supply channels until next February at the earliest. In the meantime, commands which rate the MUC may have their own pennants made up provided they follow specifications (see cut).

The MUC itself is a relatively new award. It was established last year to recognize valor and meritorious performance by a unit under either combat or noncombat conditions (ALL HANDS, April 1968).

The MUC joined the Presidential Unit Citation and Navy Unit Commendation as authorized unit awards and, for precedence, ranks immediately below the NUC. It is awarded in the name of the Secretary of the Navy.

A growing number of ships and other units active in Southeast Asia already have received the MUC.

Generally, men who are permanently assigned or attached to the unit, and who were actually present and participated in the action for which the unit was commended, are entitled to wear the MUC ribbon bar of green, yellow, blue and red stripes. No medal is authorized.

The color pattern for the MUC pennant closely follows that of the MUC ribbon.

The pennant may be displayed by shore commands which rate it, and from sunrise to sunset by authorized ships when not underway. It is flown from the foretruck by ships and from such locations as the Commanding Officer may designate by commands based ashore.

The *Awards Manual* contains details on MUC eligibility, award authority, and related administrative procedures.

New Glossary

A glossary designed to standardize the naval manpower management business has been published by the Chief of Naval Operations.

Developed in response to a recommendation of the SecNav Task Force on Personnel Retention, the *Navy Glossary of Terms for Manpower Management and Personnel*

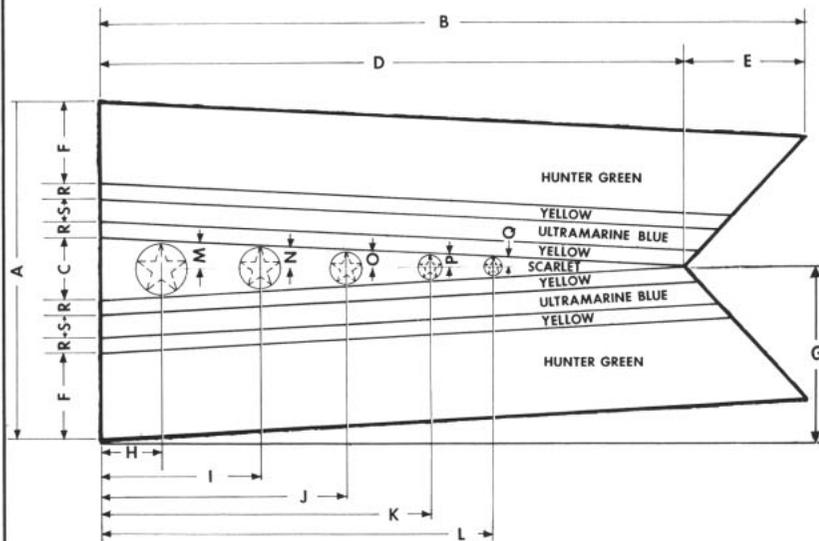
Administration (OpNav 01BI-P2) explains what is really meant by such terms as "billet sequence code," "manning level," and "unit identification code."

The new lexicon may be ordered from Naval Station, Washington, D.C. 20390; Naval Supply Center, Norfolk, Va. 23512; and Naval Supply Center, Oakland, Calif. 94625

Meritorious Unit Commendation Pennant

Measurements for large size pennant:

A—3 ft.—9-3/8 in.	G—1 ft.—10-11/16 in.	N—2-7/8 in.
B—7 ft.—11-13/16 in.	H—8-5/16 in.	O—2-1/4 in.
C—8-1/4 in.	I—1 ft.—9-31/32 in.	P—1-23/32 in.
D—6 ft.—7-13/32 in.	J—2 ft.—9-31/32 in.	Q—1-1/4 in.
E—1 ft.—4-13/32 in.	K—3 ft.—8-5/16 in.	R—2-1/16 in.
F—11-11/32 in.	L—4 ft.—5-3/16 in.	S—3-3/32 in.



NOTES:

1. Colors: Hunter Green—Cable No. 70064; Yellow—Cable No. 70068; Ultramarine Blue—Cable No. 65010; Scarlet—Cable No. 65006; Bronze—Cable No. 70159.

2. The cable numbers for ultramarine blue (65010) and scarlet (65006) are listed in the U.S. Army Color Card. Cable numbers for the remaining colors are listed in the Standard Color Card of America, 9th Edition. Both color cards are issued by the Textile Color Card Association of the United States, Inc.

3. The green, yellow, blue and yellow stripes run parallel to the scarlet.

4. Meritorious Unit Commenda-

tion pennant fabricated for stock shall be made without stars.

5. Should a unit be cited more than once, for each citation in addition to the first for which the insignia are authorized, there shall be added one bronze star up to a total of five stars. Stars will be located and displayed as shown in the drawing.

6. Emblazonry of the stars may be applied by—(A) appliqueing, (B) painting, (C) silk screen process, or (D) a combination of these.

There are two other sizes: (1) approximately 1 ft. 11 in. by 4 ft.; and (2) approximately 1 ft. 4 in. by 2 ft. 10 in. The blueprints may be obtained from the Naval Ship Engineering Center.

SAM and PAL Ride Navy's Pony Express

IT IS WELL KNOWN that some mail travels faster than other mail. Not everyone, however, knows why nor does he know what can be done to make his letters and parcels travel faster by marking them for the priority they deserve.

The postal service has assigned various priorities to letters and parcels. The system is designed to move in the least possible time the most important items to servicemen both at home and overseas.

To take advantage of these priorities, each piece of mail must conform to regulations concerning size and markings.

Here are the various ways by which mail can be sent:

First Class Mail: This category of mail includes all letters in envelopes no larger than five and one-half by 11 inches. Larger envelopes and parcels must be so marked; otherwise, third or fourth class treatment may be expected. Air transportation will normally be provided mail falling within this category except as noted below and in the following table.

Airmail: This service is given to all mail which is marked Airmail or Air Parcel Post.

All-Navy Cartoon Contest
Sam E. McCrum, JOC, USN



"Slipknot, eh!"

Certified mail receives air or first class service as marked, and should be used when the sender wishes to prove either that the item was mailed or that delivery was made.

Registered mail receives airmail or first class service as marked. If a registered letter is being sent to a military post office address outside the United States, the service will

be significantly slower than it would be had it been sent as ordinary mail. This, of course, is due to the added control necessary.

Special delivery is given expedited surface transportation unless it is marked first class or airmail. Although civil post offices give expedited service to addressees, such mail to Navy activities and other government agencies usually is provided only when special arrangements have been made with the Post Office Department with the command desiring the service.

Special Handling is given to official parcels marked *Special Handling*. They receive expedited surface transportation in the United States and are airlifted to, from and between overseas military post offices.

Second, Third and Fourth Class Mail: This mail normally is provided surface transportation throughout except when air transportation is authorized by special legislation as specified under *Space Available Mail (SAM)*, and *Parcel Airlift (PAL)* below.

Insured mail is available only on third and fourth class mail, which includes parcels marked, SAM, PAL and Parcel Post.

Post offices do not maintain records of receipt and delivery of insured articles valued at less than \$15. However, parcels are numbered upon payment of an additional fee.

Legislation, some of which is very recent, provides for the airlift of the following mail:

Space Available Mail (SAM) applies only to personal mail which consists of First Class letters, post and postal cards, sound recorded communications having the character of personal correspondence, parcels weighing not more than five pounds and measuring not over 60 inches in length and girth combined and certain second class publications which are published once each week or more frequently and feature current news of interest to the Armed Forces and the general public.

Parcel Airlift (PAL) is a special service whereby personal parcels which weigh not more than 30 pounds and measure not more than 60 inches

Type Service	Marking	Handling Precedence	Mode of Transportation
AIRMAIL Official (All Classes) Personal (All Classes)	AIRMAIL/AIR PARCEL POST	First	Domestic - AIRLIFT Overseas - AIRLIFT
FIRST CLASS Official (Letters, Large Envelopes, and Flats) Personal (Letters, Post and Postal Cards, and Sound Recorded Communications) Official first class parcels Personal first class parcels	FIRST CLASS	Second (Official) (Personal)	Domestic - AIRLIFT Overseas - AIRLIFT Domestic - AIRLIFT Overseas - AIRLIFT Overseas - Surface
SPECIAL HANDLING	SPECIAL HANDLING	Second (Official) (Personal)	Domestic - Rail/Truck Overseas - AIRLIFT Overseas - Surface
SPECIAL DELIVERY Note: (Special Delivery mail will be handled as shown unless marked for AIRMAIL or FIRST CLASS service)	SPECIAL DELIVERY	Second (Official) (Personal)	Domestic - Rail/Truck Overseas - AIRLIFT Overseas - Surface
SECOND CLASS Personal (SAM) Newspapers All Other	SECOND CLASS	Third	Domestic - Rail/Truck Overseas - AIRLIFT Domestic - Rail/Truck Overseas - Surface
SAM PARCELS	SAM	Fourth	Domestic - Rail/Truck Overseas - AIRLIFT
PAL PARCELS	PAL	Fourth	Domestic - AIRLIFT Overseas - AIRLIFT
PARCEL POST Official parcels not marked for additional service. Personal parcels not marked for SAM or PAL service.	PARCEL POST	Fifth	Domestic - Rail/Truck Overseas - Surface

in combined length and girth will be given airlift service to and from military post offices upon payment of the regular surface postage plus a one-dollar fee.

Mail that is not marked *Airmail, First Class, Special Delivery, Special Handling, SAM* or *PAL* will be transported by surface transportation over the entire route of travel.

The following table will show you in a nutshell the handling preference given to various types of mail, how the mail should be marked and the way it is transported.

Now Is the Time To Check Up on Voting Procedures

General election day is Tuesday, 5 November, but relatively few Navymen will be near the state in which they are eligible to vote.

Distance from their voting residence, however, is no longer a problem for Navymen. Thanks to the Federal Voting Assistance Act of 1955, all states have provided help for you and your family concerning casting.

Each state has its own laws concerning voting qualifications. Generally speaking, differences in these laws are found in the requirements for citizenship, age, registration and length of residence in the state and voting district.

For example, most states require that voters be 21 years old, that they reside in the state for a specified length of time, that they be registered and, in some states, that voters be of good character.

Here is a brief rundown which gives variations of the 21-year-old voting age rule as well as information on residence, registration and character requirements.

The minimum age for voting is 21 in all states except Alaska, Georgia, Hawaii and Kentucky. In Georgia and Kentucky, the minimum age is 18. Alaska has fixed the minimum voting age at 19 and Hawaii bestows the voting privilege on its citizens at age 20.

Residents of the Territory of Guam are entitled to vote upon reaching age 18 but Guam does not participate in national elections.

All states require a minimum

period of residence as a prerequisite for voting and many permit registration by absentee process. Some states will register a qualified voter at the same time they accept a Federal Post Card Application or a voted absentee ballot. In others, a voter must be registered before applying for a ballot.

In addition to the qualifications concerning age, residence and registration, some states require that the voter be of good character or that he not have been convicted of a felony unless pardoned.

It is the responsibility of the appropriate state officials (not the Navy's) to determine an individual's eligibility to vote under the laws of that state.

If you have doubts concerning your eligibility to vote or don't know how to cast an absentee ballot, the Navy has a program to help you and your dependents become acquainted with your voting rights, privileges and responsibilities. All you need do is ask your voting officer.

Your voting officer has been appointed to give you factual, accurate and unbiased information on how you and your dependents may vote by absentee ballot or in person.

If you and your family are in the United States and intend to vote by absentee ballot, you should have received, by 15 September, the Federal Post Card Application for Absentee Ballot (FPCA) (Standard Form 76, Rev. 1955). Overseas

All-Navy Cartoon Contest Gregory L. Stevens, CYNSN, USN



"You can forget the starch this time..."

Navymen should have received one by 15 August.

This form must be delivered to you by hand to insure that you and all eligible Navymen are given the opportunity to apply for absentee ballots. It is the responsibility of your voting officer to see that these forms are available.

Ships and stations may be requested to furnish statistical data on the number of personnel who are old enough to vote in the general elections and the number who actually voted by absentee ballot.

This information, however, in no way infringes upon your right to cast your vote in secrecy. In fact, the law requires that the actual marking of the ballot be done privately.

No person is entitled to question you concerning the way you voted or your choice of candidate nor can any commissioned, warrant, petty or noncommissioned officer attempt to influence your choice of candidate.

Corpus Christi Welcomes 350 New Housing Units

A five-million dollar, 350-unit naval housing project, covering several city-size blocks, has been opened at NAS Corpus Christi. The first unit was occupied on 8 June, while others were still under construction.

The one- and two-story air-conditioned homes, with individual carports, are varied in design by the use of exterior wood and brick. Gas ranges, refrigerators, garbage disposals, draperies and venetian blinds are the basic furnishings. Each unit also has connections for washers and dryers.

Twelve children's playgrounds, equipped with swings, slides and seesaws, are scattered throughout the court-designed landscape.

The first 200 dwellings are being assigned to enlisted families, while the remaining 150, expected to be completed and ready for occupancy in November, have been designated for officer families.

Bachelor enlisted men at Corpus are also looking forward to new lodgings expected to be completed early next year. The project consists of three two-story barracks with central heating and air-conditioning.

Speed of Mail Delivery Depends on Many Factors

If you have wondered how long it should take a letter from home to reach you, the following table will give you an idea of what to expect.

The table shows the average number of days required for mail to

move from one place to another in the United States and from the United States to overseas locations. A combination of U.S. and overseas transit times must be used to determine travel time for mail dispatched from areas other than the FPO area. Delivery to ships at sea may take an additional one to 14 days depending on the class of

mail, the availability of adequate carrier on board delivery (COD) service, frequency of scheduled replenishments and in-port periods.

Correct addresses are essential in getting mail to servicemen in the least possible time. If your correspondents don't know yours, inform them.

Here is the table which will show you how long it takes various types of mail, including parcel post, to move from one place to another. The abbreviation PAL shown in the table means Parcel Airlift. SAM means Space Available Mail.

	AIRMAIL (Official & Personal Letters, Parcels & PAL Parcels)	FIRST CLASS Letters	SECOND CLASS Parcels (*)	PARCEL POST (Including SAM Parcels)
To FPO New York				
From:				
Eastern Cities	1-2	1-2	1-3	2-6
Midwest Cities	1-2	1-2	2-4	3-10
Western Cities	1-2	1-3	2-5	5-15
To FPO San Francisco				
From:				
Western Cities	1-2	1-2	1-3	2-6
Midwest Cities	1-2	1-2	2-4	3-12
Eastern Cities	1-2	1-3	2-5	5-15

*Parcels marked for "SPECIAL HANDLING" or "SPECIAL DELIVERY" are provided approximately the same transportation as "FIRST CLASS" parcels.

	AIRMAIL (Official & Personal Letters & Parcels)	MOM (First Class official letters and official parcels marked "First Class", "Spec. Del.", and "Spec. Handling".)	SAM (First Class Personal letters; SAM & PAL parcels; SAM Second Class mail.)	SURFACE (Parcel Post other Second Class)
Between:				
FPO San Francisco and:				
**Antarctica	10	13	13	30
Australia (NW Cape)	4	4	4	4
Guam	3	5	5	30
Hawaii	1	1	1	10
Japan (Tokyo Area)	2	3	3	20
Midway	2	3	3	15
*New Zealand	3	3	3	35
Okinawa	3	5	5	40
Philippines	5	8	8	35
Vietnam	4	5	5	45
FPO New York and:				
*Argentina, NFD	2	2	2	8
*Canal Zone (Panama)	2	2	2	12
Caribbean Area	5	5	5	13
*Dhahran, Saudi Arabia	3	3	3	14
Guantanamo Bay, Cuba	4	4	4	11
FPO New York and:				
*Keflavik, Iceland	1	1	1	4
London, England	1	1	1	14
Naples, Italy	1	1	1	14
Puerto Rico	1	1	1	14
Rota, Spain	2	2	2	25
*Scotland	5	5	5	35
FPO Seattle and:				
Alaska	2	2	2	10

**No mail service February through 15 September.

*Registered mail is normally dispatched on only one flight per week. Current schedule may be obtained from the OINC, FPO New York or San Francisco, as appropriate. AUTOVON numbers are 753-7687 and 831-1545 extension 217, respectively.

Now Is a Good Time For Officers to Think About Transferring to Specialty

If you're a permanently commissioned, Regular Navy line officer, you may be eligible to apply for re-designation, if qualified, to any of seven specific restricted line categories.

At the same time, qualified restricted line officers may transfer to the unrestricted line designators 1100, 1310, 1320 or 1350. This is spelled out in BuPers Inst. 1120.33E.

Interested personnel will note that revised instructions on transfer between the restricted line and unrestricted line within the Regular Navy now permit officers legally designated as Aeronautical Engineer to receive administrative designations to Ordnance Engineering Duty (1700).

Here is a rundown on the redesignation requirements.

UNRESTRICTED TO RESTRICTED—

Officers who wish to transfer to the line should have at least three years of active commissioned service as of 1 December of the calendar year in which application is made.

There are no minimum educational requirements, other than having been graduated from the Naval Academy or other accredited college or university with a baccalaureate or higher degree. However, officers who apply for redesignation should understand that they must compete for promotion and assignments with officers who may possess considerable experience and educational backgrounds in their respective line categories. With this in mind, applicants who possess the following

educational experiences may be considered particularly qualified for transfer to the restricted line:

Engineering (1400). Baccalaureate or higher degree in engineering or science. Have completed, currently enrolled in, or have demonstrated the potential to complete postgraduate training which leads to a master's degree or its equivalent in any phase of engineering or science related to the Naval Ship Systems Command or Naval Electronics Systems Command. Fields of primary interest are naval architecture, mechanical engineering, electrical engineering and engineering electronics.

Also, any engineering field of design, construction, repair, shore electronics, maintenance of ships and installed machinery and equipment or related research and development. A background which includes three years afloat and one year of engineering duty is particularly desirable.

Aeronautical Engineering (1510). Baccalaureate degree or higher in engineering or science. Have successfully completed, or demonstrated potential to complete, postgraduate study in engineering, science, or management related to responsibilities of Naval Air Systems Command.

Fields of interest are both technical and managerial; applicants with a combination of engineering, science and managerial study are considered eligible. Fields of study should be aeronautical engineering, engineering electronics, electrical engineering, mechanical engineering and physics.

Applicants with study in operations research, combined with other desired experiences, are also eligible. Candidates should have sound background of at least four years' operational experience in the Fleet.

Aeronautical Engineering Meteorology (1530). Degree in meteorology or baccalaureate or higher degree in any field of engineering, chemistry, mathematics, physics or oceanography. At least one year (30 semester hours) of courses in meteorology, or graduate study in meteorology at Naval Postgraduate School. Should have at least two years' experience in meteorology billet.

Special Duty Public Affairs (1650). Baccalaureate or higher degree, pref-

erably in a foreign language or linguistics, engineering (emphasis on electronics/electricity), physics, mathematics or computer sciences including operational or systems analysis. Experience should include training in research techniques, including teaching. Applicants must meet security requirements outlined in BuPers Inst. 1120.33E.

Special Duty Intelligence (1630). Baccalaureate degree or higher in electronics, industrial engineering, government, political science, international relations, geology, geography, cartography, language, hydrography, photogrammetry, physical or natural science, law, transportation or other field related to intelligence category. Operational experience at sea and previous experience in intelligence is desirable.

Special Duty Public Affairs (1650). Baccalaureate degree or higher;

Correspondence Courses

Five enlisted correspondence courses and three officer courses have been revised and are available to the Fleet. In addition, one new course, *Principles of Naval Engineering* (NavPers 10507), is now available to officers. Revised courses are listed below. Note that one course is classified.

Enlisted Courses

- *Machinist's Mate 3 & 2* (NavPers 91502-2B); supersedes NavPers 91502-2A.

- *Aviation Boatswain's Mate F 3 & 2* (NavPers 91679-C); supersedes NavPers 91679-B.

- *Air Controlman 3 & 2* (NavPers 91676-1B); supersedes NavPers 91676-1A.

- *Aviation Maintenance Administrationman 3 & 2* (NavPers 91498-B); supersedes NavPers 91498-A.

- *Gunner's Mate M (Missiles) 3 & 2* (NavPers 91379-A); Confidential, supersedes NavPers 91379.

Officer Courses

- *Military Sea Transportation Service* (NavPers 10972-B1); supersedes NavPers 10972-B.

- *Contract Administration and Contractor-Labor Relations* (NavPers 10742-A); supersedes NavPers 10742-1.

- *Jet Aircraft Engines* (NavPers 10985-C); supersedes NavPers 10985-B2.

erably in a foreign language or linguistics, engineering (emphasis on electronics/electricity), physics, mathematics or computer sciences including operational or systems analysis. Experience should include training in research techniques, including teaching. Applicants must meet security requirements outlined in BuPers Inst. 1120.33E.

Ordnance Engineering (1700). Baccalaureate degree or higher in engineering or science and postgraduate training in engineering, science or management (master's degree or equivalent). Should have four years' operational experience in the Fleet.

Waivers of eligibility requirements may be considered individually for officers who have broad backgrounds in appropriate specialties. Also, those who do not meet the desired education and experience backgrounds may be considered for redesignation as needs of the service dictate.

Applications for transfer to the restricted line should be submitted to the Chief of Naval Personnel (Pers-B643) before 1 November each year. A selection board normally convenes each December.

Those selected are designated in their current grades and dates of rank as soon as they become available for reassignment.

RESTRICTED TO UNRESTRICTED—

Requests for redesignation from the restricted to unrestricted line should be forwarded to the Chief of Naval Personnel (Pers-B643), via command channels, using the format prescribed in the basic directive. The CO's endorsement should include specific recommendations with regard to the applicant's motivation and qualifications for unrestricted line duty.

The application should include two copies of a Report of Medical Examination (SF 88) and one copy of a Report of Medical History (SF 89).

Full details on restricted line transfers and applications are contained in BuPers Inst. 1120.33E. It is noted that Reserve officers and temporary Limited Duty Officers may apply for appointment in the restricted line under provisions described in article C-1105A, *BuPers Manual*. Limited Duty Officers (permanent) who desire appointment to the restricted line should review article C-1307, *BuPers Manual*, in addition to the BuPers directive.

Up-to-Date Reading List for World-Wise Navymen

IT'S NO LONGER enough to stay current with developments in your own specialty.

No matter whether you are in a ship at sea or in the naval air arm, or have a desk job in Washington, San Diego or Norfolk, or whether you're counting the days until you greet your relief in the Far East, it helps to know where you and your job fit into the general picture.

This is one of the reasons why SecNav (through the SecNav Reading Program Committee) takes considerable trouble to compile periodically a list of books and articles which every Navyman, officer and enlisted, is urged to read. They're all timely and significant, and will help you keep abreast of the rapid changes in the national and world situation.

Here's the most recent list, with a brief description of each title offered:

Asia

Last Reflections on a War—Bernard B. Fall. The author's sympathy with all things Vietnamese and his grasp of the nuances as well as the overt realities of U. S. involvement give impact to this posthumous work. Consists of 19 unpublished pieces, articles new to book form and transcripts of tapes.

South-East Asia: Race, Culture and Nation—Guy Hunter. A short, factual, calmly rational study of the nation building process as it is conditioned by race, religion, language and similar factors. Most nations of Southeast Asia have populations composed of people of quite divergent cultures. That's the big problem.

India's Quest for Security: Defense Policies, 1947-65—Lorne J. Kavic. Independence gave India the responsibility for her own active defense. The efforts of a nation vast in population but limited economically to maintain a satisfactory level of military strength are the subject of this carefully researched study.

The Korean War—General Matthew B. Ridgway, USA (Ret). Describes the efforts of the General to reorganize the 8th Army after General Walker's death. He also has a few words to say on the dismissal of General MacArthur, the strategy of

limited wars, and the Navy and Marine Corps.

Foreign Relations

The American Approach to the Arab World—John S. Badeau. As the author sees it, our basic approach to the Arab nations has been to try to find out what they are doing, and tell them to stop it. He doesn't think much of that idea, and suggests means of improving U. S. ability to protect her true interests in the Middle East.

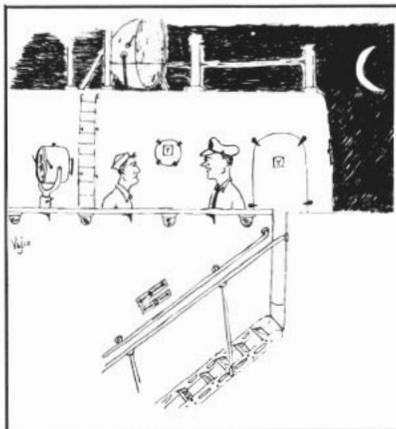
Memoirs—George F. Kennan. Kennan reveals himself as an intellectual, a humanist and a remarkably modest man considering the impact he has had on the formation and execution of foreign policies. His lucid account of how and why decisions were made is what makes his memoirs so valuable.

The Real CIA—Lyman B. Kirkpatrick, Jr. The approach is partially autobiographical, which adds interest to the accounts of the Bay of Pigs and the U-2 incidents. However, the primary purpose of the author is to explain the internal organization, the mission, the problems and the realities of the agency.

Across the Pacific: An Inner History of American-East Asian Relations—Akio. With a subtitle such as this, who needs further explanation?

America's Stake in Asia—Drew Middleton. Impressions by the author of a journey throughout Southeast Asia.

All-Navy Cartoon Contest
Jose Veliz, Jr., BM2, USN



"I don't care if it does attract bugs. I want you to send the message."

Describes the nature of the struggles of both small and large countries to remain independent and to achieve economic and social stability in the face of discouraging odds.

Gibraltar, the Keystone—John D. Stewart. Covers almost everything there is to know about Gibraltar, but concentrates on the present problem—what happens to a small colony when the people do not wish to become citizens of the nearest country but when colonial status is nearing an end.

Australia Faces Southeast Asia: The Emergence of a Foreign Policy—Mary Belle and Amy Vandenbosch. What with Southeast Asia being in a turmoil ever since World War II, and what with Great Britain pulling up stakes, Australia is having difficulties with her foreign policies. The policies of the United States look good; yet questions remain, not least being the "Trustworthiness of American support," according to some sources.

Negotiating with the Chinese Communists: The United States Experience—Kenneth T. Young. These studies of Chinese strategy in international negotiations have a transfer value to situations involving negotiations with Asian communities in general.

Science

The Politics of Pure Science—Daniel S. Greenberg. The nature and development of the relationship between the scientific community and the military and federal government is explored. Greenberg thinks there may be trouble ahead.

The Frail Ocean—Wesley Marx. Another viewer-with-alarm, with the ocean as possible victim this time. Marx cites case after case, a number of them involving the Navy, to make clear the ease with which the delicate balances that sustain ocean life and physical structure can be upset, and suggests directions which may be taken.

The Double Helix—James D. Watson. Scientists are people. This thesis, if fully accepted by the intellectual community, may have as far-reaching effects as that of the discovery of the structure of DNA. In any event, Watson makes a good (and most readable) case for it. In re-

telling the events leading to the final discovery of the structure of the DNA molecule, for which he won his share of the Nobel prize, Watson has recreated the competitive, aggressive, often exuberant and frequently boring atmosphere which existed. It might be noted that his major scientific work (to date) was completed before his 25th birthday.

Military Affairs

The Fall of Japan—William Craig. After beginning the war, Japan didn't quite know how to stop it. As the military situation grew from bad to worse, chaos developed in Japan with mutiny a fact and revolution a possibility.

Incredible Victory—Walter Lord. The story of the Battle of Midway has been told before and will undoubtedly be told again, but it is unlikely that it will be told better.

1942: The Year that Doomed the Axis—Henry H. Adams. Gives a touch of nostalgia for those who lived through that gulp-making year in which the United States and her allies fought desperately on widely separated fields to ward off what appeared to be the final onslaught. The younger generation might — just possibly might — have a little more respect for their elders after reading this. But they probably won't.

The Admirals Lobby—Vincent Davis. A study of the Navy's attitudes and involvement in political activity and lobbying. Somewhat tentative and unverified.

The Sea in Modern Strategy—L. W. Martin. An attempt to bridge the gap between a large technical literature devoted to naval science and

Borrowing Books by Mail

The books recommended here in Midwest, Southwest, and Pacific Coast areas.

• Commanding Officer, U. S. Naval Station (Library-ALSC), Bldg C-9, Norfolk, Va. 23511, for those in Southeast and Caribbean areas.

• Commanding Officer, U. S. Naval Station (Library - ALSC), Box 20, FPO, San Francisco, Calif. 96610, for personnel in Central Pacific, Hawaii areas.

• Commanding Officer, U. S. Naval Station (Library - ALSC), Box 174, FPO, San Francisco, Calif. 96630, for personnel in the Far East and the Marianas.

tactics and a growing body of works devoted to strategic analysis.

Money Management

As an aid to sound personal financial management, the following publications are suggested (in this connection, see also the August issue of ALL HANDS):

Managing Insurance and Personal Finance—U. S. Military Academy. Specifically directed to military financial problems and money management.

Your Investments—Leo Barnes. A standard guide to investments, stocks, bonds, real estate, mutual funds, and the like.

The Retirement Handbook—Joseph C. Buckley. A frequently revised book which gives much useful advice and information.

Truth about Probate and Family Financial Planning—William J. Casey. Estate planning for the layman.

How to Save Money When You Buy and Drive Your Car—Merle E. Dowd. Advice to the car owner on some basic decisions.

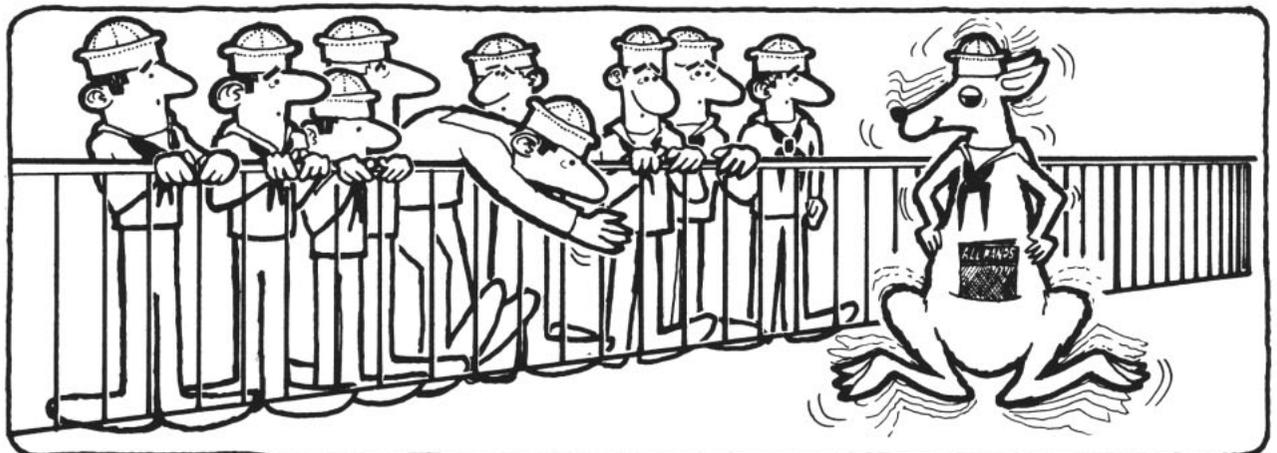
Sense with Dollars—Charles Neal. How to solve your financial problems before they start.

The N. Y. Times Guide to Personal Finance—Sal Nuccio. The newspaper's personal finance columnist advises in all areas of financial planning and practice.

The Legal Adviser on Home Ownership—Jerome G. Rose. A handy manual for those owning or buying a house.

How to Avoid Ten of the Biggest Home-Buying Traps—A. M. Watkins. The most frequent home-owning problems dealing with design, location, price and financing are analyzed.

The Macmillan Guide to Family Finance—Rex Wilder. A guide to living the good life within the income.



DON'T POCKET ALL HANDS . . . remember that there are nine other Navymen waiting to read this issue.

Volume III of DANFS Is Last Word From G Through K

The third volume of the *Dictionary of American Naval Fighting Ships*, four years in the printing, is now available, adding historical sketches of ships whose names begin with letters G through K.

Volume III offers more detail on most ships listed, as well as more photographs and a broader perspective on naval history.

There are six appendices to the new book. The first three cover historic ship exhibits, monitors and Civil War naval ordnance. The fourth is an addenda to appendices of Volumes I and II covering guided missile cruisers 1959-67; submarines 1959-67; destroyer types 1959-67; escort ships 1959-67; and aircraft carriers 1963-67.

Appendix V lists ships named A through F since publication of the first two volumes, and Appendix VI lists corrections to errors appearing in these editions.

Altogether, Volume I, II and III contain histories of about 5000 warships, including histories of ships that served the Confederate States of America.

When the multi-volumed *Dictionary* is complete, it will contain, in alphabetical order, historical sketches and vital data of all ships that have had commissioned—or uncommissioned service in the Continental Navy and the United States Navy.

As in the first two volumes, ships which were named but not commissioned are mentioned in their alphabetical location but, usually, without historical sketches or statistical data.

The new volume should be of continuous value to those interested in the Navy's ships, past and present. It can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price \$6.

Training Corps (NROTC) Program will be conducted during the 1968-69 school year.

While the NROTC program is aimed primarily toward recent high school graduates, active duty enlisted men, Regular or Reserve, may also apply. However, those on active duty must compete in the same manner as civilian applicants, and must be available for NROTC medical examinations and interviews usually held early each year.

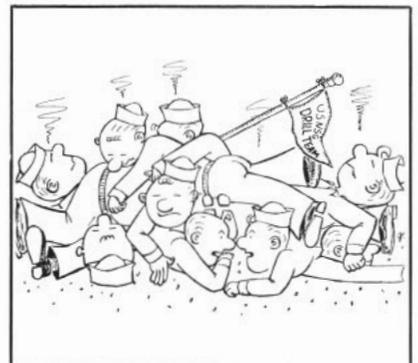
Even though the NROTC programs may not apply to you directly, your efforts can be of considerable value in promoting the programs by bringing them to the attention of potential applicants.

If you are a high school senior or recent graduate, a male citizen of the United States, 17 years of age but not 21 by 30 Jun 1969, never having been married, you are basically eligible to compete for the Regular NROTC Program. The 1969 NROTC Bulletin which lists eligibility and academic requirements plus application form is now available at high schools, Navy recruiting stations, and NROTC colleges and universities.

The qualifying examination, the Navy College Aptitude Test (NCAT), will be administered on 14 Dec 1968. Applications to participate in the examination must be received by the Naval Examining Section, Science Research Associates, Chicago, Ill., by 15 Nov 1968. Examination centers are established at naval activities overseas as well as throughout the continental United States.

Those who qualify on the NCAT

Michael B. Grandy, CTSN, USN



"What did he say? I don't know . . . it sounded like 'HAHRUR HARR'."

List of New Motion Pictures Available to Ships and Overseas Bases

The list of recently released 16-mm features available from the Navy Motion Picture Service is published here for ships and overseas bases.

Movies in color are designated by (C) and those in wide-screen processes by (WS).

The Secret War of Harry Frigg (WS) (C): Comedy; Paul Newman, Sylvia Mascina.

Grand Slam (WS) (C): Drama; Edward G. Robinson, Janet Leigh.

Sebastian (C): Drama; Dirk Bogarde, Susannah York.

The Bamboo Saucer (C): Science Fiction; John Ericson, Anna Karachew.

Chubasco (WS) (C): Drama; Richard Egan, Christopher Jones.

Sweet November (C): Drama; Sandy Dennis, Anthony Newley.

Attack on the Iron Coast (C): Melodrama; Lloyd Bridges, Andrew Kier.

Valley of the Dolls (WS) (C): Barbara Perkins, Patty Duke.

The Young Girls of Rocheforte

(WS) (C): Musical; George Chakiris, Catherine Deneuve.

Flaming Frontier (WS): Western; Stewart Granger, Pierre Brice.

The Ambushers (C): Melodrama; Dean Martin, Senta Berger.

Off Beat: Adventure Drama; William Sylvester, Mai Zetterling.

The Scalphunters (WS) (C): Melodrama; Burt Lancaster, Shelley Winters.

Day of the Evil Gun (WS) (C): Western; Glenn Ford, Arthur Kennedy.

The Vengeance of Fu Manchu: Melodrama; Christopher Lee, Tony Ferrer.

One of Our Spies Is Missing (C): Mystery Drama; Robert Vaughn, David McCallum.

P. J. (WS) (C): Melodrama; George Peppard, Raymond Burr.

Speedway (WS) (C): Comedy; Elvis Presley, Nancy Sinatra.

No Way to Treat a Lady (C): Drama; Rod Steiger, Lee Remick.

Torture Garden (C): Drama; Jack Palance, Beverly Adams.

Deadline Is Approaching For NROTC Application

The 23rd annual competition for the Regular Naval Reserve Officers

will be scheduled for a medical examination and interviews during the months of January and February 1969. From those who are found qualified, about 1700 will attend college next fall in preparation for their naval careers.

The purpose of the Regular NROTC program is to train well qualified young men to complement the number of junior officers commissioned from the Naval Academy. Selected candidates receive not more than four years of government subsidized education at 53 outstanding colleges and universities throughout the country. In addition to tuition and other educational expenses, the Navy furnishes textbooks, uniforms, and a \$50 per month subsistence allowance.

NROTC midshipmen have a wide choice in their major fields of study but must complete 24 semester hours of naval science studies and participate in three summer training periods. After receiving a baccalaureate degree, Regular NROTC graduates are commissioned in the Regular Navy or Marine Corps with the same rank, promotional opportunities and choices of duty assignments as their Naval Academy contemporaries.

They're Major Sports at Sasebo

The sports may have been called minor, but the enthusiasm of participants was of major proportions at the Commander Naval Forces Japan Minor Sports Tournament.

There were 40 team and individual entries in squash, handball, table tennis, horseshoe pitching and badminton events. Competitors were entered from ships and stations near Sasebo, where the tournament was held.

Champions and runners-up in the double elimination events were:

- Squash Singles—Lieutenant Brent Bennitt of *uss Bon Homme Richard* (CVA 31) won over Radioman 1st Class Mike Branson of Sasebo, in the final match: 15-10, 15-10, 15-4.
- Squash Doubles—LT Bennitt and LCDR John Robinson downed runners-up Lieutenant Glenn Allen and Mike Branson, RM1, of Sasebo, 15-7, 15-11 and 15-14.
- Handball Singles—LT Allen defeated Lieutenant (JG) Maynard

Louis Giordano, RMSN, USN



"Now muster a 30-man . . ."

Crowther of Fleet Activities, Sasebo, in the final match: 21-13, 11-21, 21-9.

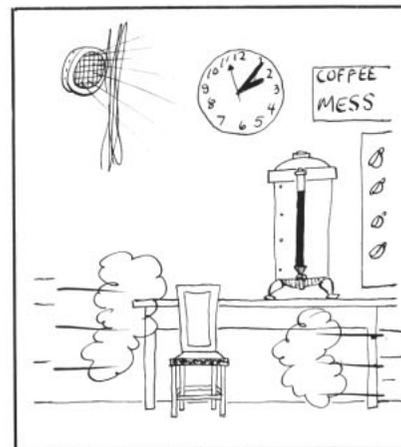
- Handball Doubles—LT Allen and Lieutenant (jg) Mike Prentiss of Sasebo defeated runners-up LTJG Crowther and Sergeant Major Bob Winkler of the Sasebo Marine Barracks: 14-21, 21-5, 21-9.

- Badminton Singles—LT Allen defeated LCDR John Robins, Okinawa, in the final match: 15-5, 15-8.

- Badminton Doubles—LCDR Joe Parker and LT Allen defeated CDR Mario Vasquez and Lieutenant Charles Sharples of Fleet Activities, Yokosuka: 15-12, 15-9.

- Horseshoe Singles—Chief Storekeeper Richard Whitmore of Atsugi downed Lieutenant Bert Gregory of Sasebo in the final match.

- Horseshoe Doubles—Chief Whitmore and Aviation Electronics Technician 1st Class Gary Ehresman, both of NAS Atsugi, defeated run-



. . . working party on the pier."

ners-up Lieutenant Bert Gregory and Senior Chief Ship's Serviceman Felix Rozinski of Sasebo.

- Table Tennis Singles—Chief Aviation Storekeeper Oscar Carter of NAF Okinawa won over Seaman Francisco Sola-Rivera of NAS Atsugi in the championship match.

- Table Tennis Doubles—LCDR John Robins of Okinawa and Oscar Carter, AKC, of Okinawa defeated runners-up Aviation Storekeeper 3rd Class James Gaines, and Seaman Sola-Rivera.

Travelers Are Reminded Of Baggage Limitations

Free baggage allowance on commercial air flights and leave taken in connection with temporary additional duty orders are two of several rulings discussed in the latest change to BuPers Inst 1321.2F, the guide for issuance of TEMADD to officers and midshipmen.

The area dealing with air baggage states that the free baggage allowance for passengers on commercial airlines traveling within the United States (less Alaska and Hawaii) is based on a *piece* or *pound* concept.

Most airlines use the *piece* concept and allow one large bag whose total dimensions do not exceed 62 inches, and one medium-sized bag whose dimensions do not exceed 55 inches. A third *piece*, or it may be *pieces*, is baggage that must be carried onboard by the passenger and which must fit under his seat. Carry-ons may not exceed 45 inches.

A few airlines still use the *pound* concept whereby the baggage weight and the class of service determine the maximum allowances. To save considerable confusion and possibly valuable time, it is advisable to consult with the airline ahead of check-in for the latest information regarding the free baggage allowances.

Leave taken in connection with TEMADD normally will not be approved, according to the instruction, if privately owned vehicle travel allowance of seven cents per mile has been authorized.

For guidance in writing TEMADD orders for all officers and midshipmen, refer to BuPers Inst 1321.2F. TEMADD orders for enlisted personnel are written according to instructions in the *Enlisted Transfer Manual*, NavPers 15909.

Thinking of Taking a

Pointers on Recreational Boating That Every Navyman Should Know

NAVYMEN in growing numbers are discovering the enjoyment that can come from recreational boating. Each year, in spring, summer and fall, and even in winter, increasing numbers of Navy men and their families take to the rivers, lakes and bays in pleasure craft. They go fishing, adventuring, waterskiing, deep-water swimming, or just plane around the water enjoying the sun and spray.

DO YOU know how to safely overtake a larger boat?



None of this growing group needs to be told how to enjoy his boat. Some, however, might find information concerning the rules for boating safety and the latest legal requirements useful.

Here is a roundup of some of the more important things you should know if you intend to become a boatman.

Recreational Boats, by Class

The federal government has established minimum equipment for each class of boat. Before you can determine your own boat's needs, you first have to find out what class it is in.

A motorboat is any vessel 65 feet in length or less which is propelled by machinery, except tugboats and towboats propelled by steam. The word motorboat also means a boat temporarily or permanently equipped with a detachable (outboard) motor and, (although few and far between) a boat propelled by steam. Classes are determined by length, and are classified as follows:

- Class A — less than 16 feet.
- Class 1 — 16 feet to less than 26 feet.
- Class 2 — 26 feet to less than 40 feet.
- Class 3 — 40 feet to not more than 65 feet.

After determining your boat's class, the next step is to equip it with at least the minimum requirements of the law.

Required Equipment

Depending on their class, motorboats may be required to carry fire extinguishers, lifesaving devices, flame arresters, ventilation devices, bells, whistles, and lights.

If your boat is 26 feet or more, you must carry a fire extinguisher capable of extinguishing fires involving flammable liquids and grease. If your boat is smaller than 26 feet, it will not necessarily have to carry an extinguisher unless, owing to the nature of its construction, it will tend to trap explosive vapors.

Such vapors may be trapped in closed compartments under thwarts and seats where fuel tanks may be stored; in double bottoms not sealed to the hull or which are not completely filled with flotation material; in closed living spaces; in closed stowage compartments in which combustible or flammable materials are stowed; and in permanently installed fuel tanks.

To meet equipment requirements, portable fire extinguishers must be approved by the Coast Guard. Such approved extinguishers will carry the description "Marine Type" on the label. If you have doubt about the approval status of a fire extinguisher, you can find out for sure by contacting the nearest Coast Guard Marine Inspection Office.

The law requires every motorboat to have on board one lifesaving device for each person, whether on board or skiing. The device may be a life preserver, buoyant vest, buoyant cushion, ring buoy or special purpose water safety buoyant device.

Motorboats over 40 feet long must carry a life preserver or buoy for each person on board. Although not specifically required by law or regulation, probably the best and surest lifesaving device to use on all

Boatman's Holiday?

recreational boats is a Coast Guard-approved life preserver.

All lifesaving devices can have excellent flotation materials, be expertly manufactured, and be in serviceable condition without being a good lifesaving device. Obviously, the proper use of any lifesaving device requires the wearer to know how it will perform. The only way to gain this knowledge is through personal experience. Every person going out on the water in a boat should first understand how to properly fit and wear the lifesaving device intended for him on the boat.

He should then understand how the device will react when he wears it in the water. Only then can he be sure he and the device are ready for an emergency which would cause him to leave the boat. Children, especially, should be well trained in the use of lifesaving devices.

If you have an inboard motor (gasoline engine) which has been installed since 25 Apr 1940, your motor must have an efficient means of backfire flame control. If your engine emits backfire flames, the flames must be dispersed to the atmosphere outside the vessel in such a manner as not to endanger the vessel, persons aboard or nearby vessels or structures.

Ventilation

Longstanding federal regulations have required efficient ventilation of motorboats using such volatile fuels as gasoline. You must first determine whether your boat needs a ventilation system. If it is constructed so that it does not entrap explosive or flammable gases

and vapors within the boat it need not be fitted with a separate ventilation system.

If your boat meets the following criteria, it is considered sufficiently open to allow the scouring action of the natural atmosphere to dissipate any fumes:

1. As a minimum, the engine and fuel tank compartment should have 15 square inches of open area directly exposed to the atmosphere for each cubic foot of net compartment volume.

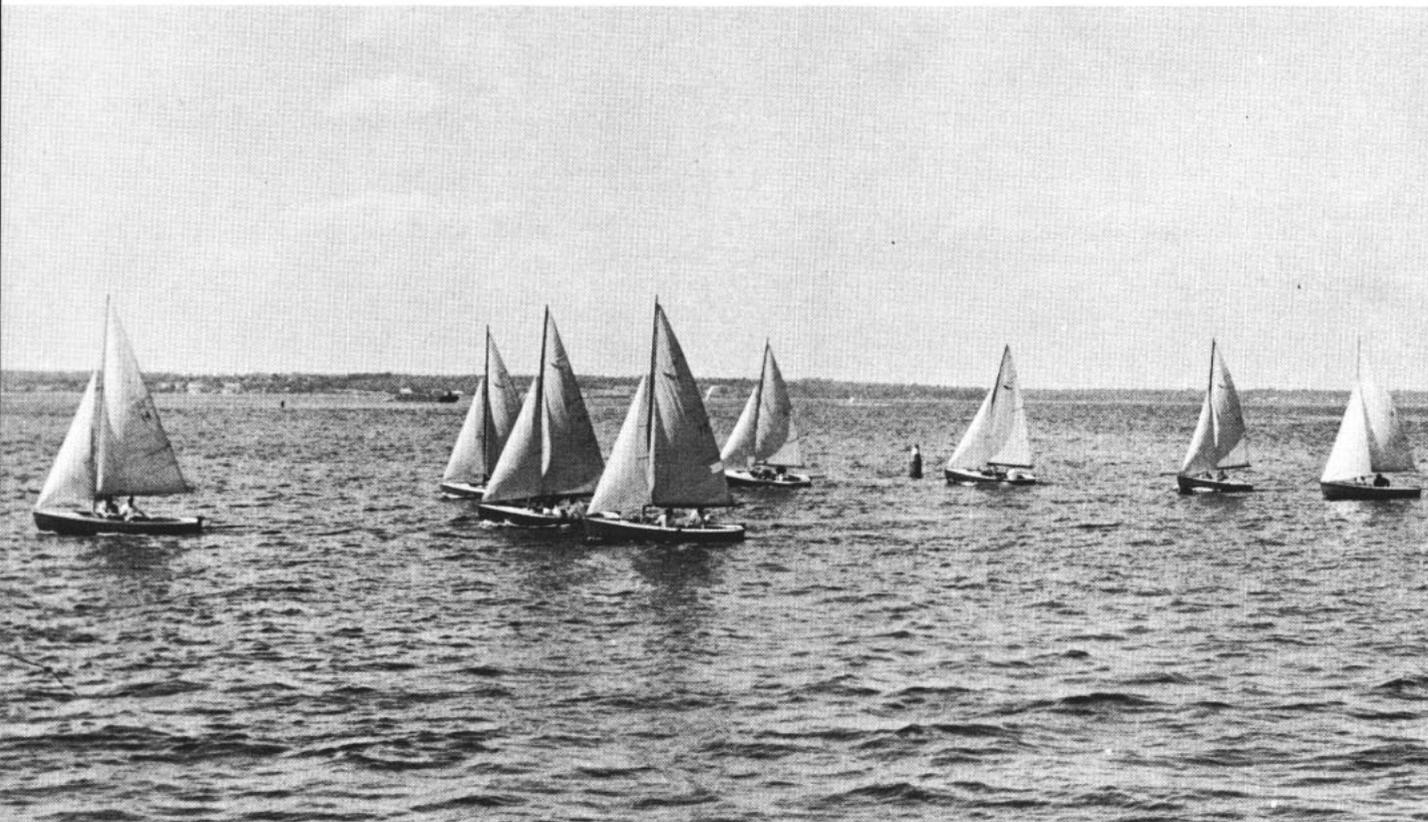
2. Fuel and engine compartments must have at least one square inch of open area per cubic foot within one inch of the compartment bilge level, or floor, so that vapors can drain into open areas.

3. There must be no long or narrow unventilated spaces accessible from engine or fuel compartments into which a fire could spread unless the space complies with number four below.

4. Long, narrow compartments, such as side panels, if joining engine or fuel compartments and not serving as ducts, must have at least 15 square inches of open area per cubic foot made possible by frequent openings along the full length of the compartment formed.

If a boat will entrap fumes it is required to have at least two ventilator ducts fitted with cowls at their openings to the atmosphere. The ventilators, ducts and cowls must be installed so that they provide for the efficient removal of explosive or flammable gases from the bilges of each engine and fuel tank compartment. Intake ducting must be installed to extend from the cowls to at least midway to the bilge or at least below the level of the carburetor air intake. Also, exhaust

SPECIAL RULES covering sailboats dictate that they have the privilege of right-of-way over powered craft.



ducting must be installed to extend from the lower portion of the bilge to the cowls in the open atmosphere. The cowls attached to intake and exhaust ducts should be located and trimmed for maximum effectiveness and to prevent fumes from being recirculated through the bilges.

Lights

All boats are required by law to display lights at night. These lights warn others of the presence and type—sail or power—of boat, and enable other vessels to properly apply the Rules of the Road.

A motorboat on the waters of the U. S. may carry the lights prescribed by the act of 25 Apr 1940 (Motorboat Act), or it may carry the lights prescrib-

ed by the International Rules. In addition, there are requirements for stern, anchor, and other special lights contained in the applicable Inland, Western Rivers, and Great Lakes Rules.

The requirements for lights in U. S. inland waters are summarized in the accompanying chart.

The above requirements are the legal minimum. Of course the well-prepared boatman will find he should have additional equipment. How much and what kind of equipment depends upon the type of boat, the area, and extent of operation.

Some useful items which could come in handy are anchors, fenders, signal mirrors, spare oars, compass, bailing device, first aid kit, emergency water and rations, flashlight, and tools. There are, of course, more.

MOTORBOAT ACT (Act of April 25, 1940).—

used where Inland, Western Rivers and Great Lakes Rules apply

POWER ALONE	SAIL and POWER	AUXILIARY: SAIL ALONE*	SAILBOATS
<p>under 26' in length</p> <p>32 pts 2 mi white comb 20 pts 1 mi red green</p>	<p>32 pts 2 mi white comb 20 pts 1 mi red green</p>	<p>12 pts 2 mi white comb 20 pts 1 mi red green</p>	<p>12 pts 2 mi white 10 pts 2 mi - Sidelights red green</p>
<p>26' to 65' in length</p> <p>32 pts 2 mi white 10 pts 1 mi red 10 pts 1 mi green 20 pts 2 mi white</p>	<p>32 pts 2 mi white 10 pts 1 mi red 10 pts 1 mi green 20 pts 2 mi white</p>	<p>12 pts 2 mi white 10 pts 1 mi red 10 pts 1 mi green 20 pts 2 mi white</p>	<p>*Stern light not required for vessels under sail alone on Great Lakes</p> <p>Manually propelled vessel shall have a white light ready to be temporarily exhibited in time to prevent collision.</p>

INTERNATIONAL RULES.—

required on high seas, may be used inland

POWER ALONE	SAIL and POWER	AUXILIARY: SAIL ALONE*	SAILBOATS
<p>less than 40' in length</p> <p>carried 3ft higher than colored lights 20 pts 3 mi white 12 pts 2 mi green 10 pts 1 mi white comb 20 pts 1 mi or 10 pt separate sidelights red</p>	<p>20 pts 3 mi white 12 pts 2 mi red 10 pts 1 mi green comb 20 pts 1 mi or 10 pt separate sidelights white</p>	<p>12 pts 2 mi white comb 20 pts 1 mi red green</p>	<p>12 pts 2 mi white 10 pts 2 mi red green</p>
<p>power—40' but less than 65'—sailing vessels over 40'</p> <p>located 3ft above gunnels 20 pts 3 mi white 12 pts 2 mi red 10 pts 1 mi green 10 pts 1 mi or 20 pt comb white</p>	<p>20 pts 3 mi white 12 pts 2 mi red 10 pts 1 mi green 10 pts 1 mi or 20 pt comb white</p>	<p>20 pts 2 mi optional & additional red gr 12 pts 2 mi white 10 pts 2 mi green 3ft screen on sidelights red</p>	<p>Red over Green 20 pt 2 mi for masthead optional for all sailboats</p>



SPECIAL EQUIPMENT necessary for safe operation depends on the type of craft, area and extent of operation.

Rules of the Road

Your boat is subject to traffic laws just as ships are; however, those governing boating traffic vary according to locality. Although rules in the different areas are similar, you should obtain and study the rules applying to your specific area of operation. A brief study of the Inland Rules will suffice here, since these are most commonly used by boatmen.

When two boats are meeting head on, or nearly so, each must pass on the port side of the other. In other words, pass on the right. However, when the courses of such vessels are so far on the starboard of each other as not to be considered meeting head and head, either vessel shall immediately give two short and distinct blasts of her whistle, which the other shall answer promptly by two similar blasts of her whistle, and they shall pass on the starboard side of each other.

When two vessels are approaching each other at right angles or obliquely so as to involve risk of collision, other than when one vessel is overtaking another, the vessel which has the other on her own port side shall hold her course and speed. The vessel which has the other on her own starboard side shall keep out of the way of the other by directing her course to starboard so as to cross the stern of the other vessel, or, if necessary to do so, slacken her speed or stop or reverse. The privileged vessel may give one short blast of the whistle to signify her intention to hold course and speed.

Every vessel coming up on a leading vessel from any direction more than two points (22 1/2 degrees) abaft the leading vessel's beam shall be deemed to be an overtaking vessel. The overtaking vessel is the burdened vessel and has a duty of keeping clear of the other vessel.

If the burdened vessel wishes to pass on the starboard hand of the vessel ahead, she will give one short blast. If the vessel ahead answers with one short blast the overtaking vessel shall direct her course to starboard.

If the burdened vessel wishes to pass on the port

hand of the vessel ahead, she gives two short blasts. If the vessel ahead answers with two short blasts, the overtaking vessel directs her course to port.

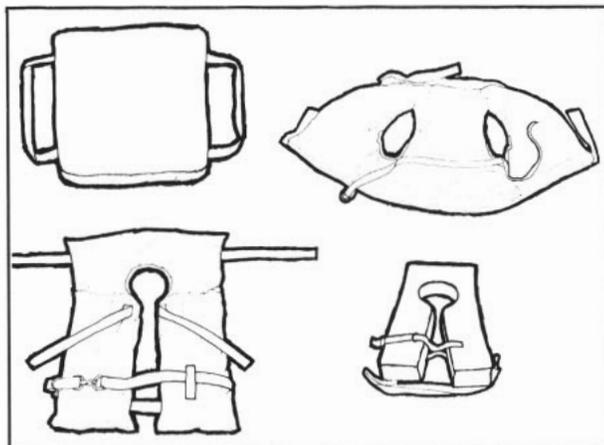
If the vessel ahead does not think it safe for the vessel astern to attempt to pass at that point, she will immediately signify this by giving the danger signal of four or more short rapid blasts. Under no circumstances may the vessel astern attempt to pass the vessel ahead until such time as they have reached a point where it can be safely done, when the vessel ahead shall signify her willingness by blowing the proper signals.

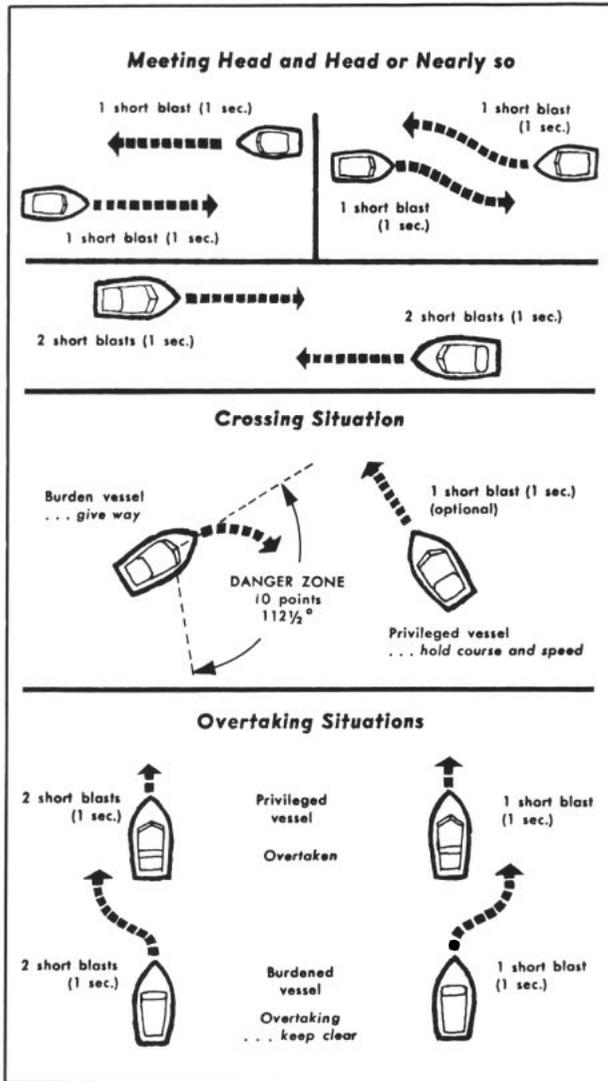
The vessel ahead shall in no case attempt to cross the bow or crowd upon the course of the passing vessel.

If, when two vessels are approaching each other, either vessel fails to understand the course or intention of the other, from any cause, the vessel so in doubt shall immediately signify this by giving the danger signal.

Note that in these rules, "steam vessel" includes any vessel propelled by machinery.

VARIOUS TYPES of approved lifejackets are illustrated below, from left to right: Buoyant cushion and a jacket type life preserver. Bottom row: Buoyant vest and a bib type preserver.





If you are equipped with both machinery and sail, the only time you are considered a sailing vessel under the rules is when you are propelled by sail alone.

When a vessel propelled by machinery and a sailing vessel are proceeding in such directions as to involve risk of collision, the former shall keep out of the way of the sailing vessel. An exception to this rule is the case where a sailing vessel is overtaking a machinery-propelled vessel. Common sense dictates a small sailing vessel should not insist on this right-of-way when approaching large commercial vessels. The International Rules effectively state that small sailing vessels do not have the right of way over deep-draft power-driven vessels in narrow channels.

Risk of collision can, when circumstances permit, be ascertained by carefully watching the compass bearing of an approaching vessel. If the bearing does not appreciably change, such risk should be deemed to exist.

In a fog, mist, falling snow, or heavy rainstorms, go at a moderate speed. Moderate speed has been defined by the courts as a speed no greater than will enable a boat to stop in half the distance of visibility.

The law says that in obeying and construing these

rules due regard shall be had to all dangers of navigation and collision and to any special circumstances which may render a departure from the rules necessary in order to avoid immediate danger.

The rules of the road apply alike to the small pleasure craft and large commercial ships such as ocean liners, freighters, or towboats with large cumbersome tows. However, the large vessel with her great length and tremendous weight requires a great deal more room to maneuver because her turning circle is large, her stopping distance is relatively great, and often her deep draft restricts her to little variance from channel courses. For these reasons, operating a small pleasure craft too close to the large oceangoing vessel or towboat with tow is dangerous.

Your Responsibilities

In part, the Motorboat Act provides that no person shall operate any motorboat or any vessel in a reckless or negligent manner so as to endanger life, limb, or property of any person. Such conduct is punishable by a fine not exceeding \$2000 or by imprisonment for a term not exceeding one year or by both fine and imprisonment.

However, under the Federal Boating Act of 1958 the reckless or negligent operator may, as an alternative to the above criminal punishment, receive an administrative penalty of up to \$100.

Speeding or water skiing in the close proximity of swimmers and other boats, especially small boats, can be dangerous, and may amount to reckless or negligent operation. Remember, you are responsible for the wake your boat creates.

You are also responsible for what happens inside your boat. Don't overload it. The number of seats in a boat is not an indication of the number of persons it can safely carry. The safe load of a boat in persons depends on the vessel's characteristics, such as the hull volume and dimensions; what it is made of; and the weight of the engine.

More and more manufacturers display a plate on their boats showing recommended weight capacity, usually in number of persons and number of pounds for persons, motors, fuel and gear. Remember, however, these are only recommended values for fair weather

	WHITE	BLACK	RED
Storm Signals	WHITE	BLACK	RED
Daytime Signals			
Night Signals			
	SMALL CRAFT Winds up to 38 mph	GALE Winds up to 54 mph	WHOLE GALE Winds up to 72 mph HURRICANE Winds 72 mph and up



conditions. They do not relieve the boatman of responsibility for judgment.

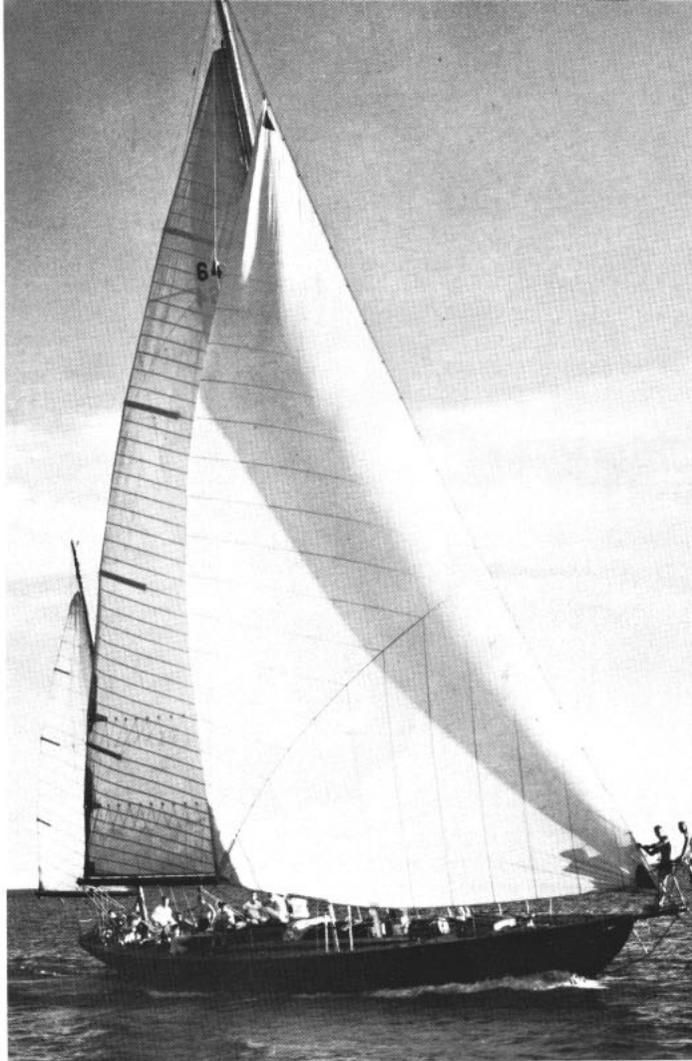
When you are buying or renting a boat, its use should be kept in mind as it may relate to capacity. Take waterskiing, for example. Most states require that in addition to the boat operator, there must be one person to observe the skier. A boat to be used for waterskiing should therefore have capacity for three or more persons as well as an engine of sufficient horsepower to tow the skier. If the boat is to be put to such popular uses as skindiving, waterskiing, or even swimming, it should be stable enough to withstand the off-center load which is applied when persons are reboarding it from the water.

The weather and water conditions should also be taken into account. If the water is rough, the number of persons carried should be reduced.

Man Overboard

Just as a ship's crew constantly drills to prepare for emergencies, a man going boating should think out procedures that he would follow in certain of the more common emergencies. In this way his actions will be automatic, fast and correct.

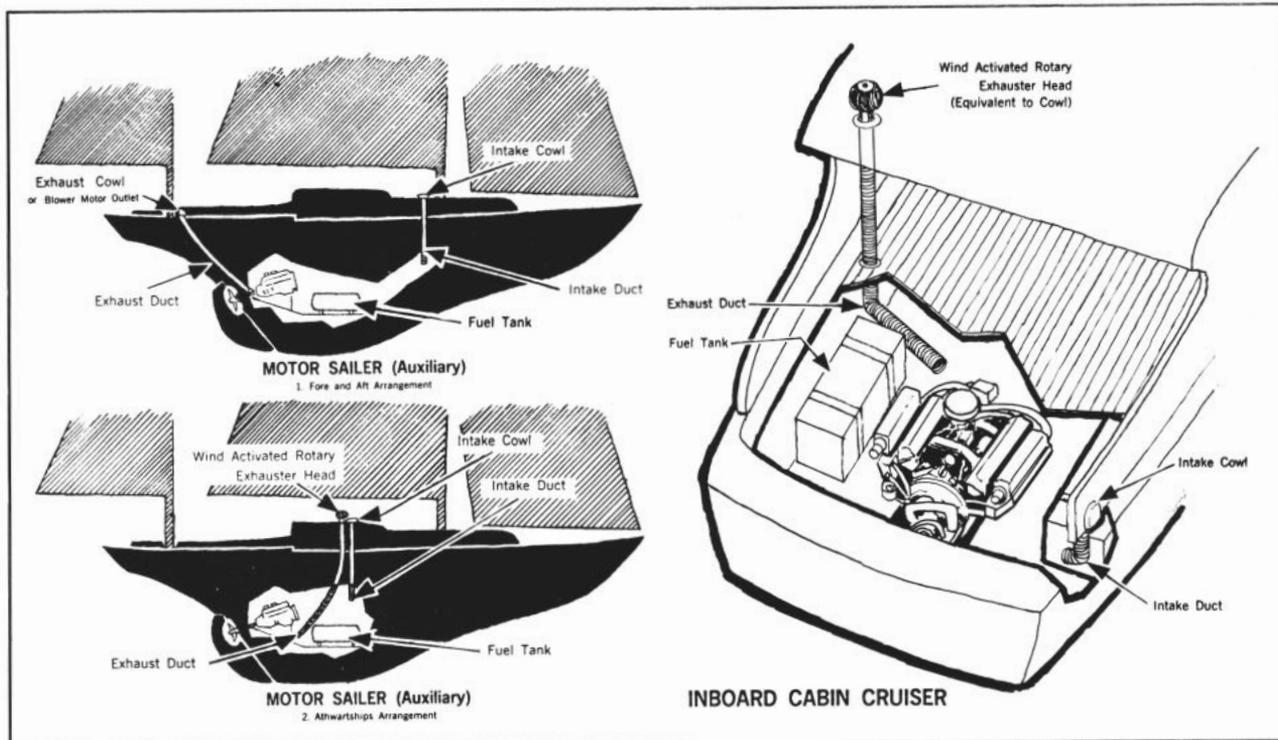
If you should happen to lose one of your boaters over the side, there are certain recommended procedures which you should know. First, swing the stern of the boat away from the man, thus decreasing the danger of propeller injury.



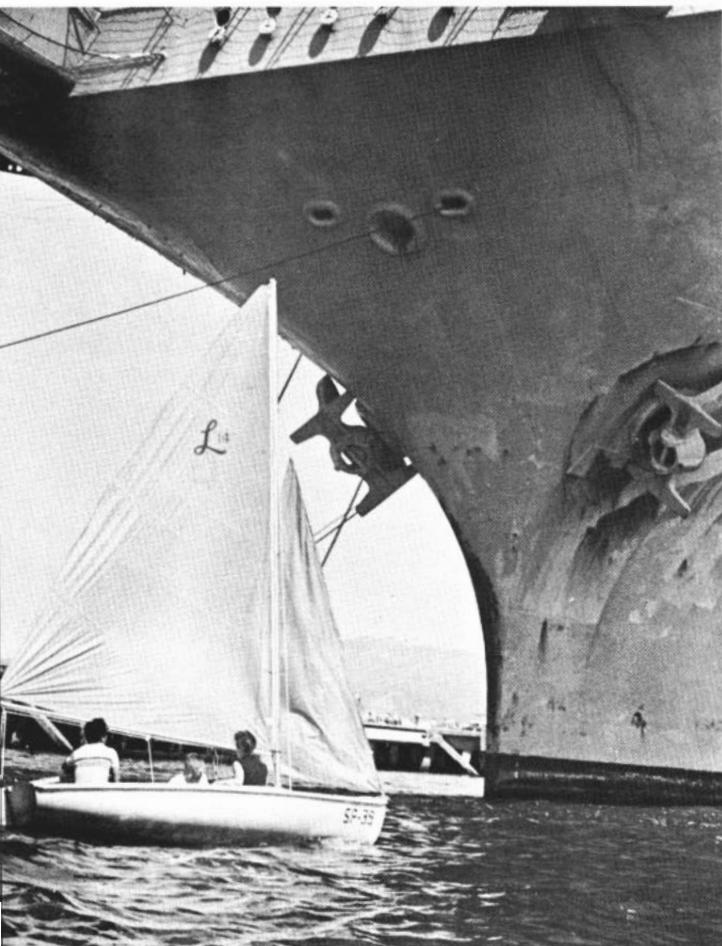
Throw a lifesaving device to him as soon as possible, even if he can swim. Try not to hit him. Normally, a life ring, if handy, is the best lifesaving device to use for this purpose because it can be thrown farther and is easier for the man in the water to use.

Keep the man in view. If you have another person in the boat with you have him act as lookout. If it is dark, direct the best possible light on the man in the water until rescue is accomplished.





THE ILLUSTRATIONS on these two pages show several arrangements which provide safe and efficient removal of gases and vapors from fuel and engine compartments.



You should normally maneuver to approach the man from downwind or into the sea. The particular maneuver that you use in approaching a man in the water depends upon common sense and good judgment based upon existing conditions, such as the temperature of the water, the sea conditions, the physical condition and ability of the man in the water, whether or not you are alone in boat, and boat maneuvering room.

If you have capable assistance in the boat with you, it might be advisable to have your assistant put on a life preserver with a line attached to the boat and get into the water to assist the person who fell overboard.

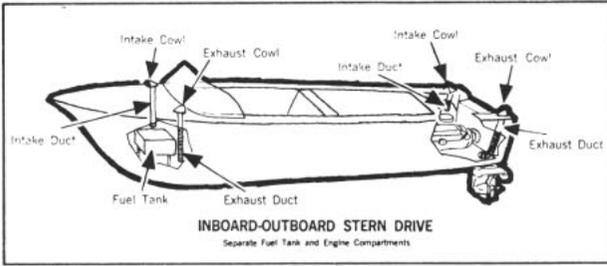
It is often difficult to climb into a boat from the water, and if a man is hurt or cold he may not be capable of pulling himself in without assistance. In small boats the weight of a man suspended from the side might be enough to tip the boat and cause it to take in water. Take him aboard at the stern if possible.

Fire on Board

As a Navyman, you know well that fire on the water can be a terrifying experience. If your boat is burning, you are faced with nowhere to go except in the water.

Keep in mind that most fires are preventable. A man who keeps a boat in shipshape condition, which includes clean bilges and proper stowage of gear, may never be faced with the emergency problem of fighting a fire. This requires constant vigilance. Whenever you notice a condition which might contribute to a fire, correct it at once.

Despite a boatman's best efforts, fires are always a possibility. Be foresighted in this regard. Shipshape conditions include proper stowage and maintenance of firefighting gear. Having this equipment handy and in good condition is the first step in successfully combating fire. The firefighting gear might be limited to



one fire extinguisher and a bailer; however, their availability and proper operating condition could mean the difference between prompt extinguishment and disaster.

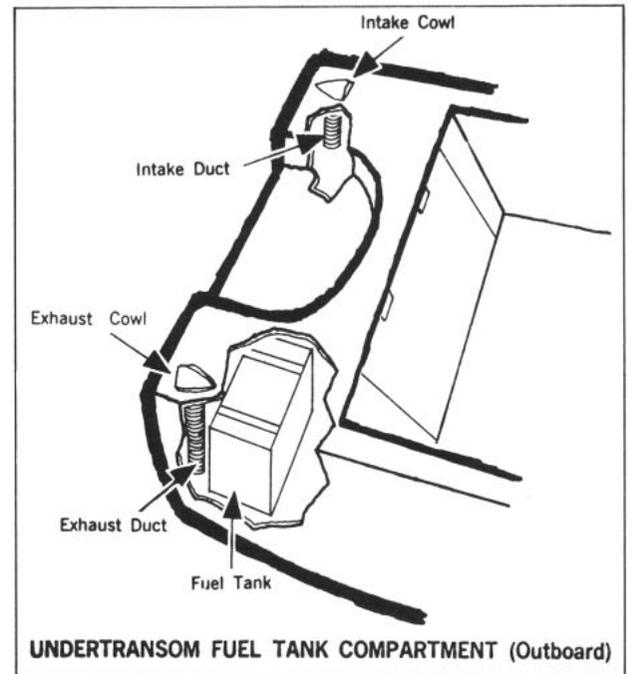
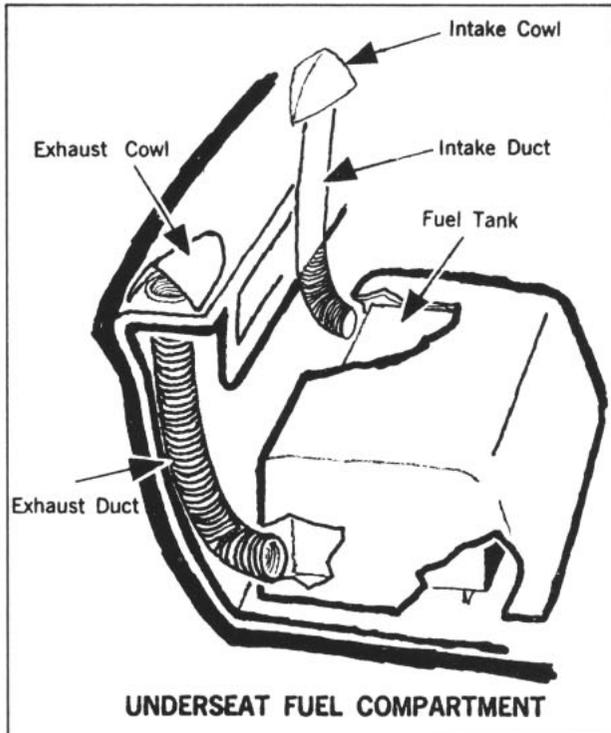
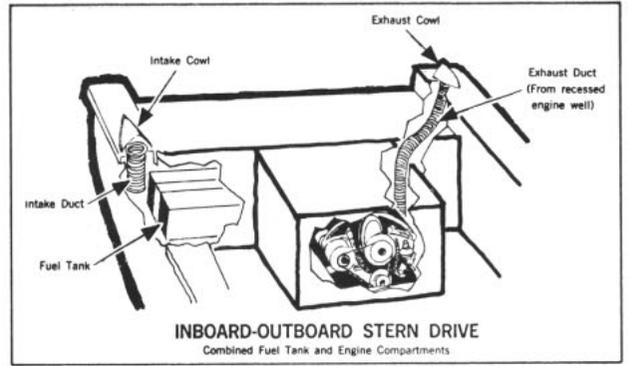
If some sort of disaster should strike while you are out in a boat, it may be necessary for you to abandon ship. Keep in mind that many ships and boats involved in casualties have continued to float for long periods of time. Don't leave the area. Generally a damaged boat can be sighted more readily than a person and it may help to keep you afloat.

Keep your head and restrain your initial impulse to swim ashore. Distance over water is deceptive. Usually the shore is a lot farther away than it looks.

Before going over the side, don your life preserver and give distress signals. Don't waste signaling devices where small likelihood of assistance exists. Wait until you see someone or something.

If you do not wear your life preserver at all times while in your boat, keep it handy, preferably loose, so that it will float free. Many emergencies occur suddenly, and a life preserver securely stowed in an inaccessible location may be of no assistance.

For more detailed information on the various aspects of boating, send for the *Official U. S. Coast Guard Recreational Boating Guide*, available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402, for \$.45.



TAFFRAIL TALK

DEXTER, the last horse in the Navy (ALL HANDS, February 1967, page 35), died this summer and was buried with full military honors in the park that bears his name at the Naval Home in Philadelphia.

Dexter had given 34 years of service to his country, 11 with the Army and 23 with the Navy. As a young colt, Dexter began his military career in the United States Army with the Artillery Field Service, pulling the caissons with a field artillery unit at Front Royal, Va.

Eleven years later, in 1945, the Naval Home in Philadelphia needed a horse to pull a utility wagon, and Dexter was transferred to fill the billet. Since his retirement several years ago, his only official duty was to serve as the Home's mascot.

According to a report from 4th ND headquarters at Naval Base Philadelphia, 400 persons attended Dexter's burial.

The old salts, the retired Navymen who live at the Naval Home, stood at attention while "Taps" was played. For them life will not be the same without the meanderings of their beloved and respected shipmate.

★ ★ ★

The Pacific is a big ocean. But not all that big.

Awhile back, the weathermen aboard uss *Bennington* (CVS 20) attached a small radio transmitter to a weather balloon, took it out to the flight deck, released it, and went back inside to track it.

They tracked the balloon to 47,700 feet, after which the signal faded, presumably indicating the balloon had burst and the transmitter had fallen into the sea.

Four and one-half hours after they had released the balloon, the *Benn's* weatherman received a call from flight deck control. Their transmitter had landed on the flight deck, and would they kindly come get it?

★ ★ ★

Seems the weapons magazines at Naval Air Station, Atsugi, Japan, were choked with weeds and tall grass. Since the nature of weapons magazines makes normal maintenance procedures impractical, another solution had to be found.

The Public Works Department's answer to the problem was to put 10 conservation monitors, otherwise known as hungry white goats, to work.

The four-footed lawn mowers, purchased in the nearby Japanese community of Ayase Town, soon had things under control. They now have permanent jobs at NAS Atsugi, fringe benefits of which include their own living quarters.

A leading chief has been appointed for the goat division. Part of the chief's job, the press release tells us, is "to insure that the goats get proper on-the-job training." We're betting that this will get the chief's goat.

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 keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

ALL HANDS The Bureau of Naval Personnel Career Publication, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. The issuance of this publication was approved by the Secretary of the Navy on 27 June 1961. 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. DISTRIBUTION: By Section B-3203 of the Bureau of Naval Personnel Manual, the Bureau directs that appropriate steps be taken to insure that all hands have quick and convenient access to this magazine, and indicates that distribution should be effected on the basis of one copy for each 10 officers and enlisted personnel to accomplish the purpose of the magazine.

The Bureau invites requests for additional copies as necessary to comply with the basic directives. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U.S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

PERSONAL COPIES: This magazine is for sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. The rate for ALL HANDS is 25 cents per copy; subscription price \$2.50 a year, domestic (including FPO and APO address for overseas mail); \$3.50 foreign. Remittances should be made to the Superintendent of Documents. Subscriptions are accepted for one, two or three years.

• AT RIGHT: AN ASSORTMENT of electronic gear on the mast of USS *Kitty Hawk* (CVA 63) presents a study in black and white against the sky. *Kitty Hawk*, an attack aircraft carrier, is serving with the Seventh Fleet. 





JOB - WISE
TRAVEL - WISE
CAREER - WISE
TRAINING - WISE
EDUCATION - WISE

**THE
WORLD-WISE
NAVYMAN**