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**FRONT COVER:** Submarine contacts are plotted on the dead reckoning tracer at the Naval Amphibious Base, Little Creek, Va., during training prior to the joint armed forces operation in the Caribbean. Pictured are W. H. Wantuck (left), RD3, USN; Lt. J. L. Wolf, USN, and an unidentified man.

**AT LEFT:** Navyman salute smartly as they step ashore from the destroyer uss Hymen (DD 732) for liberty at Cristobal, Canal Zone. See pp. 8-12.

**CREDITS:** All photos published in ALL HANDS are official Department of Defense photos unless otherwise designated: p. 23, top, San Diego Journal; back cover, Navy Recruiting Service.
WHAT is the first and only beachhead won on North American soil by an enemy of the United States during the past 100 years?

The chances are that your answer to this question—like those of nine out of 10 persons—will be wrong.

It was just eight years ago that the Japanese made a successful landing in the sub-Arctic area of the Aleutians, some months after Pearl Harbor.

Before this American soil was won back the United States had to learn a great deal about cold weather warfare.

World War II made the United States Arctic-conscious. Since the end of the war the defense establishment of this country has developed training programs aimed at instructing personnel on the art of survival in the polar regions, and in the Arctic and Antarctic.

As one segment of this overall training program, Seabees and CEC officers of the Naval Reserve are participating this year in Operation Snowshoe, a series of abbreviated courses under simulated Arctic conditions.

Operation Snowshoe is designed to acquaint Organized Reservists with the scope and problems of national defense in an area where nature can play the deciding role between victory and defeat.

A few miles from the continental divide, on the snow-blanketed slopes of the Rockies, at an altitude nearly two miles above sea level, Seabee Reservists donned snowshoes and skis, accompanied "weasels" on cross-country treks, established overnight bivouac areas in subzero temperatures, and learned how to keep themselves warm in snow caves.

A total of 650 enlisted men and officers of the "part-time Navy's" can do component, coming from points as widely separated as Chicago, New Orleans, Southern California and the Pacific Northwest, assembled together to take part in the Organized Reserve Arctic Training maneuvers under the sponsorship and logistic support of the Fifth Army.

Provided with cadremen instructors from the 14th Regimental Combat Team, the Reservists took their annual training instruction during January, February and March, at the Army's Camp Carson and Camp Hale in Colorado.

As a substitute Arctic region,
Camp Hale is ideally situated in a valley high up in the Rockies, where the snow reaches a depth of four feet, and the temperature a corresponding depth of 40 degrees below zero.

In this area are some of the highest mountain peaks in the United States, including Mt. Elbert, the second highest, and Mt. Harvard, ranked fifth.

This year the Seabees and officers of the Civil Engineer Corps Reserve had a comparatively mild time, with the temperature hitting a mere 20 degrees below zero at Camp Hale, and snow barely over two feet deep. Some Reservists bound for Operation Snowshoe were held up for several days, being snowbound at Donner’s Pass.

Designed as a course in military activities under conditions of snow, wind and sub-freezing temperatures, the instruction began at Camp Carson, at the mid-altitude point of 5,000 feet.

Many of the Naval Reserve trainees had their first acquaintance with skis on a straw training ground devised by the Army instructors.

Even when Camp Carson has insufficient snow, instruction continues with “dry skiing” on straw. For the beginner this has certain advantages, in that ski instruction can be carried on in slow motion.

After a brief indoctrination on snowshoes and skis, which included basic pointers on “how to fall” and lecture sessions on the general use of Arctic equipment, the Seabees and CEC Reservists moved up to the actual winter training area at Camp Hale.

Transferred to the “Arctic” in a matter of hours, the Reservists found themselves learning how to survive as Rocky Mountain Eskimos.

From the first day, when they made an extended “bear paw snowshoe” march in deep snow, to the last day when they awoke in lean-to outdoor shelters in a freezing bivouac area, the Seabees crammed their heads full of the survival training gathered over several decades by explorers, hunters, scientists and inhabitants of the polar regions.

Scientific research in the polar regions is one of the specialties of the Navy’s Civil Engineer Corps. It was a member of the CEC who first reached the North Pole. After many attempts, by himself and other men of numerous nationalities, Rear Ad-

miral Robert E. Peary, CEC, USN, achieved the goal on 6 April 1909 which had eluded men for centuries.

The CEC Reservists and Seabees at Operation Snowshoe were kept busy learning the intricacies of the one-step, two-step, side-step, the herringbone, pole riding, plow turns and straight downhill running on varied terrain.

They became acquainted with such new terms as ski joring, bush-whacking, mohair climbers and toonigans.

They learned to load and lash the sled tobogan, and the packboard. They studied mountain weather and snow characteristics, including avalanches. Also: first aid in snow regions, emergency evacuations, how to improvise sleds, and mountain cooking in the extreme cold.

What the well-dressed Arctic man

LEAN-TO makes an excellent shelter in wooded areas. Heat of the fire is reflected from the sloping wall and keeps occupants reasonably warm.

CADREMEN, Seabees and CEC officer Reservists head for Camp Hale for intensive training in the specialized techniques of cold weather warfare.
CROSS-COUNTRY skiing at high altitudes and low temperatures is no joke. For men preparing against arctic aggression it is an essential skill. will wear — a subject of study by military fashion designers for several years — was illustrated in a model show put on by the 650 Reservists and their Army cadremen.

From the mohair climbers on the bottom of his skis to the goggles he wears in order to keep his eyes from getting sunburned, the military man living in the Arctic exercises as great care in correct dressing as a young debutante on her first date. (The mohair climbers, by the way, are used on skis because their bristles provide a non-skid grip on the snow for uphill travel.)

Here’s a list of the special clothing that goes on the well-dressed Arctic man, as modeled by the Seabee trainees: “long handles” (special heavy winter underwear), field trousers, pile jackets, parkas, nine-pound mountain boots, trigger-finger mittens, plus the ever-important goggles.

His equipment also includes mountain skis, a ruck sack, sleeping bag, an axe and holder, snow shoes, a duffle bag, canteen, mess kit, and rations.

All told, when carrying all the clothes and equipment issued to him, he tips the scales at about 100 pounds more than his normal weight. Fortunately he doesn’t have to carry all of this under normal circumstances.

But even with the scientific care that goes into cold weather dress design, providing materials of the lightest weight with the greatest amount of protection, his clothes still make him a good 30 pounds heavier.

At Camp Hale the Seabee Reservists lived in winterized tents, but on the march they tested several different types of living quarters, including the lean-to, the snow cave and the wanigan.

The five-man lean-to may be used in a wooded area. It consists of a sloping ceiling of branches reaching from the ground to a height of approximately five feet. A fire may be built in front of the lean-to, with the heat reflected inside by a log wall built behind the fire.

A snow cave is merely a hole dug into the snow. The Reservists learned to construct one quickly, using their snow shoes as shovels, and constructing breakers to protect them from the wind.

The wanigan is a type of shelter first used in the Arctic after the end of World War II. It was included in the various types of equipment tested by the Navy’s Bureau of Yards and Docks during Operation Snowshoe.

An oblong shelter, 10 by 24 feet, a “knockdown” wanigan can be moved on sleds or runners. As a permanent structure it can be used as an office, shop, mess hall or sleeping quarters. Made of wood and tarpaulin, it will accommodate eight men.

The Reserve training course also included observation and use of other special equipment furnished by Bu-Docks for operation under Arctic conditions, such as snow compaction devices and snow melters for making drinking water.

While an abbreviated course lasting two weeks can serve to furnish only the beginnings of an indoctrination in Arctic living, the Reservists were able to pack in a great deal of information as a result of their “on the job” training.

Here, for example, are a few of the “do’s and don’ts” to follow if you want to grow old and happy while making the North Pole your headquarters.

- Don’t grow a beard. It’s a liability. Moisture from your breath, collecting on the beard will convert it into a veritable ice mask, making thawing of frostbite on the face difficult.
- Do shave before going to bed, rather than in the morning, to avoid unnecessary chapping.
- Don’t overdress. Too many
clothes cause excessive perspiration which condenses to form hoarfrost within the layers of your clothing. This will melt in the warmth of a camp fire, then freeze, increasing danger of frostbite.

- Do wear clothing that fits loosely, but it must be air tight. The best type of cold weather clothing is soft spongy material that holds a considerable amount of air, acting as an insulator and retarding the transfer of heat from the body.

- Don’t let your hands or face come in contact with cold metal. The skin will freeze instantly to the metal. If you do find yourself in this predicament, don’t pull away, or you’ll part with your skin. The contact point should be warmed by the best available means. Use urine, if necessary.

- Do change your socks daily and keep your clothes clean. In the Arctic not only is cleanliness next to godliness, but it may also mean the difference between life and death. Dirt and oil from the body fills up the tiny air cells in underwear and clothing, thus reducing their insulating quality.

- Do make faces and grimace from time to time, to test whether you are becoming a victim of frostbite. Frostbite does not cause pain at first, but you can be forewarned if the skin becomes stiff and numb.

- Don’t rub frostbite. This breaks skin tissue causing an open wound, and in subzero temperatures wounds heal very slowly. Never apply snow or ice, which only increase the freezing. At the same time don’t use hot water or excessive heat, which will cause too rapid thawing, increasing pain and damaging skin tissues. Best bet is to thaw the frozen parts with warm hands, or place them next to warm skin.

- Don’t sleep with your feet away from the fire. Sleep with your head farthest from the heat. If your head gets cold it will wake you up. But your feet don’t have sense enough to know when they are freezing.

With pointers like this, the Reserve trainees discovered that life in cold weather areas can be safe, healthy and liveable. Organization and group discipline, they learned, pays extra dividends in Arctic operations.

The first class of Reservists to participate in Operation Snowshoe had an opportunity to put their group organization and discipline to a stringent test. The Seabees came through with flying colors, winning not only the commendation of the Fifth Army, but from local newspapers and the Chamber of Commerce at nearby Colorado Springs. However, it was a violent interruption in the form of a forest fire, not an “Arctic” disaster, which won them such high praise.

During the first days of training at Camp Carson, a roaring fire, whipped on by a 90-mile-an-hour wind, over-ran a large section of the country. The heavy wind currents and the constant change in their directions made it difficult to control the spreading fire, which threatened not only the Army facilities but nearby resorts.

The Army and Navy personnel worked all day and night to control the fire, which ultimately cost the lives of eight soldiers. Using bulldozers, the Seabee Reservists combined their efforts with Army personnel and cut through roads when bridges were burned out, battled the blaze, established patrols to search for missing persons, and kept an all night watch to keep the fire from recurring.

Although most of the CEC officers and Reserve Seabees came from different sections of the country, and barely had time to begin their training, they fought the fire as organized companies in an excellent manner. With the fire under control and the commendations part of their record, they went on to chalk up a high mark in fighting cold weather conditions with the same kind of group spirit.

There were no casualties among the Seabees and CEC Reservists on their first simulated Arctic training operations, except for a few cases of nose burn from the Rocky Mountain sun, and a couple of cases of heat exhaustion among the Colorado firefighters!
CAREER TRAINING — Line officers are being impressed with the value toward their careers of going through the Armed Forces Information School, Carlisle, Pa.

This course in applied public relations is meant not only for full-time Public Information officers and officers who will be assigned collateral duty in PubInfo billets aboard ship or ashore but also for officers not returning to PIO billets. Completion of the Carlisle course, it is emphasized, does not mean assignment to PubInfo billets.

Several openings for officers at the school remain to be filled for the class beginning 3 May 1950.

For an outline of the operation of the Carlisle school, see ALL HANDS, January 1950, p. 20-22. For detailed information for submitting applications, see BuPers Circ. Ltr. 120-49 (NDB, 31 July 1949).

DESIGNATION CHANGE — "Task Fleet," a postwar term that has become familiar throughout the Navy, is no longer a correct designation. In accordance with a Chief of Naval Operations directive, the word "Task," is to be omitted in referring to the various fleets. Instead of "First Task Fleet," the correct term now is "First Fleet." This pertains as well to the other fleets — Second Fleet, Sixth Fleet and Seventh Fleet.

The word "Task" was dropped because it was considered to be of no useful purpose.

SCHOOL MOVES — The U. S. Naval School, Naval Justice is in the process of being moved from Port Hueneme, Calif., to Newport, R. I. The last class finished at Port Hueneme February 17. The first class begins at the East Coast location sometime in May. The average class at the school runs to 100 officers and enlisted personnel and lasts seven weeks.

Established in 1946, the school of justice provides intensive instruction in the fundamental principles of naval disciplinary and court-martial systems, and the practical application of these principles to the specific problems arising within every command.

Officers who complete the justice course are qualified to prepare a case for trial and to serve on a court-martial, as well as to administer everyday naval justice.

Enlisted graduates of the school are qualified to prepare papers and documents used in courts-martial, to serve as instructors and as court reporters.

BLUE JACKETS' BLOOD PAYS FOR BIG PARTY FOR ORPHANS

Forty bluejackets enjoyed that warm feeling that goes with doing a generous deed when they entertained 24 orphans at an afternoon-long party at the Navy Supply Corps School, Bayonne, N. J.

The whole thing started several months ago. Men at the Laundrymen's School at Bayonne spotted an appeal for blood donors in a local newspaper. One of the hospitals in the area urgently needed them. The idea caught on with the men who voted unanimously to donate blood.

Paid at the rate of five dollars a pint, the men further decided to pool their profits in a contribution to some charity. But someone suggested that a personal donation was desirable, and from that came the notion of a party for the boys and girls of St. Michael's Orphanage.

The men, on their own time, organized and detailed work parties to clear the decks for the celebration. On the specified day the children, after a hearty welcome aboard, were taken to a hall for an hour-long showing of movie cartoons. Next came a sightseeing tour of the Bayonne Naval Supply Depot and the ships of the Atlantic Reserve Fleet, the latter of particular interest to the junior grade boots.

Climax of the day's activities was of course the party itself, with games, prizes, gifts for all the children. Naturally there were candy and cake and gallons of ice cream.

Was everybody happy? Take a look at the picture of the "kids," in uniform and otherwise, who participated.
Navy Strength fell off during January to a total of 401,900, a decrease of 13,700 from the previous month's total of 415,600.

During January, new recruits totaled 1,328, immediate reenlistments 4,096 and other reenlistments 1,069.

Marine Corps strength at the end of January stood at 80,100, down 1,100 from the previous month’s total of 81,200.

The Marine Corps accepted 1,117 new recruits while an estimated 920 marines reenlisted during the month.

- **CORRESPONDENCE COURSES**
  - Enrollment in Navy correspondence courses increased from 24,713 on 1 Oct to 38,310 on 31 Dec 1949, according to figures released by the Chief of Naval Personnel for the second quarter of fiscal 1950.
  - Largest administering activity was the Naval Correspondence Course Center, Brooklyn, N.Y., where 33,721 officers and men were enrolled at the end of the period. Activity showing greatest increase on percentage basis was the Bureau of Medicine and Surgery, Washington, whose enrollment rose from 279 to 913 in three months.
  - A breakdown by services shows USNR officers far in the lead with 26,313 enrolled at the end of the quarter. Seven hundred enlisted men swelled the Reserve total. Regular Navy officers and enlisted totalled 10,409, with Coast Guard Regulars and Reserves contributing 618, and Marines 193. A total of 51 Army and Air Force personnel also participated in the program.

- **CARGO HANDLING**
  - Two classes, each class six months in length, will convene this year at the Naval School, Cargo Handling, Naval Supply Center, Oakland, Calif.; the dates are 17 Apr 1950 and 9 Oct 1950.
  - Although the school is organized primarily for Supply Corps officers, a limited number of line and other staff corps officers whose duties involve cargo handling will be admitted.
  - Ensigns through lieutenant commanders may apply. Applications for the October class should be submitted via official channels to reach the Chief of Naval Personnel (Attn: Pers 422) by 15 Aug 1950.

- **SCHOLARSHIP**
  - A four-year, full-tuition scholarship to one of the top-notch engineering colleges in the nation has been offered to the son of an officer, warrant officer, petty officer or non-commissioned officer of the Navy or Marine Corps.
  - The student selected—whose Navy or Marine father may be on active duty, retired or deceased—will be awarded free tuition (up to $600 a year) at Rensselaer Polytechnic Institute, Troy, N.Y.
  - Application forms may be secured from the Dependents Welfare Branch, Bureau of Naval Personnel, Washington 25, D.C. To be considered, the application must be completed and returned to the Bureau on or before 20 June 1950.

- **SHIPPING AUTOS**
  - Naval personnel upon permanent change of station who ship their automobiles overseas to their new duty station do not have to pay a $10 service charge.
  - The lifting of this service fee is the result of new BuSandA regulations regarding the shipment of autos belonging to service personnel.
  - A privately owned auto may be shipped overseas in a government ship and at Navy expense if shipping space is available and if the owner is a third class petty officer or above and is being assigned to a permanent change of duty overseas.
  - Formerly a charge of $10 was made for handling, loading and stowing private cars. Although personnel no longer must pay the $10, however, they must pay any charges for crating their car for safe shipment and for getting their car to dockside to be loaded.
  - Automobiles are not considered “household effects.” It was erroneously stated that they were in an answer to a Letter to the Editor of All Hands (February 1950, p. 27).
Panama’s Fascinating Liberty Ports

SOONER or later in the life of almost every sailor who stays in the Navy very long, there comes a special time of high adventure — his first trip through the Panama Canal. For the old-timer, too, there is always something new to be seen at the “Crossroads of the World.”

The outer doorway to the Panama Canal, if one approaches from the Atlantic, is the Cristobal breakwater. Let’s pretend that it’s a forenoon in the dry season, and your ship is arriving in Panama on a cruise to the west coast. . . .

If you will look off to port now before your ship passes the end of the peninsula on which Cristobal and Colon are built, you’ll see Coco Solo. The Navy has an air station there, as you may have heard. The Navy used to have a submarine base there, too, but doesn’t any more. The body of water bordering Coco Solo is called Manzanillo Bay, incidentally. Near Coco Solo — so near that you won’t be able to tell where one ends and the other begins — is an Army air base called France Field.

If you make an about face and take a sight over the starboard quarter of your ship, you should be able to spot the red roofs of Fort Sherman. That’s another Army post, located on the “up-the-coast” side of Limon Bay.

But if you’re like most people — sailors and tourists alike — your eyes will by now be directed on the peninsula called Manzanillo Island. This is the teeming blob of land on which are squeezed Old Cristobal, New Cristobal, and Colon. After scanning the jumble of tile roofs, tin roofs, palm trees and sun-splashed walls, you will no doubt pick out some details of the cities. First-off, you may sight Washington Hotel right out on the nearest corner of the “island.” Washington Hotel is one of Colon’s outstanding buildings. They have an outdoor salt-water swimming pool on the hotel’s grounds that’s worth a visit any hot afternoon.

Before you get half through looking, your ship will probably be tying up to the pier, and the dock sheds will have your view closed in a little. Your ship might have anchored out in the bay instead, or it might have cruised on into the canal as many do. But you are glad that you’ll get a better look at Cristobal-Colon before moving on. And even now, although your view is restricted, you note strange new sights and sounds. A frigate bird hangs motionless in mid-air where the trade wind whisks up over the dock shed. On the pier a Jamaican negro shouts to a friend in odd-sounding English.

Walking up from the pier as you go ashore, you will be on Terminal Street, which extends up the spit of land to which the piers are attached. You will go past the fine big buildings of the steamship lines and the post office and the commissary in Cristobal. Before you know it you’ll be entering the southern end of Front Street.

Front Street is the place for those who love curios and souvenirs and enjoy shopping for them. For several blocks one shop adjoins another with hardly a break, each with an oriental merchant in the doorway pleading for customers. Extended second stories offer shade from the sun, and the mosaic sidewalk is strange and seamy underfoot.

Although merchandise is tagged for price in most cases and placards on the walls proclaim “One Price,” a little haggling is expected — and is usually profitable. In fact the original price quoted by the salesman may be less than that shown on the tag.

There are silks to be had, fine perfumes, carvings of ivory, ebony and jade. You will see heavily carved tables and chests of camphor-wood and teak. Incense burners are for
sale, constructed of oriental bronze. Wallets, handbags and suitcases of alligator skin can be purchased, as well as pictures made of butterfly wings. You may come away with a bracelet of beaten silver or a ring of marvelous design — or with nothing at all. A bazaar on Front Street in Colon is well worth visiting, whether you buy anything or not.

Retrace your steps to where you first entered Front Street, and you will be within a block or so of the YMCA. There you may want to have a coke and rest your feet while writing a couple of postcards. The lady at the desk will tell you about points of interest and let you know about any special tours or activities scheduled while your ship is in.

Across the street from the “Y” and on down the line are numerous cantinas. Older members of your crowd will bemoan the disappearance of “live bands” and the advent of juke boxes in many of these establishments. Still, to absorb a torrent of Central American jive from a king-size nickelodian is an experience not to be missed. And the cerveza still flows as freely as ever. Some of the plusher cabarets do have real-life orchestras, along with a floor show. At certain of these places, someone will sit at your table if you wish, to help you learn Spanish. A word of warning: The refreshments these teachers require comes high — up to a buck for a very small glassful.

Many areas in Colon are “out of bounds” to service personnel, and it is well to find out where you can go legally — before going. Still the SPS will warn you if you wander into forbidden territory — in a friendly way, too, if you are cooperative.

If several of you go ashore together, you might find it a good stunt to chip in and rent a taxi for a couple of hours after you’ve seen Front Street and some of the area around the “Y.” Here, too, a bit of bargaining may save you money. For a glimpse of the countryside, get the driver to take you up to Gatun — or maybe out the highway as far as Puerto Pilon or Cativa.

Plenty of time on your hands? Take the 50-mile bus trip to Panama City and come back on the train. Sights on this journey will range from grass houses and banana groves near Gatun Lake to California-style residential sections on the outskirts of Panama City. Returning on the train, you will cross wide stretches of water near the edge of Gatun Lake. Fare on the bus, one way, is 50 cents or 85 cents, depending upon which of the two bus lines you choose. Railway fare is $1.85.

By way of Gatun, in a taxi, you can go to the ruins of Fort San Lorenzo at the mouth of the Chagres River. At several places on this trip — even before you get to Gatun — you will see portions of the “Old French Canal.” Work financed by France went on there throughout almost all the 1880s — 20 years before the present canal was constructed.

Despite a terrific death rate from tropical illnesses, work continued until, in 1888, almost a third of necessary digging had been completed. Funds ran out that year, and nothing more was done until 1904, when the
American work commenced. The present-day canal, finished in 1914, crosses the old French diggings between Cristobal and Gatun.

At Fort San Lorenzo you can wander among ancient cannon, barricades and dungeons which seem to swarm with ghosts of pirates and long-dead warriors.

Going back, if you time it right, you might want to take the ferry across Limon Bay instead of going the long way around.

Your ship backs away from the pier and turns to head up the channel to Gatun locks. Foolish and rare is the man who will shut himself below decks with a comic book now. Soon the vessel will be gliding between green banks. It will stop shortly thereafter to be lifted in three great steps to fresh-water Gatun Lake 85 feet above sea level. Then it will steam between emerald islands, and if you look far off to your left past the islands you will see the skeletons of old trees standing in the lake. These were thriving jungle giants before the canal was built and before the rising water crept up their trunks to kill them.

Past Barro Colorado Island, which the U. S. has set aside for study of tropical plants and animals; through Gamboa Reach, and you enter Gaillard Cut. This is where the canal pierces the continental divide. All is well in Gaillard Cut nowadays, but for many years landslides always threatened and frequently blocked the canal there. Into Pedro Miguel lock, and you are lowered some 30 feet into Miraflores Lake. It's only a mile across this lake, and then you pass into Miraflores Locks and are dropped the final two stages to sea level.

Now, though you have traveled from the Atlantic to the Pacific, you're more than 20 miles further to the eastward than you were when you started. And tonight, if you notice, you will see the sun going down behind the green hills of Panama—not into the Pacific ocean. It's all because of the way the isthmus winds around.

Balboa, at the Pacific end of the canal, like Cristobal at the Atlantic end, is a U. S. Government community. Neither of these cities has any private enterprise. Almost everything is Government owned and operated. In Balboa, not far from the piers, you will find a Canal Zone clubhouse. Near it is the Army-Navy YMCA, and on out to the right of that, the headquarters of the 15th Naval District. At 15th ND headquarters there's a good ship's service, and the Balboa "Y" is a livewire establishment.

It's quite a walk from Balboa up to Central Avenue in Panama City. If you would rather ride, you can catch a bus in front of the clubhouse or near the "Y" or at other places in Balboa.

A Panamanian bus—particularly one of the small ones called chitas—is a bit of local color in itself. Often being the driver's own property and only place of business, it receives all his Latin love of drama and ornamentation. The windshield may be bordered inside by crochet-work edged in scores of tassels. Above it is often a miniature religious shrine equipped with a tiny red light that burns when-
ever the motor is running. A radio under the dash will pour out a torrent of local music while the horn of the flashing vehicle adds to the din at every intersection. Keep hands and elbows inside the open windows.

Panama—called Panama City by us foreigners—is larger than Colon. The place crowds the quarter million mark in population, which is a lot of people for the amount of ground involved. Its curio shops are more scattered than those of Colon, and prices in general are a trifle higher. In Panama City it is the city itself you should see—that and Old Panama, some miles to the northeastward "down the coast."

A caramata is the thing for getting around Panama City on a sightseeing tour, if you can find one. These rubber-tired buggies drawn by a small clip-clopping horse are becoming scarce, and you may have to take a taxi instead. Get the driver to proceed slowly, or you will miss much in the teeming streets. Ask him to drive to the upper end of Central Avenue, past the cathedral and Central Park to Las Bovedas Promenade. Walk the length of the bay-side sea wall, and you will be at French Plaza. There, stone tablets tell in Spanish of early attempts to build the canal.

Not far from Las Bovedas is the Panama National Tourist Commission. There, information and literature can be obtained concerning places to be visited. Next door is the National Theater, and across the street from that, LaSalle College. Two blocks from the college, you will pass the presidential palace. There, if you look quickly and carefully, you'll see snow-white egrets standing beside the fountain in the entrance patio. The egret, by the way, is the national bird of Panama.

Back across Central Avenue is San Jose Church—the famous Church of the Golden Altar. Enter quietly and respectfully, for there will be devout people at prayer. The huge altar which fills the end of the church is said to be of solid gold and to be worth millions of dollars. It was located in Old Panama when that was the capitol city. In 1671, when the pirate Henry Morgan was approaching to sack the city, a quick-witted monk took thought of the precious altar. He had it covered completely with a coat of paint, and the pirates thought it was nothing but a fancy carving of wood. Consequently, they left it unharmed. (Or so the story goes.)

Have your driver take you out along the bay-front to the statue of Balboa. Nearby is the American embassy and a large hospital, and up the slope before you stretches a fine residential section. A drive of three or four miles farther will take you to the ruins of Old Panama. Perhaps you can find the dungeon which is said to have been reserved for political prisoners.

The story is told that at low tide the cell was much like any other dripping-damp place of confinement. As the tide rose on the nearby beach, it rose likewise within the cell until at last the unfortunate occupant was liquidated—unless he changed his political views meanwhile. Before returning to the city, it
BARGAINING for souvenirs in the exotic curio shops in Colon, almost invariably results in a price reduction. These bazaars are always worth visiting. Overhead ... family life swarming out onto the balconies and onto the sidewalks, and visible through the open top halves of front doors ... the honk of auto horns and now and then the clopping of horses’ hooves. Everywhere is the rippling sound of Spanish and the babble of a dozen other languages. Wild music cries out from the open doorways of cantinas and is answered in kind by that of radios in chichas.

At the major intersections, small khaki-clad policemen direct traffic with abrupt mechanical motions of their arms. Shoeshine boys plead for the privilege of polishing your footwear, and suave oriental merchants urge you into curio stores.

At sundown, people flock to Central Plaza for sociability. On Sunday nights, demure, decorous upper-class girls promenade in pairs and groups at Las Bovedas. Always, Ancon Hill stands up high and angular to the westward — brown or green in the daytime, depending upon the season; black, topped by red lights at night. Out in the Bay of Panama stands the shadowy mass of Taboga Island with a pretty village at the water’s edge. You can go out there in a Canal Zone launch for a dollar, and have one of the best swims of your life in the warm clear water.

If you are in Panama in the rainy season — May to November, inclusive — the weather may cut down your activities somewhat. Still, tropically inclined people learn to take it all in stride. Usually, the showers aren’t too long in duration, and sometimes many hours go by between downpours. At such times it is well to stay close to shelter unless you’re dressed for rain. A hard shower can commence with little warning and can soak you to the skin in a jiffy.

You may have opportunities to see many things not mentioned here. For instance, if you’re in Panama during the last four days before Ash Wednesday you’ll be in on one of the most colorful periods of pageantry to be found anywhere. That period is the annual carnival season. At any time, if you have transportation, you can range further afield to points of interest. A portion of the Pan-American Highway leading toward Costa Rica offers special possibilities in this respect.

A word of friendly admonition: One should remember that outside the Canal Zone he’s a visitor — admitted without any red tape whatsoever, but a visitor just the same. Many customs there are different from ours, and often strictly observed. We should regard these customs as interesting and colorful, but not amusing or in any way inferior to our own. Our deportment in our hosts’ home country should be like we would want theirs to be if they visited our own home towns.

Happy landings at the “Crossroads of the World!” It’s a fascinating place.

— H. O. Austin, JOC, USN.
Once again enlisted Waves are on duty in the kingdom of Kamehameha and the pineapple. A group of 72 enlisted Waves arrived recently in Hawaii to become the first enlisted women to be permanently assigned to the 14th Naval District since August 1946.

These photographs were taken as the contingent was preparing to depart from San Francisco on board the transport USS General J. C. Breckinridge (AP 176).

Clockwise from above: Waves wave to well-wishers on the dock who bid them bon voyage. Conducting Wave on tour of the ship, crew member explains operation of 40 mm. mount aft of Breckinridge's funnel. Attentive Wave is told of radio room procedures. Under quartermaster's watchful eye, Wave takes wheel of General J. C. Breckinridge.
LIKE Jack’s beanstalk, the huge, transparent crystal that the pretty girl is holding in her hands grew from a tiny seed.

It grew and it grew — not in Jack’s backyard like the famous beanstalk — but in a large glass container set in the middle of a spic-and-span scientific laboratory in a Navy research building in Washington, D.C.

And pretty soon the crystal was full-grown — as you see it here in the picture. Now it is ready to be cut up into many little crystals. Each small crystal in turn will form a tiny but a very important part of a piece of Navy sonar equipment.

This particular crystal is an “ADP” crystal (ammonium dihydrogen phosphate). Aside from some earlier work on another crystal, it is the first one to be “grown” artificially by the Navy in a laboratory.

Although ordinary enough looking, the ADP crystal proved itself to be the most important crystal in World War II as far as the Navy was concerned. With it the Navy was able to develop in a hurry a new and better sonar, a sonar which was used to good effect to turn the tide against German U-boats in the Atlantic.

With the nation once again at peace, Navy scientists are continuing to pursue various leads in the vast new field of crystals that was opened up for them by the development of ADP. At the Naval Research Laboratory in Washington, D.C., they have turned out a veritable harvest of these strange-looking, many-colored, twinkling artificial crystals.

Many of the crystals that can be “grown” in the lab never have been discovered in nature. Being able to produce these unknown crystals in the lab has now opened up further bright vistas for future research — research that points to many improvements that may be brought about in the Navy of, say, 1970.

But the birth and growth of the ADP crystal is only the most dramatic example of the growth of artificial crystals. Here are a few of the other new home-grown crystals along with some uses to which they are put:

- Artificial quartz — used in radio receivers and transmitters and in radar, microphones and earphones to replace natural quartz.
- Scheelite — used in radiation detection equipment like the scintillation counter (ALL HANDS, March, 1950).
- Steel-hard, artificial rubies — used as bearings where a tiny but very hard surface is needed in precision instruments.
- Phosphorescent crystals — mixed into luminous paint to make it glow in the dark.
- Sapphire — needed to correct microscopes and cameras to transmit color.

All these and many more can now be grown in the
Navy's laboratory. This was not true several years ago.

Before the war, an important crystal like quartz was imported—big chunks of it from Brazil. Although natural quartz is still being imported, it could now be produced artificially in the laboratory should the nation's defense demand it.

Crystals are "grown" in the lab in a variety of ways. A crystal may be grown by mixing up the proper ingredients, putting these ingredients in a crucible, and baking the crucible in a red-hot electric furnace.

Crystals can also be grown by sifting the ingredients in powder form onto the top of a piece of metal thrust into the center of the flame. Crystals have even been grown from a cloud of concentrated vapor.

But the oldest and most reliable method for growing crystals is from a saturated solution. This is the method that was used to turn out the rush order of ADP crystals needed during the war.

Anyone who has taken a high school course in chemistry knows roughly how the saturated-solution method begins. Every high school chemist has grown a salt crystal merely by mixing up a solution of ordinary table salt and water in a shallow dish and allowing the mixture to evaporate and crystallize overnight.

In the Navy's lab they do the same thing—only better. A saturated solution of ADP is allowed to crystallize through evaporation. When the solution has solidified, the research men pick out of the dish the most perfectly formed of the crystals and use them as "seeds" to grow bigger and better crystals.

In the second part of the saturated-solution technique, several of these "seeds" are mounted on a spindle, the spindle is inserted in the super-saturated solution and the spindle is slowly rotated (see photograph). As the seeds slowly move through the solution, particles precipitate out of solution and adhere to the sides of the seed. In this way the seed gradually grows into a full-grown crystal. It often takes a month or more for a crystal to grow as much as six inches in width.

Scientists have also found that in order to grow the best crystals they must add a tiny bit of impurity to the solution. Then too, the rate of rotation of the spindle has a lot to do with the finished crystal.

**Collection of Combat Art Given to the Navy**

Two hundred and fifty-six paintings, drawings and sketches done by combat artists during World War II have been donated to the Navy Department.

Valued at half a million dollars, the works of art were turned over to the Navy by Abbott Laboratories, a pharmaceutical firm which sponsored the project in the last war.

These are the art items from which nearly 3,000 reproductions were mailed to naval activities free of charge by the Combat Art Section, Office of the Chief of Naval Operations, Navy Department, Washington, D. C. While the deadline for requests from ships is now past, naval shore activities may still request a selection of the reproductions to be mailed to them.

The collection is scheduled to go on public display at some time in the future.

Key sea battles, attacks on Jap ships and enemy-held Pacific islands, and various phases of air, sea and amphibious operations are depicted, and various branches of the naval service are represented.

**A LANGUAGE ALL THEIR OWN—Lawrence Beall Smith and others painted carrier life. Collection depicts every aspect of Navy’s war effort.**
They're Doctors to the Navy's Engines

The Captain's Gig was just backing down to stop alongside the forward gangway and pick up the skipper himself when the engine suddenly made a terrible clatter.

With an instinct born of long experience, the coxswain cut the motor almost instantly. The rattling clangor died away and for a moment all was silent. Then the voice of the O.D. could be heard calling away a substitute boat and giving instructions for hoisting the gig aboard.

Within an hour the gig's engineer entered into a serious conference with the ship's engineering officer and the leading chief motor machinist's mate. This was the third time that same engine had knocked out a main bearing within a month. All efforts to find the cause of the trouble and a cure for it had failed. The conference lapsed into silence.

At last the chief cleared his throat. "Here's one thing we could do," he said. "You've heard of the Naval Engineering Experiment Station, at Annapolis, . . . We could send them this bearing when we get it out. - And we've still got the other two that burned out. We could send 'em those, too. . . . That way, we should soon know what our trouble is, if anybody can tell us."

So it was that a stout, heavy wooden box arrived one day at the U.S. Naval Engineering Experiment Station, across the Severn River from the Naval Academy, at Annapolis, Md. Because of the nature of its contents, the box was taken to the Internal Combustion Engine Laboratory. While it is being opened and while the three burned-out bearings are being examined and discussed in a preliminary way, let's take a look around this laboratory.

The Internal Combustion Engine Laboratory is one of the six modern scientific laboratories at the Navy's Engineering Experiment Station. As we turn our backs on the three beat-up bearings from the captain's gig, we find ourselves walking down a rubber-matted aisle between two rows of diesel engines.

Although the engines are painted a uniform shade of green, we soon notice that otherwise they are greatly unlike each other in many ways. Here is a great ponderous engine that reaches almost up to the lofty ceiling. Beside it is one only a fourth its size. Beside an engine with a familiar American name we find one with angular German words printed upon it. While most of the engines are motionless and silent, far down the aisle a gigantic diesel sends up faint heat waves. From its exhaust comes the steady whoom-a whoom-a whoom-a so familiar to submariners.

A man—evidently an engineer—with the preoccupied air of a scientist falls into step with us. He smiles shyly. "You were admiring our diesels . . . ?" he asks. "Come, let me show you our Japanese unit. There it is . . . we don't have it running just now. It was captured in Tokyo in 1945 . . . almost new at that time . . . it contains a number of interesting features . . . our tests are not complete . . . ."

We move into another room. The engineer's cultured, studious voice continues.

"Here," we are told, "is our fuel-testing engine. Despite its unusual appearance, it's actually a small single-cylinder diesel engine, especially designed for purposes of testing. Here, you see, are four separate fuel tanks, with a section of each feed line made of transparent material. By moving this little lever, we can change instantly from any of the four types of fuel to any other . . . ."

"By turning this hand wheel we can change the shape and size of the combustion chamber. The change is actually brought about by means of a rather large steel ball which is built into the cylinder head. The ball moves inward or outward as we turn the handle . . . Now, this device creates a visible spark when the crankshaft is 10 degrees ahead of top dead center. At that instant the fuel is injected. This other device, just like it, makes a spark when the crankshaft—and the piston—are actually at top dead center. And here is an indicator which shows when the explosion occurs—somewhere between the occurrences of the two sparks. By altering the shape of the combustion chamber, we can produce the explosion at the proper moment with any of the various fuels . . . ."

We are shown the small room where research on chromium-plated engine parts is underway. Here is the new wear-testing machine . . . you see — sections of chromium-plated cylinder walls . . . sections of piston rings . . . some cylinder oil . . . the machine constantly rubs the piston ring sections against the cylinder wall sections, with various predetermined pressures . . . .

On the wall are hugely enlarged micro-photographs of test specimens: This one shows a chrome-plated speci-
men after 500 hours...this one, an ordinary un-plated specimen. Here’s a plated specimen after 1500 hours...here’s an un-plated specimen after the same length of time in the machine...Even our untrained eyes can detect the difference.

Our scientist-guide leads us to the head office where by now our gig-engine bearings are lying upon a sheet of paper on a table. He hands us a typewritten page. “Here,” he says, “is a summary of what we do in this particular laboratory. Perhaps you’d like to read it through while I have a look at the patient.”

Here is what we read:

“The Internal Combustion Engine Laboratory is the diesel and gasoline engine proof-testing and experimental unit for the Bureau of Ships of the Navy Department. The type of work carried on includes the following activities:

- Test and develop diesel and gasoline engines. The work includes improvement of current engines, type approval of new designs, acceptance tests of new production, life tests of engine and generator sets, and investigations of failures in service.
- Investigate and test internal combustion engine bearing materials. This is to determine their suitability and reliability, causes of failure in service, and availability as replacements.
- Investigate and test special diesel engine lubricants and dopes. Commercially available oils are tested for general suitability and oil specifications are developed.
- Investigate and test diesel fuels and fuel dopes to correlate the properties of diesel fuels, determine the characteristics required for various diesel engines and prove the suitability of available diesel fuels.
- Design and develop auxiliaries and instruments specifically required for naval use, locate and eliminate sources of sound from engine installations, investigate salvaging procedures for engine parts; conduct instruction and lectures on engines, auxiliaries, accessories, fuels and lubricating oils for naval officers on special duty.

“The physical facilities of the laboratory include a refrigerated room for engine starting and operating tests under extreme temperature conditions...

“Did they send along a specimen of their oil?” our host asks one of his assistants.

“Yes—a quart can.”

“Good. Let’s get it into the hands of the people over at the chemical lab. And one of these bearings should go to the metallurgical laboratory, and one to the Bearings Project.”

Let’s proceed that quart of used oil over to the Chemical Engineering Laboratory as the internal combustion people go ahead with their investigation.

Here again we are received by a hospitable scientist—this time a tall, slender scientist with a red moustache. Like our first host, he talks learnedly and interestingly as we move along. “Here,” he says, “is a rather smelly experiment that has been going on for some time.” He indicates a large panel which covers most of a good-sized wall. Almost concealing the panel is a network of vials, hoses and electrical wires. The vials contain liquids which are shaded various degrees of brown and yellow. From some of them arise little evil-looking jets of vapor.

“Antifreeze,” we are told. “The Navy likes an antifreeze which will remain fully dependable through two full years of use. It has been having some difficulty in finding such an antifreeze. Perhaps the results of this experiment will bring us nearer to an answer.” We turn from the antifreeze experiment and enter a small, hot room. On one wall are several short lengths of insulated pipe which remind us of the steam pipes aboard ship. Each is radiating heat.

“Here is an example of the work we are doing in insulation,” our host informs us. He glances at us quizically. “Do you find it surprising to see something of this kind in a chemical laboratory?” he asks. “Many do, but still insulation is largely chemical. The chemistry of the insulation—the cell structure and similar properties—is as important as the mechanics or volume of the insulation. To keep the heat inside the pipes and out of living spaces is very important, you’ll agree—from the viewpoint of human efficiency as well as mechanical efficiency.”

A man walks up with the can of oil from our broken-down gig machine. “Oh yes,” our guide says, sighting it. “I’m afraid we won’t get to that until tomorrow, although I’d heard it was coming over.” Then, to us: “Now, don’t hurry off!”

But we have had our interest gripped by this experiment station, and must see every laboratory—and the time is short. The chemical engineer speaks of many things as he escorts us to the door—lubricants, fuels, preservatives, insulation, packing, gaskets, metals and alloys, water-treating chemicals, air-drying chemicals, cements...paints...

“I wish you could see our glass-blower at work,” he says as we reach the door. “It’s amazing the things he can make and repair...See this complicated piece of laboratory equipment...Yesterday it was broken—see
the line. A touch of flame, a twist of the wrist—presto! It was as good as new!"

Throughout our tour, we have heard a constant high-pitched whine of machinery. It is more noticeable to us as we step out from the quiet chemical lab. Noting our curiosity, our chemist-guide escorts us along the clean pavement to a large white building with a vast area of southward-facing windows. "This is the main building of the Mechanical Laboratory," he says. "The Gas Turbine Plants Section occupies a good share of this building. The sound you hear is a large gas turbine."

Again we are joined by an authority on the particular specialty concerned, and the chemist leaves us. As we approach the huge mass of machinery and ducts at the far end of the building, our new guide hastens to describe it scientifically while his voice can still be heard.

"We are learning much regarding the possibilities of gas turbines as prime movers for ships... this is an experimental model, of course, not suited for such use itself, but very useful here. An unusual feature is its independent compressor with an independent turbine to run it, and even an independent burner for the compressor turbine... added flexibility, we think... the compressor with its turbine can run at a constant speed.

"The sound you hear is created largely by the inlet air duct and compressor... not by the turbine itself. Here, you see, is an arrangement which can give us a salt spray such as would be encountered in various kinds of weather at sea..." The engineer's voice is lost in the sound of high-speed machinery. At the other side of the installation he points at a little metal mirror. Looking into it, we see reflected a mass of white-hot flame.

"What's it burning?" we inquire, shouting into the engineer's ear.

"Diesel oil, just now. Ordinary bunker fuel can be used, though."

Outside the door, our guide of the moment tells us that this particular "run" has been underway for some 25 hours and still has 11 hours to go. Also, we learn, that particular installation has been in use two or three years—constantly revealing new and valuable information. "Interesting," we agree; fascinating, in fact.

The Machinery and Auxiliaries Branch of the Mechanical Laboratory follows. We walk among air compressors, pumps, refrigeration machinery, steam and air separators, valves, steam traps, and a thousand other mechanical units.

Our latest host tells us of some of the tasks the Machinery and Auxiliaries Branch does. "We determine the suitability of a subject for use in the Navy... determine compliance of a subject with specifications. We find out what causes failure of a piece of machinery in service and determine and recommend corrective or preventive measures. Just now we're doing a good deal of research on flexible shafting...

"We devise and develop items to fill a definite or critical need in the naval service... write specifications... perform engineering work, when necessary, in designing and installing major facilities for use on the station or for other specific purposes..."

"We furnish technical information or render engineering services to other Naval and Governmental activities."

Here we see a test of flexible high-pressure tubing which may some day be authorized for charging torpedo air flasks. In another section of the shop is a length of three-inch shafting with a flanged coupling in the center. The shaft—and the coupling—are getting the daylight twisted out of them. The point of failure will be compared with that of a new-type coupling. Here we see a test being set up to try out a new compressed air whistle for diesel tugs; here, the contents of an oil filter being examined...

The Waves Mechanics Laboratory—What, no Waves in dungarees undergoing a test of their mechanical ability? No—these waves are sound waves, and the mechanics thereof are studied and analyzed here.

Everything here has a new look, and much installation and assembly work is still going on. Sound-proofing is being hung on the walls of three huge rooms—one of which is thought to be the largest "anechoic" room in the nation. When the spun-glass blankets have all been installed, the walls will be three feet thick, for all practical purposes, and the interior will look like the bellows of a mammoth accordion. (See "Acoustical Laboratory," ALL HANDS, March 1949, p. 36.)

These rooms are facilities for studying noises and the things that make them. Insulated from the building and from all other sounds, a machine—most any machine used in the Navy—will be set up and put in motion. If the motion must be created by another machine, it will be put in a separate room—also soundproof. A shaft through a soundproof wall will transfer the power from the propelling machine to the subject under study. The result will be scientific sound analysis—and the result of that: quieter machinery for shipboard use... less interference with our own listening devices; fewer clues for enemy listening devices, less fatigue for our crews.

The same building contains a 16-foot-deep "swimming
pool.” This permits testing of underwater sound-detecting devices and sound insulating devices.

The Welding Laboratory—endurance tests for various weldments . . . development of methods for relieving welding stresses . . . performance of stress analysis . . .

From behind a black screen rises blue smoke, illuminated by flickering blue-white light. At a polishing wheel a technician puts a mirror-like finish on a weld specimen . . . later, a scientist will examine its grain structure through a high-powered microscope. Seated beside a tank of water a man thrusts his hand into a rubber glove built into its side. A helper hands him an underwater welding torch which he submerges in the water. He steps on a pedal which closes an electrical switch. Through a glass port in the tank’s side we see a violent orange glow . . .

The Metallurgical Laboratory—corrosion testing . . . study of electroplating . . . study of wear in bearings and cylinder liners . . . flash sintering of powdered metal compacts . . .

In one room we survey massive rows of levers and fulcrums which can exert terrific tensile strains—static or varying. In another are dozens of devices for putting stresses on rotating members, on vibrating members—for exerting crushing forces, denting forces . . .

—and here is the bearing out of the captain’s gig. It has arrived ahead of us and already a man is cutting out a specimen of the Babbitt metal. It won’t be many days, we’ll wager, before the captain and the engineering officer, the chief and the gig engineer, will all know why they couldn’t keep main crankshaft bearings in that new diesel.

(In fact, they did find out—in less than a week. It was the oil, as was proven by tests performed by the Chemical Engineering Laboratory. The wrong oil in the right barrel, due to a slip-up somewhere along the line.)

The Engineering Experiment Station is the Navy’s oldest laboratory dedicated to solving the problems concerning the machinery for driving and operating naval vessels. The station was authorized by Congress in 1903 and put into operation in May 1908. Besides being the oldest laboratory of its kind, USNEES claims quite a few other “firsts” and “onlies.” It was the first American activity, for example, to determine just how fast a submarine engine can be run while the sub is snorkelling.

While most of the lab’s work is done in the six departments on the station, a little is done on naval vessels at sea. Also, a part of the work is conducted in the plants of commercial manufacturers and at other naval activities within the U. S.

The station’s work is always changing and never ending. While many of its tasks may be obscure to the sailor in the fleet, many others affect him very directly. A few real-life examples:

The attack transport USS Thomas Jefferson (APA 30) had two boiler tubes overheat and rupture because of a strange deposit in them. Upon studying the ruptured sections, the Engineering Experiment Station found them to contain practically pure calcium hydroxide, or hydrated lime. That indicated cement-type pipe coating. Investigation showed that the ship carried boiler water in tanks lined with such a coating. The station recommended a different kind of tank coating and the recommendation was carried out. No more ruptured boiler tubes.

Five years later a similar ship reported a similar problem. The station’s records of Thomas Jefferson case gave a clue. In no time this ship, too, had its problem solved.

During a tour of the station a submarine skipper found the Mechanical Laboratory running a test on air compressor valves. He was surprised and delighted, for he had been having trouble with the same type of valves in his ship’s compressors. He was also relieved, for he had thought that his submarine, alone, was having such trouble—and that perhaps he was somehow to blame. He learned that the Experiment Station had designed some new valves to replace the troublesome ones, and he offered to give them a service test on his vessel.

While the war was going on, USS LST 172 had trouble with a propeller shaft bearing. Examination at the Engineering Experiment Station showed corrosion. The corrosion was traced back to faulty oil, and the station recommended that the ship’s engineers analyze their oil every 50 hours and take other precautions. No more trouble was reported.

So—the Engineering Experiment Station’s work goes on—summer and winter, war and peace. On a tablet beside the door to the administration building is the following inscription: “The work it is intended to do will never be completed. There will always be progress and it is the work of the Experiment Station to assist in determining what is progress . . . and what is not.”

That assistance is valuable whenever the Navy is called upon to fight a war—more valuable, probably, than we shall ever know.
CONNING Conserver into position for salvage work requires experienced hand.

RESCUE and salvage operations are "duck soup" for the crew of USS Conserver (ASR 39). Men of the "dungaree Navy," they have been performing these rugged jobs for the Pacific Fleet since Conserver was commissioned in June 1945.

In her crew there are nine qualified divers including the captain, executive officer and salvage officer. Typical operations involve surveying on sea or land, underwater demolition,
rigger beach gear and towing. The ship also is equipped to aid ships and planes in emergencies at sea in addition to her regular duties.

Based at Pearl Harbor, Consoler's part in Exercise MIKI last fall brought her back to the U. S. for the first time since her commissioning.

These photographs show Consoler and her salty crew in action during the ship's current cruise in Alaskan waters.

Here, she is maneuvered in close prior to towing barges off a Kodiak beach.

LOOKOUTS on Consoler scan the sea for a drifting fishing vessel (above). Below: Quartermaster locates best possible position for salvage work.

from Alaskan beach. Tough, sometimes dangerous jobs are routine for ASR men.
All-Navy Bowling Results; Recreation Roundup

It was the strangest All-Navy tournament ever held. At Norfolk, Va., a finalist whipped one down the alley and glanced nervously at the scoreboard, wondering how his opponents in San Diego, Guam and New Orleans were doing. In bowling alleys at Pearl Harbor, T. H., Quantico, Va., and New York City small crowds gathered to watch the top keglers in their respective areas pit their skill against unknown competitors scattered around the globe. When the last frame was smashed, telegraph keys clattered out the scores to the Navy Department. The eight sports groups’ contestants and officials settled back to await word on who were the All-Navy bowling champions for 1950.

It wasn’t long in coming. By a decisive lead of 29 pins, the 8th Naval District Group, representing the South Central Group, captured the team championship title with a score of 8,550. Runners-up were the AirLant keglers, representing the Atlantic Fleet Group.

New individual bowling champion of the Navy is R. M. Devito, AD2, usn, of NAS Floyd Bennett Field, N. Y. Devito, bowling for the 3rd Naval District team which represented the Northeastern Group, piled up a score of 1,839 for the nine games.

STAR KEGLER Ralph Devito, AD2, captured the All-Navy Individual Bowling Championship for 1950.

Devito’s average of 206.5 per game for nine games considerably bettered the winning score of last year’s champion, William McCormick, AE3, usn. McCormick’s game average for six games: 190.

This second annual All-Navy bowling tournament was held by telegraphic means due to the required reduction in travel by naval personnel. Each naval district and type command selected a representative team of its best bowlers, which vied against other teams within the sports group for the right to represent that group in All-Navy competition. These eight group championship teams, bowling on their home alleys under the supervision of officials, fought it out for the All-Navy title. Their certified scores were telegraphed to the Navy Department.

Here are the results, by sports groups:

- Northeastern Group (3rd ND team) – team score: 8,554. Group’s high scorer: R. M. Devito, AD2, usn, NAS Floyd Bennett Field, N. Y., 1,859.
- Far East Group (NavMarianas team) – team score: 8,529. Group’s high scorer: R. H. Huskey, CS3, usn, Naval Barracks, NOB Guam, 1,807.
- Hawaiian Group (14th ND team) – team score: 8,271. Group’s high scorer: M. Mazurczak, BMC, usn, Office of Port Director, Pearl Harbor, TH, 1,693.
- West Coast Group (11th ND team) – team score: 8,226. Group’s high scorer: Henry F. Ahrens, DKC, usn, NavRes Armory, Huntington Park, Calif., 1,775. (Ahrens was runner-up to the All-Navy individual champion in 1948.)

Inter-Service Golf Tourney

Twelve of the Navy’s top golfers will compete against Army and Air Force divot champs in the Inter-Service Golf Tournament being held at Fort Benning, Ga., during the period 13-19 Aug 1950.

Navy representatives in the matches will be picked from the low scorers at the All-Navy golf tournament, which takes place the week of 6 Aug 1950 at NAS Glenview, Ill.

All-Navy Sports Calendar

Here’s the dope on future All-Navy championship events.

- Boxing
  Week of 14 May 1950
  San Diego, Cal.

- Tennis
  Week of 16 July 1950
  USNA, Annapolis, Md.

- Golf
  Week of 6 Aug 1950
  NAS Glenview, Ill.

- Softball
  Week of 10 Sept 1950
  Treasure Island, Calif.

- Baseball
  Week of 17 Sept 1950
  Pensacola, Fla.
Club Honors EM's Memory
The memory of a Monterey, Calif., enlisted Navyman was honored at the opening of a new enlisted men's recreation center at the Navy's General Line School in Monterey. The new recreation center was named Criscuolo Hall after a Monterey sailor who lost his life on Pearl Harbor Day.

Michael Raymond Criscuolo, yeoman second class, the man after whom the recreation center was named, graduated from Monterey High School in 1939. While in school he had been a member of the student council and manager of the athletic teams. He enlisted in the Navy shortly after graduation and later became a yeoman, second class, while serving on board the battleship *USS Arizona*. He lost his life while serving in that ship on 7 Dec 1941.

During the ceremony which marked the opening of the new recreation center, a framed portrait of Criscuolo was unveiled. The ceremony included several speeches, among which was a short speech by a member of the Criscuolo family. There were refreshments for the guests and all enlisted men present.

The name Criscuolo was chosen by an enlisted men's committee. Members of the committee considered Criscuolo's record the best among those of all former Navy men from Monterey whose names were considered.

The recreation center is a new permanent building. It was completed late last year, and is intended for a recreation building for enlisted men attached to the naval school.

Beats Free-Throw Mark
Standing at the free-throw line, Lloyd Wood, AD1, USN, sharp-shooting hooper of NAS Norfolk, Va., flicked 95 out of 100 consecutive free throws through the net to crack the National YMCA free-throw mark established last year.

Wood is a regular guard of the All-Navy champion Norfolk Flyers, and is noted for his deadly set shots. Another member of the Flyer squad, Leroy "Mutt" Pasco, SN, USN, equaled last year's winning tally by putting 94 out of 100 free shots through the hoop.

Operation Opera
French opera stars cast as North American Indians make a sight well worth seeing if you ever get the chance crew members of *USS Algol* (AKA 54) had while visiting Marseille, France.

*Algol* and the traveling cast of the French Light Opera converged on Marseille at the same time — with the result that the sailors were guests of honor at two showings of the French version of the American light opera "Rose Marie."

Earlier, they had been invited back stage to view what the stage manager called "a typical North American frontier scene." One look at the scenery, comprised mainly of Indian maidens of the French version, assured heavy support from the Americans.

When they turned up on two successive nights, the sailors received special programs, or, to say it according to the title, *Programme de la Representation De Gala de "Rose Marie" en L'Honneur Du Navire De Guerre Americain Algol.*

Even though most of *Algol*'s crewmen were short of being able to translate back into English the translated French lyrics, many of them were well enough acquainted with the production to ascertain unfamiliar accents in the voices of the Indians and the Royal Canadian Mounties.

*Algol*'s opera critics had among their numbers some eminently well qualified experts — for this type of production, anyway. Three former Canadians were familiar with the locale of the action. Another sailor, F. Becak, EN3, USN, was part Sioux. John "Wahoo" Puller, SN, USN, is a full-blooded Cherokee.

Crewmen tell the story that "Wahoo," after one look at the Frenchified Indian princesses in the stage, let out a Cherokee war whoop that cleared the set. The stage manager, after a time, was able to persuade the cast it was only a real Indian's idea of fun, and the show went on.

APRIL 1950
Two Outstanding Boxers

The Naval Training Center, San Diego, has turned out with two outstanding contenders for All-Navy boxing honors. Two of the station’s fighters — Douglas Kirby, SA, usns, lightweight, and Thomas Allen, BM2, usn, middleweight — captured the San Diego Golden Gloves titles in their respective weight classes.

Much was expected of Kirby, a piston-fisted puncher, and he lived up to advance notices by scoring a KO and two decisive decisions to acquire the title. Big surprise of the tournament was Allen, a “sleeper” who proceeded in workmanlike fashion to outclass his first two opponents and then swarmed over his opposition for the middleweight crown.

Waves Learn About Waves

Forty-eight Waves stationed in the Pensacola area are back at their offices after getting their first taste of the sea.

The Navy girls left their dry-land billets long enough to go aboard uss Cabot (CVL 28) for a full day of carrier operations in the Gulf of Mexico.

The girls watched fascinated as Cabot’s planes zoomed off and back onto the carrier’s big, broad flight deck and appeared becomingly bewildered when they were shown the intricate devices on the ship’s spacious bridge.

The 48 were also taken on a complete tour of the big carrier and were given a chance to get a close-up look at the department of the ship that corresponded to their particular billet ashore.

The purpose of the one-day cruise was to familiarize the Waves with carrier operations. It was said to mark the first time a group of this size had been embarked for an operation at sea.

The trim, slack-clad Waves thought the whole day was just fine except that everything seemed to move up and down all the time. The gently heaving decks under their feet caused many of the girls to seek the comforting atmosphere of the ship’s sickbay before the day was out.

Reporting back to the mainland by radio as Cabot returned home at the end of the day’s cruise, Captain Charles Lee, usn, Cabot’s skipper, jokingly commented that the operation had been a complete success but that, “Wobbly woe-begone Waves wish waves would wilt!”
Chief Cops Golf Cup

The first man to break 70 on Honolulu’s tricky Navy-Marine golf course is George R. Soukup, HMC, usn.

Stationed at ComServPac, Soukup posted a blazing 69 on the par 72 course to win the Tripler Golf Association championship. This was a tournament open to all Army and Navy medical, hospital, and dental personnel stationed in the 14th Naval District. He scored 5 birdies, 2 bogies and 11 pars.

Chief Soukup has an amazing record as a golfer. A veteran of 14 years naval service, he began playing golf only three years ago. He won the San Diego Naval Hospital golf championship during his first year of play. Later the chief set a record on the Kaneohe Bay, Oahu, links by becoming the first person to get a birdie on this course.

High Speed Wind Tunnel

New high speeds in wind tunnel testing of larger-size plane models are being attained at NACA’s Langley Laboratory, Langley Field, Va. The relatively new four-foot by four-foot supersonic wind tunnel operated there is capable of producing air speeds previously unknown in tunnels of its size.

Because of its roominess, the NACA tunnel permits the use of models containing instruments. (NACA stands for National Advisory Committee for Aeronautics.) A model which was under investigation recently was 32 inches in wingspread, had movable controls and contained more than 300 pressure orifices.

More than three-fourths of a million cubic feet of air per minute flows through the tunnel while it is in operation. The air is set in motion by a seven-stage axial-flow turbine-type compressor which is 11 feet in diameter. The compressor has 1,137 blades and consumes 60,000 horsepower. Air speeds attained range up to two and two-tenths times the speed of sound.

A “nozzle” ahead of the tunnel’s test section has flexible walls 25 feet long. Adjustment of these walls determines the speed of air to be developed. Gates can be closed to isolate the test section so that it can be entered without returning the whole tunnel to atmospheric pressure.

While the four-by-four wind tunnel has been in preliminary operation for some months, details were not released until recently. Besides the four-by-four wind tunnel described here, outstanding among NACA operated tunnels are: a 30-by-60 foot one, also at Langley Field, a six-by-six foot supersonic tunnel at Ames Aeronautical Laboratory, Moffet Field, Calif., a 40-by-80 foot tunnel at the same place and an eight-by-six foot tunnel at Lewis-Flight Propulsion Research Laboratory at Cleveland Airport, Ohio. (See ALL HANDS, December 1948, pp. 2-5.)

Leech Trophy Matches in July

The Leech Trophy Matches — annual competition for the armed forces tennis championship — will be held on 28-29 July 1950. Top-seeded netmen of the Army, Navy and Air Force will clash on the courts of the Army-Navy Country Club in Arlington, Va.

The 12-man Navy team to compete in the inter-service matches will be selected following the All-Navy tennis tournament, which is being held at the Naval Academy, Annapolis, Md., during the week of 16 July 1950. The first day of play will pit the Navy against the Army, with the winning squad challenging the defending Air Force champions on the second day.

This year will be the 16th time the three-foot high Leech Trophy has been sought by top tennis stars of the Army and Navy, and the third year in which Air Force netmen have participated. Records for the previous 15 tournaments show the Navy has won the trophy 10 times, the Army four and the Air Force once.

A new individual trophy is being entered into inter-service competition for the first time this season. Called the Risely Bowl, it will be presented to the outstanding player in the tournament by the U. S. Lawn Tennis Association. Special matches between the number one seeded players of the three teams will determine who receives the award. The winner will retain the Risely Bowl for one year.

BOWLING ace F. C. Deitchman, ADC, copped high individual average and series trophies at AFB Clark.

Most VALUABLE player trophy was awarded B. Corbello, YN3, for play on ComServPac basketball team.
**Servicescope**

Brief news items about other branches of the armed services.

**Two national guard units** — one in Maryland and one in Puerto Rico — won the Eisenhower Trophy in 1949 after winning it previously in 1948.

The Eisenhower Trophy was established in 1948 to be awarded each year to the outstanding company-size unit of the Army National Guard in each state. The District of Columbia, Hawaii, Puerto Rico and Alaska are excluded. Company A, 296th Infantry Regiment of San German, F. R., and Headquarters & Headquarters Company, 115th Infantry Regiment of Towson, Md., have been awarded the trophy for 1949 after having won it also for 1948.

The trophy, named after General of the Army Dwight D. Eisenhower, is a 15-inch cup. A smaller replica of the cup becomes the permanent possession of the winning unit. The large cup is retained only for a year unless the unit again wins the trophy.

Factors which guide judges in selecting winning units are: success in maintaining enlisted strength, performance in field and armory training and qualification in individual and crew-served weapons. Selection boards consist of the adjutant general of each state, the senior tactical Army commander in each state and the senior Army instructor.

The cups will be presented to the winning units this summer.

**An air force fighter**, the Sabre, has been “souped up” to give it greater speed and turning ability at high altitudes. The new model Sabre, the YF-89D, is a first cousin of the F-86A which now holds the official world’s speed record of slightly over 670 miles per hour.

Powered by a J-47 jet engine, the new Sabre has been souped up by adding an auxiliary afterburner. After-burning is a process of introducing fuel into the exhaust pipe and igniting it there with spark plugs, thereby giving the plane an extra boost. Aside from the afterburner, the only other major alteration that distinguishes the Model D from the Model A Sabre is the installation of the intake duct for the jet engine under the nose rather than directly in the center of it. The new Sabre is three feet longer than the F-86A. These sleek Sabres are designed to climb quickly to extreme altitudes to intercept enemy planes.

Discovery of part of the record-breaking rocket which soared 250 miles above the earth’s surface a year ago has been announced by the Army. Body section of the “bumper” rocket, released from the V-2 mother missile at a height of 20 miles, was recovered near the north end of the 116-mile White Sands firing range at Las Cruces, N.M.

Noting had been found of the projectile — an Army designed “WAC Corporal” — since it hurtled into space at 5,000 m.p.h. on 24 Feb 1949. The opinion had been advanced that it had disintegrated like a meteorite upon re-entering the earth’s atmosphere, but Army Ordnance denied at the time that this was likely.

Tail section of the recovered rocket is being tested by the Jet Propulsion Laboratory of the California Institute of Technology in order to find out what happened to it during its long skyward jaunt.

Among pieces recovered was an electric switch, in working order despite charring and rusting once broken contacts were replaced.

**Here’s a bit of news close to the feminine heart** — the Army’s WACs are to get new uniforms.

Although the changeover from the old to the new uniform will be gradual one and will not be apparent until well into 1951, the new-style uniform has been approved by the Army and is soon to go into production.

The big difference Army women will notice in their new apparel is that fewer pieces make up each uniform. For example, a one-piece summer dress has replaced the present four-piece summer uniform of jacket, skirt, shirt and tie. As a result of this reduction in items, the new uniforms will cost less.

The smart new designs are the product of months of research and review of fabrics, colors and designs by a committee of fashion experts who cooperated with the Army. The new uniform marks the first change in WAC uniform style since the original design of 1942.

**Old sergeant syndrome** is the name given to the psychiatric disorder which causes normally well-balanced soldiers to break down under battle neurosis, and through a study of its signs and symptoms Army medical experts now have a better insight into the workings of the human mind under stress and strain.

This syndrome was seen only in veteran troops that had gone through prolonged combat without relief. The psychiatrist who made the study, Major Robert Sobel, USA, was in a first-rate observation position, serving with the famous 34th “Red Bull” infantry division, the first to be sent to Europe in World War II and the division that spent more time in combat than any other.

The Army psychiatrist found the breakdown occurred in several stages: First defense to go was idealism, followed by loss of hatred toward the enemy. Then occurred self-delusion, in which the veteran indulged in the belief that relief was on its way “after the next hill.” If this belief were unfulfilled for long, a quick deterioration of morale set in. Then, once a break in efficiency developed, self-confidence weakened.

Along with these mental troubles, physical signs became apparent, the Army noted. These were: muscular

**All Hands**
tension, headache, shaking and tremor under stress, excessive perspiration, loss of appetite or nausea, sleeping difficulties, accelerated heartbeat, breathlessness and giddiness.

These "old sergeants," the report said, developed "a tendency to be the first in and the last to get out of a foxhole."

The best treatment: "Assign them jobs out of shellfire but close enough to the front for them to feel they were helping the men on the line."

** ** **

FIFTY PICKED Army men set out last month on a 23-day test of a new Arctic trail ration in the Alaskan wastes.

The party of five officers and 45 enlisted men screened for physical fitness were split into a small headquarters and three test groups. One of these was to subsist on standard C combat rations supplemented to give 5,400 calories per day. The other two used the new pack—designated Ration, Arctic Trail (A-1)—which at three-and-a-half pounds weighs half as much as C ration plus supplement, and provides equal energy.

A-1 consists of dehydrated meat bars, premixed compressed cereal, seedless raisins, roasted almonds, sandwich cookies, biscuits, chocolate sticks, chocolate bars, soup mixes, cocoa beverage powder, plastic spoons, a pack of toilet paper, and a pack of cigarettes. An accessory packet contains bouillon powder, soluble tea and coffee, sugar tablets, dried and sweetened milk, candy-coated chewing gum and two books of safety matches.

During the field test periods, all men were to engage in simulated patrol or reconnaissance missions with full equipment, bringing their energy expenditure near the maximum. Point of the tests was to show whether A-1 measures up to all requirements, and how it compares with the standard C ration.

** ** **

A TEST CHAMBER simulating flight conditions at four times the speed of sound and at a height of 15 miles has been developed for the Air Force by Wright Aeronautical Corporation at Wood-Ridge, N. J.

Part of facilities capable of testing all types of jet engines, the chamber—of stainless steel, 12 feet in diameter and 96 feet long—is designed especially for testing supersonic ram-jets.

At the present time ram-jets up to 20 inches in diameter can be operated in the new chamber. The jet is mounted on a platform in the center, and air supplied by turbine compressors driven by 15,000 h. p. motors is delivered at the rate of 140 tons per hour. At the same time pressurized steam at 150 tons per hour is vented into the exhaust system. By varying pressures of incoming air and outlet steam, different altitude and speed conditions may be reproduced.

An elaborate cooling system jacketing the chamber with a layer of circulating water reduces heat which reaches 4,000 degrees F. near the exhaust end of the structure.

Ram-jet engines, a highly efficient type of power plant for speeds of 1,000 m.p.h plus, are being considered for use in guided missiles and pilotless aircraft as well as for pilot-operated planes.

** ** **

MUCH MILITARY EQUIPMENT left behind during rapid demobilization at the end of World War II is being reconditioned under Army contracts.

The bulk of equipment being salvaged in the Pacific is shipped to Japan for reconditioning. Approximately 60,000 general purpose Army and Air Force vehicles are on hand there for rebuilding. These are being processed at the rate of 1,000 per month. Cost of reconditioning is a fraction of the original price.

In Europe, $220,000,000 worth of equipment, including 38,000 vehicles, already has been rebuilt. There, the reconditioning program got under way earlier than in Japan. In the U. S. itself, overhaul of World War II military equipment is also moving along.

** ** **

DETACHABLE fuselage of revolutionary new XC-120 Pack Plane will solve many tough air transport problems.
Transportation for Dependents

Sm: I was under the impression that after a man is advanced to second-class petty officer he is entitled to transportation for dependents from his home address as entered in his service record to the home port of his ship. Am I right?

F. L. L., CS2, USN.

- Not exactly. Second-class petty officers are entitled to transportation for their dependents on a permanent change of station, if they are in that rating at the time of change, provided dependency exists on that date. If in your case you have been recently made CS2, you will be entitled to transportation for your dependents when you make a subsequent permanent change, but not before. — Ed.

Which CPO is Senior

Sm: As a CPO, I have little trouble figuring out whom I outrate, but when a chief hospitalman says he is senior to chief boatswain's mate, gunner's mate and on down the line because he made chief before them, it is more than I can stand.

Please tell me: Who is senior, a chief hospitalman appointed to pay grade 1A on 1 Jan 1945 and to pay grade 1 on 1 Jan 1946, or a chief engineman rated pay grade 1A on 1 June 1945 and who has not yet been appointed to the top pay grade? — N. L. Y., YNCA, USN.

- Yes. A permanent chief warrant officer is not a temporary officer. He is a permanent officer and, if serving in a higher temporary grade, is a permanent officer serving under a temporary appointment. — Ed.

BAQ for Service Couples

Sm: If husband and wife are both enlisted personnel of the seventh pay grade and maintained a home, would they, under the new pay bill, be entitled to draw quarters allowance? Also, if quarters are available for either or both parties, would this exclude eligibility for quarters allowance? — J. D. L., HMC, USN.

- If two members of the service are married to each other, neither is considered to have a dependent because of such marriage, since neither is actually dependent. Therefore, the male member cannot draw BAQ for a wife, nor may the female member draw BAQ for a husband. However, each may be entitled to BAQ in his or her own right provided quarters are not available for each member's own occupancy. We have the following possible cases:

1. Separate quarters available for male member and also for female member — no entitlement to BAQ.
2. Separate quarters available for male member, no quarters available for female — female member entitled to BAQ in own right at $45.
3. Separate quarters available for female member and no quarters available for male member — male member entitled to BAQ at $45.
4. No separate quarters available for either member — both entitled to BAQ at $45 (total for the family of $90).
5. Public quarters available and assigned where members may live together — no entitlement to BAQ exists. — Ed.

Permanent CWO

Sm: If a temporary officer's permanent rank is chief warrant officer, is he eligible for retirement after serving 20 years, 10 of which have been temporary commissioned service in a rank higher than chief warrant officer? — H. W. S., USN.

- Yes. A permanent chief warrant officer is not a temporary officer. He is a permanent officer and, if serving in a higher temporary grade, is a permanent officer serving under a temporary appointment. — Ed.

Wanted with AFRS?

Sm: I am very much interested in getting into the Armed Forces Radio Service as I have had experience in that line of work in civilian life. Last July I submitted a letter to BuPers via AFRS and Com 11 requesting transfer to that line of work, and the reply from the Bureau was that there were no openings in the Navy at that time.

(1) Can you give me any information that would help me in acquiring said duty?

(2) I was much interested in your article "Learning to Give the World the Word" (All Hands, January 1940, pp. 20-22) on the Armed Forces Information School at Carlisle Barracks, Pa. What are the qualifications for getting into this school? — D. E. A., QM8, USN.

- Your best bet is to request duty at the Carlisle school, where script writing, broadcasting, etc., are part of the subject matter in courses for enlisted personnel. Then see about getting into AFRS.

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4. No separate quarters available for either member — both entitled to BAQ at $45 (total for the family of $90).
5. Public quarters available and assigned where members may live together — no entitlement to BAQ exists. — Ed.

Fighting Lady Carrier

Sm: Please inform me as to the name of the carrier used in the motion picture Fighting Lady. There are some hot arguments here and we have discussed at least four different carriers — Lexington, Yorktown, Enterprise, Essex, to mention a few. — E. N. C., YN2, USN.

- No naval vessel has been designated the Fighting Lady by the Navy Department. The motion picture Fighting Lady contains a composite of scenes shot aboard several different carriers. — Ed.

Sickbay Time as Shore Duty

Sm: If a man goes from a fleet activity to a hospital for medical treatment and is hospitalized for a period of 12 months or more, is he considered to have been in a shore duty status and does this time count as a normal tour of shore duty? — J. W. D., TMC, USN.

- Cases of this nature are reviewed by the Bureau of Naval Personnel on their individual merits. Your request should be sent via official channels to: Chief of Naval Personnel (Attn: Pers 6005), Navy Department, Washington 25, D. C. — Ed.

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Can You Prove You're a Veteran?

SIR: In ALL HANDS, February 1950, p. 5, you describe a new "Certificate of Service" card issued to personnel separated from the Navy after 1 Jan 1950. It seems that some type of certificate, similar to an honorable discharge, should be issued to Regular Navy personnel who served during World War II and have not yet been discharged. It should be impressive enough to convince various local officials that the holder is a veteran even though he has not been discharged.

In September 1945, after 44 months of war-time sea and overseas duty, I commenced a tour of shore duty and attempted to get a telephone in my home. I was refused a priority because I could produce no convincing evidence that I was a veteran. I have encountered similar difficulties elsewhere. Since I hope to continue my service in the Navy, without discharge, for the rest of my time, this problem will undoubtedly continue to be solved. I believe there are many others in the same situation. — J. C. B., CDR, SC, USN.

- All ships and stations were directed by BuPers Ltr. 96-48 (now cancelled) to issue a Certificate of Satisfactory Service (Officer's diploma-type) to those personnel who served honorably on active duty as officers between 16 Sept 1940 and 31 Dec 1946. This certificate was issued in the name of the President and bore the signature of the Secretary of the Navy.

The authority mentioned above for issuing this certificate was cancelled by omission from the January-June 1948 AS&SL, and the terminating date ships and stations could issue this certificate was 31 Dec 1948. However, eligible personnel who have not previously been issued a Certificate of Satisfactory Service (Officer's diploma-type) may request one from the Chief of Naval Personnel, attention Pers-8284. — Ed.

Helicopter Schools

SIR: I would appreciate information concerning helicopter schools and the proper method for application. Such information is not available at this command. — J. I. T., MSGT, USMC.

- Training for Marine Corps and Navy helicopter pilots (designated naval aviator and aviation pilots) is conducted at the Naval Air Station, Lakehurst, N.J.

Normally, only pilots assigned to Marine Helicopter Squadron One or those needed to man rescue helicopter aircraft at Marine Corps air stations are ordered to Lakehurst for this training.

There are no formal helicopter maintenance schools available to Navy or Marine Corps personnel. This type of training is conducted on-the-job at Marine Helicopter Squadron One at the Marine Corps Air Station, Quantico, Va., for Marine personnel. — Ed.

Officer Retirement After 20

SIR: Have any line officers been voluntarily retired after 20 years active service? Staff Corps officers? Medical officers? — J. A. M., CDR, MC, USN.

- Line, staff and Medical Corps officers have been retired upon the completion of 20 years of service. Retirement, however, is at the discretion of the President of the United States, and is dependent on the exigencies of the service. — Ed.

Addendum on the New Pay Law

SIR: Since you published in the November 1949 issue of ALL HANDS a table showing the monthly pay and allowances for officers and enlisted men on active duty, I wonder if you would publish such a table for those of us who are drawing retainer or retired pay? There are several former Navy men on the retired list that I know around here. Most of us get ALL HANDS every month and would appreciate such a table very much.

(1) Is a man in the Fleet Reserve on the retired list entitled to hospitalization? If so, can he be admitted to a Veterans Administration hospital as well as to a Naval hospital? — W. J. S., MMC, USN (Ret).

(2) By now, you and your fellow retired buddies should have received a letter from the Bureau of Supplies and Accounts telling you exactly how your retired pay or retainer pay is to be computed under the new pay law (see ALL HANDS, March 1950, p. 36).

Roughly though, retired and retainer pay is computed at 2% per cent of basic pay of the applicable rate times the number of years active service (a fraction of a year greater than six months counts as a full year) you have.

(2) Yes. Personnel in the Fleet Reserve and on the retired list are "veterans" and as such are entitled to medical treatment and hospitalization in VA hospitals with no deductions for subsistence while under medical care. If one of the VA hospitals, however, cannot take you, admission will be granted if necessary at a naval hospital on presentation of suitable identification. — Ed.

Rank and Pay at Retirement

SIR: My authorization to wear the combat distinguishing device on the Commendation Ribbon states that determination of eligibility to retirement at next highest rank and retirement at three-fourths pay of rank held at time of retirement will be adjudicated and forwarded to the Secretary of the Navy for approval when retirement is imminent.

I am aware that this procedure has been set up pursuant to section 412(a) Public Law 381, but it is not clear to me how this works out if I am reversioned to my permanent rating of ETC prior to retirement and therefore am in an enlisted status until retired at my World War II rank of CHRELE by reason of having received a Certificate of Satisfactory Service.

It appears to me that if I am reversioned I will not hold any rank at time of retirement Am I correct in believing that for those eligible, retirement pay will be three-fourths of active duty pay immediately prior to retirement and that advancement to next highest rank on the retired list is only honorary? — A. D. H., CHRELE, USN.

- If you retired in enlisted status, Sec. 412(a), P. L. 381-80 would not be applicable. Public Law 351, 81st Congress, has deleted the words "and with three-fourths of the active-duty pay of the grade in which serving at time of retirement." In view thereof, no monetary benefits may accrue to those eligible. — Ed.

Four-Pipers' No Speed Demons

SIR: The other night an old buddy of mine who was commanding officer of a tin can during World War I claimed that those old "four-pipers" were much faster than our present day destroyers and could, in fact, run circles around them.

My friend also claimed they could get well over 40 knots out of the one he was on and there were several, especially equipped for speed, that logged over 50. What's the scoop? — D. O., SO2, USNR.

- Full speed of a present day destroyer is much higher than that of the "four-pipers" of World War I. The speed of those 1200-ton destroyers was well under 40 knots. — Ed.

FOUR PIPER of World War I would be left in the wake of hopped up, modern destroyers.
LETTERS TO THE EDITOR (Cont.)

CPOs and Sergeants

Srn: (1) What is considered equivalent to Navy CPO and PO1 ratings in the Marine Corps?

(2) Is staff sergeant in the Marine Corps equivalent to the rating of PO1 in the Navy?

(3) Is it considered proper for a capable PO1 to be assigned combined military and specialist duties under a Marine staff sergeant? - W. K. G., AD2, usn.

- (1) The Marine Corps equivalent by pay grade to Navy CPO is master sergeant, since both ratings are in the seventh pay grade. Equivalent of a PO1 in the Navy is the Marine Corps rating of technical sergeant, since both are in the sixth pay grade.

- (2) Staff sergeant is below PO1 in equivalent rating, and equal to PO2 in the Navy.

(3) Under the circumstances you described the PO1 would normally be placed in charge since a PO1 is senior to a staff sergeant of the Marine Corps. However, there is nothing to prevent a commanding officer designating a junior enlisted man to assume charge of a detail which may include senior enlisted personnel, when he believes that the junior is better qualified to perform the duties in question. - Ed.

Promotions to WO and CWO

Srn: I attained my warrant rank in September 1946. According to the December issue of ALL HANDS, my date of rank has been advanced to July 1947. When will I be eligible for promotion to chief warrant?

If and when examinations for warrant rank are resumed, will I be able to make my present rank permanent by taking and passing the exam and will my service as temporary count toward chief rank?

- E. P., RELE, usn.

- The recommendations of the board referred to in paragraph 8 of Alnav 97-49 (NDB, 15 Oct 1949) for placement in higher warrant grade of permanent commissioned warrant officers who have served or are serving in higher rank have been approved by the Secretary of the Navy and will be published to the service in the near future.

- All further advancement in warrant pay grade of both commissioned warrant and warrant officers will be in accordance with regulations, the details of which will be announced to the service when approved by the Secretary of the Navy. - Ed.

Care of FR Dependents

Srn: Under what circumstances may the dependent wife of a Fleet Reserve officer obtain treatment or medical examinations at a naval hospital?

- A. G. A., RMC, USNR

- Fleet Reserve and retired naval enlisted personnel are eligible for hospitalization and out-patient care of dependents under provisions of Public Law 51, 78th Congress 1943. Under the provisions of that Act the term "dependents" is as follows:

"The term 'dependents' shall include a lawful wife, unmarried dependent child (or children) under 21 years of age, and the mother and father of a member of the Navy or Marine Corps if in fact such mother or father is dependent on such member. The term 'child (or children)' shall include a natural or adopted child or steppchild. The widows but not the children of deceased naval and Marine Corps personnel shall be entitled to hospital care in like manner as dependents."

These dependents may be treated in a naval hospital they may select upon presentation of suitable identification. Admission of dependents is contingent upon the opinion of the medical examiner as to whether hospitalization is necessary in the individual case. If, in the opinion of the medical examiner, dependents are admitted for in-patient care they will be charged at the rate of $1.75 per diem. This charge includes all hospital services and charges for subsistence.

Suitable identification is form NavMed 5055, Dependents' Identification Card, which the man may obtain from the commandant or the office carrying his records. If this form is not available, other suitable identification cards may be used such as a commission, Navy exchange, or post exchange card.

Dependents of naval personnel are admitted for all diseases and conditions except contagious, mental and chronic diseases requiring prolonged domiciliary care.

Ambulance service for dependents to and from the hospital is not furnished by the government. - Ed.

ComRats and Saved Pay

Srn: My commuted rations were stopped when I was transferred to the Naval Hospital in Philadelphia for treatment last October. Upon my return to my duty station, I was told that I could not have my commuted rations back as long as I was on saved pay.

Although the legal aspects were explained to me, I still do not understand why I can't have commuted rations regardless of which pay bill I come under as long as I rate them.

The same thing has happened to others at this station upon their transfer to temporary duty and their return. Was this an intentional provision or was it an oversight by the drafters of the new pay bill? - R. H. S., AMC, usn.

- This question has been presented to the Comptroller General for an advance decision.

Pending such decision the following must apply: You would not be entitled to credit of commuted rations if your pay computed under laws in effect on September 1949 excluding credit of commuted rations, was greater than your pay computed under the provisions of the Career Compensation Act including credit of commuted rations, both rates computed as of the effective date of order to commute rations upon return from the hospital. - Ed.

Housing on Fair Basis

Srn: What rules of regulations govern housing aboard a station when both sea and shore duty personnel are involved? Here at Boca Chica Field, there are two squadrons on sea duty, a blimp squadron outfit which is on shore duty and NAS personnel. The squadrons have 50 per cent of the apartments.

Is it up to the commanding officer to designate what per cent of the housing

Wants Overseas Shore Duty

Srn: Just what is the procedure in applying for overseas shore duty and where may I obtain further information on places available? I completed a year and a half of active duty as of 9 Jan 1960. - J. W., FA, usn.

- Assignment and distribution of enlisted personnel for overseas shore duty is under the administrative command of the service force commanders. Your request therefore, should be submitted to the appropriate service force commander (ComSercLant or ComSercPac) at such time as you are under the administrative command of either of these commanders. BuPers Ctr. Ltr. 189-48 (NDB, 15 Oct 1948) contains detailed information on this subject. - Ed.

Displaying Ensign and Personal Flags

Srn: I would like to know the correct way the national colors and personal flag are to be flown when the same mast ashore, as, for example, at a Naval Shipyard. Articles 2173 and 2174, U. S. Navy Regulations, 1948, seem to be at variance on this score. The flags are flown at present in the manner sketched. - A Seaman.

- No regulations appear to be violated in displaying the ensign and personal flag as shown in this sketch.

The manner in which the ensign and personal flag are displayed, showing a mast having a gaff, seems to be the best adaptable. Article 2173, U. S. Navy Regulations, is not applicable and Article 2174 is silent on this point. - Ed.
News of reunions of ships and organizations will be listed in the column from time to time. In planning a reunion, best results will be obtained by notifying The Editor, All Hands Magazine, Room 1887, Bureau of Personnel, Navy Department, Washington 25, D.C., four or more months in advance.

**Ship Reunions**

**Fifth Marine Division—8th Mar Div** Association is planning its second annual convention 24-28 August at Los Angeles, Calif. Convention chairman is LT Col S. Francis Zeller, USMCR. Members will visit Camp Pendleton and Hollywood, hold business sessions, unit reunions, a banquet and a ball. Details will come later.

**Officers of uss Langley (CVL 27)**—Reunion on 18 May 1950 in Washington, D.C. Festivities start at 1000 in the main ballroom of the Hotel 2400, situated at 2400 Sixteenth St., Washington. This is the fourth Langley reunion, others having been held in Philadelphia, New York and Virginia Beach. In charge of arrangements is LCDR Herbert Ladley, usn, who may be reached by phone by calling the Washington telephone number REPublic 7400, extension 81060. Correspondence should be addressed to him at: CNO Op323V, Navy Department, Washington 25, D.C.

**usss Davis (DD 859)**—All former crew members interested in getting together for a reunion in Washington, D.C., in the near future should contact William F. Crewe, 10 Williams Lane, Chevy Chase, Md., or Ralph F. McCann, 115 Wemond Dr., Alexandria, Va.

**Officers of uss Shangri-La (CV 38)**—Reunion dinner planned to start at 1830 on 1 May 1950 at the Commissioned Officers Mess, Naval Gun Factory, Washington, D.C. Information concerning rooms location available by inquiry at the Naval Gun Factory gate. For other information, write to or call Lieutenant F. J. Scanlan, usn, Room G383 Arlington Annex, Bureau of Naval Personnel, Navy Department, Washington, D.C. Former officers and wives invited.

**73rd Construction Battalion:** A reunion will be held on 3, 4 June 1950, at the Statler Hotel, St. Louis, Mo. For additional information write Mr. George J. Deans, 28 Butler Ave., Auburndale, Pa.

**CBMU 575:** Former members of this unit will meet on 9 May 1950 at the Robert Trent Hotel, Newark, N.J. The reunion committee is anxious to contact their former CO, LCDR Paul A. Harper, CEC. For information write to A. Brogan, 1075 Dewey Place, Elizabeth, N.J.

**USS Biloxi (CL 50):** Annual reunion of all former shipmates will be held in New York City on 8, 9 July 1950. Interested personnel should write either Mr. Leonard A. Smith, 207 W. Duncannon Ave., Philadelphia 20, Pa., or James T. Mckelvey, 819 N. 38th St., Richmond, Va.

**uss Brooklyn (CL 40):** All former crew members interested in participating in or helping to make arrangements for an annual reunion dance of the "Mighty B" to be held sometime this year should write Robert J. Gee, 548 Powers Ave., Box 54, New York City, or Mitch George, 163 Nevins St., Brooklyn, N.Y.

**uss Hale (DD 642):** A ship's reunion is tentatively planned for December 1950, in New York City. Former crew members are requested to write George R. Fahnestock, c/o U.S. Forest Service, Gardiner, Mont. Suggestions will be welcomed as exact date, place and kind of affair, as well as personal news.

**uss YMS 15:** All former shipmates who are interested in a reunion should contact their former CO, Principal, Point Road School, Marion, Mass.

**uss Opol (PYC 8):** Former shipmates who are interested in participating or helping to make arrangements for the first annual reunion of this ship, with place and date still to be decided, should write LCDR Bailey Cowan, 10 East 40th St., Room 3405, New York, N.Y.

**uss Mobile (CL 63):** Plans for a reunion of former shipmates are being made, to be held at the Sharamock Hotel, Houston, Tex. Interested personnel should write Travis N. Price, c/o Nacogdoches Business College, Nacogdoches, Tex.

**uss Blloxi (CL 80):** Plans for a reunion of former shipmates are being made, to be held at the Sharamock Hotel, Houston, Tex. Interested personnel should write Travis N. Price, c/o Nacogdoches Business College, Nacogdoches, Tex.

**uss Standard Landing Craft Unit 14:** Emil A. Gonzales, of 2141 Judah St., San Francisco 22, Calif., is interested in helping organize a reunion of this unit in San Francisco.

**uss FC 1205:** Former crew members of this ship who are interested in a reunion are requested to write James L. Byrne, 1113 Country Club Rd, Fairmont, W. Va.

**uss Yukon (AF 9):** A reunion of all former crew members is planned for this summer, in New York City. All interested personnel should write Alfred J. Clark, 59 Christie Ave., Clifton, N.J.
Carrier and A-A Cruiser Will Be Kept on Duty with Fleet; 'Mo' to be Training Ship

Three million dollars that will be saved when the battleship USS Missouri is turned into a training ship, will go toward paying the operating costs of an additional aircraft carrier and anti-aircraft cruiser for the active fleet.

USS Missouri (BB 63), now the only battlewagon remaining in the active fleet, will become the largest training ship afloat sometime in late spring.

This savings, as well as savings made in certain shore establishments, will free enough funds to enable one Essex-class carrier, USS Philippine Sea (CV 47), and one anti-aircraft cruiser, USS Juneau (CLAA 119), to be kept on duty with the active fleet.

Retention of Philippine Sea will give the Navy three carriers in the Pacific Fleet, one of which is in Far Eastern waters at all times, and four in the Atlantic Fleet, one of which is stationed in the Mediterranean.

"The Department of the Navy is exerting every effort to translate available appropriations into maximum fighting strength and mobilization potential," Admiral Forrest P. Sherman, USN, Chief of Naval Operations, said. Not only, he said, "have economies already effected permitted increasing previously planned fleet strength by one large carrier and one cruiser," but these economies will also be used to "provide additional equipment for anti-submarine warfare and to augment general readiness. They are also an important contributing factor in retaining two additional Marine battalions."

Wind Tunnel Sets New Record

Bigger winds had blown in smaller wind tunnels, but never had such a strong wind blown in such a large tunnel. That was the way things stood after an air speed of 4,960 miles per hour was attained in NOL's 16-inch wind tunnel at White Oak, Md.

The new record, six and one-half times the speed of sound, shatters the tunnel's own previous record. While smaller tunnels have created even higher wind speeds, the 4,960 mph speed is the highest ever attained in a wind tunnel as large as 16 inches square. The new high speed was brought about by installing brass plates within the tunnel's air nozzle to restrict the flow even more than was previously possible.

The Navy in Pictures

Portrex Practice—Personnel clamber down nets on USS Burison and load into LCVPs off Little Creek, Va. (upper right). Top left: Members of San Juan Area basketball team donated badly needed blood for transfusions to two Puerto Rican children. Left center: George A. Dedic, DCC, worked 22 months to build model of USS President Jackson. Bottom left: At Pearl Harbor, H. George Baker, JO1, shows Shirley Temple album of pictures taken during the infamous attack. Lower right: Shower of rice marks unification ceremony featuring Air Force's CPL Virginia G. Woodward and Navy's Ralph Seghers, PH2.

YESTERDAY'S NAVY

Japs lost 11 ships, 12 damaged during Battle of Coral Sea 4-7 May 1942. U. S. Marines recaptured Norfolk Navy Yard 25 May 1862. LT DeHaven, USN, started for Arctic in search of Sir John Franklin, R.N., 26 May 1850.

APRIL 1950
U. S. Navy Officer Honored

First non-British winner of the McKenna Trophy, coveted prize of Great Britain’s Empire Test School, is a U. S. Navy lieutenant commander who won the award on the basis of being the “best all-around student in each course.”

The presentation was made to Lieutenant Commander Joseph G. Smith, USN, at Farnborough, England. Competing students in the yearlong course at the British service school include pilots from all parts of the British Empire, the U. S. Navy and the U. S. Air Force.

The Royal Air Force school accorded much recognition and prestige to the Navy officer and the Navy’s air arm.

New Air-to-Air Rocket

A small, powerful air-to-air rocket designed for use by high-speed planes against other high-speed aircraft has been developed by the Navy’s Bureau of Ordnance. It is the first successful air-to-air rocket ever built.

Named the “Mighty Mouse,” the new rocket is compact enough to be carried in quantity by the mother plane, yet fast and devastating. One rocket — scoring a direct hit — will destroy any known plane.

The “Mighty Mouse” was successfully test-fired by a Navy attack plane, the Skyraider, at the Naval Ordnance Test Station, Inyokern, Calif. The new rocket is built with folding fins, which reduce air resistance on the mother plane and permit it to carry a larger number of the missiles. It is designed for use with a new type of airplane rocket launcher under development by the Navy.

To fire the rocket, the launching plane is aimed at the target and the rockets are cut loose either singly or in salvos from the launcher, which is attached to the plane’s wings or fuselage. The rocket’s fins fold together while in the launcher and extend outward to their normal flight position when the rocket is fired.

CREW at quarters, the destroyer USS Wallace L. Lind (DD 703) steams slowly into the harbor at Venice, Italy. Doge’s Palace is in the background.
Neptune Packs Potent Punch

A new version of the long-range PV2 Neptune patrol plane will soon be winging over Navy-patrolled sea lanes.

Specifically designed to meet the threat of snorkel-type submarines, the new plane—designated the P2V4—has many improvements over earlier models. Most important of these is a sensitive new search radar which can accurately locate small targets (such as snorkel tubes) over a larger area than was previously possible.

The twin-engine P2V4 packs a powerful punch. Its bristling armament of rockets, cannon, torpedoes, mines and bombs, assisted by the latest electronic equipment make it a potent antisubmarine weapon.

Full use of magnetic detection gear and sonobuoys to detect submarines will be made by the new patrol plane. This method of pinning down submarines was developed during World War II, and consists of dropping small radio buoys in specific patterns over an area of ocean in which a sub is suspected. When the buoys alight on the water they release a hydrophone which sinks to a predetermined depth. The throb of the submarine’s propellers is detected by this sensitive instrument, and broadcast by a transmitter within the buoy. Receivers on board the plane enable skilled operators to plot the submarine’s position by the relative noise level.

A new "compound" engine is being installed in many of the P2V4s to increase their range and speed. In this engine, the exhaust gases of the regular reciprocating engines are passed through turbines which, geared to the main crankshaft, deliver additional power to the propellers. Wing tip fuel tanks increase the range.

This new model of the famed "Trounculent Turtle," (which holds the world's non-refueling distance record of 11,236 miles) has a variety of comfort features to combat crew fatigue on extended flights. These include a galley for serving hot meals, bunks, heating and ventilating equipment and adequate space for relief crew members.

Squadrons of P2V Neptunes have been maintained in Alaska, Newfoundland and the Caribbean for the past few years by the Navy. They have proved effective in conducting long-range search under all weather conditions. The big planes have made more than 100 takeoffs from aircraft carriers.

Navy Bomber Sets Record

"The next flight will probably break our record," said the skipper of the Neptune Navy bomber which had just completed a record-breaking carrier-launched flight. In fact, this particular Neptune still had enough gas aboard for another 500 miles or so upon landing.

The 5,060-mile flight began aboard the aircraft carrier Franklin D. Roosevelt (CVB 42), off the U. S. Atlantic coast. It ended at Mills Field, South San Francisco, Calif., after crossing the Bahamas, the Canal Zone, Nicaragua, and parts of Mexico. Time in flight was a little less than 26 hours. The previous distance record for carrier-based planes, also set by a Neptune, was exceeded by 180 miles.

Seven crew members manned the P2V-2 on its trail-blazing jaunt. Gross weight at takeoff was 64,500 pounds—five and one-fourth tons less than the plane's maximum gross weight. The Neptune's wheels were clear of the deck before the plane had covered half the carrier's deck length. Jato units assisted the plane's two motors in whisking the lightly laden aircraft aloft.

The P2V-2 Neptune is considered one of America's most useful and versatile military planes.
Cockpit Capsule

In its search for increased pilot safety, the Navy is looking forward to the day when increased speed and ceiling of aircraft will make the current ejectable pilot seat outmoded.

One answer being developed to the problems of cold, windblast and lack of oxygen confronting an aviator bailing out at high speed and altitude is the cockpit capsule—a streamlined gadget clamped to the plane's fuselage so that it hugs closer than a flea on a dog's back.

So built that it does not disturb the airflow of the plane, the capsule un挂钩s itself when the pilot or aircrewman moves a lever, and is propelled up and away from the plane's structure. Automatically it spreads fins and releases a small drogue parachute to prevent tumbling even at decreasing speed.

Then a large chute is deployed which brings the entire capsule to earth at a landing speed only slightly above that of ordinary parachute landings.

On the way down the capsule is pressurized and insulated from cold stratosphere temperatures. But if a pilot wishes to bail out from the capsule in a hurry, he can pull another lever and descend in his own parachute.

Ordinarily he'd do well to stick with the capsule, however; for its usefulness is by no means ended upon landing. If landing is effected on water, the thing floats like a boat. If it lands in the Arctic, it affords protection against weather. Of course it's equipped with provisions designed to aid the flyer's chances of survival in wild or dangerous areas.

In short, though no claim has been made that it will alleviate the current housing shortage, it's equipped with practically everything but inside plumbing and a cooking range.

Pacific Paradise

Life on a Pacific island in peacetime isn't exactly a bowl of coconuts, but it isn't bad either, the Navy has discovered.

With the dark shadow of war lifted, the sunny, tranquil islands of the central Pacific are pretty well back to normal once more.

Islands with familiar names—Majuro, Kwajalein, Ponape, Truk, Saipan, Yap and Peleliu—lie silent, sandy specks on the broad ocean, the natives once again enjoying an undisturbed existence in their clustered villages.

So says the Navy in its second annual report to the United Nations on the U.S. trusteeship in the Pacific. No one is getting rich, but no one is starving either, the report states.

The uncomplicated economies of the islands are more or less in balance. Income from exports of copra for coconut oil and artistic handicraft items provide the cash for such simple wants of the natives as soap, cloth, cigarettes and shoe polish.

Most of the other needs of the islanders can be fulfilled within easy distance of their front yards. They can hook fish out of the lagoons and collect piles of good-eating coconuts from the trees that dot the islands. To build a house, one has merely to go out and chop down a couple of palms.

To give the islands under its care a slightly more varied diet, the Navy has helped to import 58 heifers and six bulls which will be used to form the beginnings of a dairy herd in the Trust Territories.

To aid the expanding economy of the islands, the door has recently been thrown open to outside shipping concerns to circulate freely in the 2,400-mile-wide expanse of water and islands. Heretofore, the Navy-operated Island Trading Company has had to carry the entire load.

War has been declared on the chief economic pest in the islands, the coconut beetle.

Not only the beetle but also the ballot is coming in for its share of attention. Power of government rests with the Navy, the report says, but the natives are taking over more and more local and regional administration. Future plans call for even wider native participation in island governments.

The secret ballot has been installed and the people are rapidly learning
Navy Diving Hero Still Active in Panama

What do CPOs do after they finish up 20?

Well, some start raising chickens, some withdraw from active life and some ship over. And some, realizing that they are just entering the prime of life, go on to bigger things. Down in the Panama tropics, for instance, there’s an ex-chief machinist’s mate who is the Canal Zone’s foremost diving man—and he finished up 20 years in the Navy back around 1937.

William Badders is his name. People all over the nation heard a lot about him back in the days when the submarine uss Squalus was being raised from the ocean floor. He got the Congressional Medal of Honor for work he did on that job, and the Navy Cross for work on the sunken S-51 before that—and a letter of commendation for work on the ill-fated S-4. Badders was a member of the first class of students that went through the deep-sea divers’ school when it opened at Washington, D. C., in 1926.

To get back closer to the present, the ex-chief went to the Canal Zone in 1940 to set up a new diving organization. Up to that time, they had only what they called “lock divers” at the canal. Should a ship have been sunk cross-wise in the channel or should some other such disaster have occurred, there would have been few men and little equipment at hand ready to remedy the situation. A change was in order.

One of the first steps to be taken was to select a site for a local diving school. Badders knew of a place on the jungle-clad shore of Gatun Lake where a freighter was sunk in fairly deep water. The submerged and capsized hull would make an ideal practical training school, he knew. A road was laid out to the site. A shed was built on the lake shore to be used as an office, classroom and storehouse. A barge, compressors, diving suits, all the tools of the diver’s trade were acquired and moved in. A crane was erected to place heavy equipment on trucks, barges or flatcars. Soon the tropical diving school was operating at full swing.

During World War II, Badders trained 75 civilian divers and qualified at least 150 Navy divers. Why so many civilian divers? One reason was that a great many of them went into the service—particularly the Seabees—soon after they were qualified. There they did great Paul Bunyan-like things—under water as well as on it.

Today, peacetime conditions have cut Badders’ crew to a fraction of its wartime strength, and his students are few. But, if you get down to the town of Gatun some time, catch a ride over to his establishment. Anybody will tell you where it is. There you will see as complete and busineslike a set of salvage equipment as you’ll find anywhere. You’ll realize that it’s ready for instant use, for trouble can occur in the canal in peacetime as well as any other time.

Badders goes over to his diving base each morning, early. If there’s no diving or salvage to oversee, there’s still plenty to do. It takes constant attention to keep all that equipment in tip-top shape in the tropical climate, and he sees that his local help stays on the job. He keeps up with all the latest wrinkles in his profession and keeps up on the paper work. Any time something comes up that requires the attention of a diver, Badders knows where he can find plenty of them—and quick. In two shakes of an air hose he can have the divers and the equipment at the scene of action and at work.

The boss-man will be glad to show you around if you ever get down to his place. As he leads you briskly about the place, speaking of many things, you’ll learn that some ideas held by many people are all wrong. Three such ideas are these: Life in the tropics makes an old man of you in a hurry, deep-sea diving ruins a person’s health, a man’s active career is about finished when he “goes out on 20.”

"Tain’t so. Not always, anyway—as this ex-CPO’s activities prove.
ALOHALAND—J. H. Hackstedde, EM3, welcomes his wife and son on their arrival in Pearl Harbor.

Seabees Still in Business

A lot of people think that there aren’t any Seabees any more, but they’re wrong. The Navy’s famous Construction Battalions are still present and accounted for, although not as large as before (see p. 2).

Now numbering less than 5,000—as compared to approximately 250,000 during World War II, the Seabees seem to many people to have vanished. Still, they are carrying on their strong-armed work over a good share of the world—at 14 Pacific bases, alone. Seabees are on duty at both sides of the Atlantic, and at Pt. Barrow, Alaska, a Seabee detachment is helping test and develop Arctic equipment. Others are busy at island bases within a few hundred miles of the equator. Operating under direction of the Bureau of Yards and Docks and the Civil Engineer Corps as before, the Seabees are engaged mainly in maintenance work and utilities operation.

But perhaps their most important peacetime function is their in-service training program. Seabee recruits are given on-the-job training and experience in the wide fields of skills covered by the construction ratings.

Most Seabees are classified under Group VIII ratings. This group includes the rates of surveyor, construction electrician’s mate, driver, mechanic, builder, steelworker, and utilities man. These specialties cover the skills used in more than 60 civilian trades. A few rates drawn from Group VII, Engineering and Hull, are included in the Construction Battalion organization, also.

Typical of the activities scheduled for Seabees this year is an operation being carried out by Mobile Construction Battalion #1, of the Naval Amphibious Base, Little Creek, Va. The battalion is now on the island of Vieques, off Puerto Rico, which was the scene of this spring’s full-scale all-service amphibious exercises. The First Mobile Battalion built roads, landing ramps, and bleachers for observers.

During the actual landing operations, the 105th Seabees—also from Little Creek—demonstrated the use of pontoon causeways and other advance-base equipment the Seabees made famous in World War II.

In addition to the Little Creek installation, stateside activities employing Seabees are the Amphibious Base at Coronado, Calif., and the Naval Construction School, Ft. Huéne, Calif.

Instead of being deactivated, the Construction Battalions make up one of the most progressive and efficient branches of the naval service. Their men are well trained and equipped. The Seabees are constantly developing new techniques and procedures which will be beyond all value when and if the U. S. ever needs new advance bases anywhere in the world.

MAYOR of Louisville, Hon. Charles P. Farnsley, congratulates LT J. F. Akers on his completion of 30.

Ships Join Pacific Fleet

In moves to bolster the pared Pacific Fleet, six combat vessels have been or will be deployed from the Atlantic.

Latest transfer to be announced is that of uss Stilley (CVE 118), being overhauled at the Naval Shipyard, Boston. Stilley will team up with uss Badoeng Strait (CVE 116) to balance active carrier strength equally between the two oceans, with uss Mindoro (CVE 120) and uss Falau (CVE 122) remaining in the Atlantic Fleet.

Also pending is the transfer of destroyers uss Epperson (DDE 719) uss Philip (DD 498) and uss Renshaw (DD 499). These ships will join uss Carpenter (DDK 825), uss Fletcher (DDE 445) and uss Radford (DDE 446), already in Pacific waters, to form a new anti-submarine squadron, Conron 1, probably based at Pearl Harbor.

Meanwhile the big 17,000-ton uss Rochester (CA 124) was shifted westward to join uss Juneau (CLAA 119) in forming Cruiser Division 5. The move increases to six the number of active cruisers in the Pacific.

First cruiser of Oregon City class to operate on the West Coast, Rochester’s appearance is marked by the single stack adapted as the newest thing in cruiser design. The ship’s catapults were removed last year, in converting the aviation complement from seaplane to helicopters.
Coco Solo in Reduced Status

Coco Solo, probably the Canal Zone's most famous Navy activity, is going into "partial maintenance." Things will be quiet at Coco Solo when the current reduction is completed—as quiet as they have been at any time since 1922. At that time, the station was placed out of commission and in a reserve status. Only a skeleton crew was kept aboard to maintain the area and a total of two planes remained in operation.

At a time like this—at a sort of milestone in Coco Solo's history—it is interesting to glance back along the trail.

Submarine Base, Coco Solo, was established in April 1917, just after the U.S. entered World War I. The first vessels to be stationed there were the submarine tender USS Talahassee and five C-class subs. The area now comprising Coco Solo was swampy, like much of the surrounding territory. More than 2,000,000 cubic yards of coral from Manzamo Bay were dredged up and deposited on the land to give it more elevation.

Soon air operations began at Coco Solo, and by mid-1918 R9 flying boats were going as far as 70 miles to sea to guard the approaches of the Panama Canal. Pilots employed carrier pigeons for contact with the base. Between the end of World War I and the 1922 inactivation, there were 17 HS-2L pusher-type seaplanes in operation there. These were augmented by seven HS-1L seaplanes, two R9 seaplanes and one R-type kite balloon.

The 1922 shut-down was short in duration. The following year saw a rebirth of activity and a return to the active list. The air station was made separate from the submarine base in 1929, and was named "Fleet Air Base" in 1931. The submarine base for the Canal Zone area was moved to the Pacific end of the canal in 1943, leaving Coco Solo entirely devoted to aviation, aside from its duties as a naval operating base.

Many interesting tales are told of Coco Solo. Some of these concern record rainfalls—34 inches in one month in 1934, and fish found on the landing field afterward. More than an inch of rain is said to have fallen in 15 minutes in November 1949.

Other oft-repeated tales concern historical pets. One was a ferocious bulldog named Solo, who used to rule the roost while on liberty in town. One day he met his match—a gang of local pooches. The affray ended his career for good. "Piggo," a beautiful Chesapeake retriever, met his demise while swimming between Coco Solo piers. A hungry shark put an end to his earthly existence.

A dog named "Snipe" lived at the station for many years. When he died in 1949 at an age of 20 years or more, he was buried at sea with "full military honors." Last year also brought an end to the activities of "George," the parrot. "George" spent much time at the main gate, where he had all kinds of things to say to people passing through. A car ran over George at last, and now George's raucous voice is stilled.

In earlier years, a crocodile lived in a culvert at the gate. Guards used to feed him portions of their night rations, and "Croc" grew in stature. At last a straight-shooting O.D. put a bullet through Croc's small brain to safeguard passers-by. They stuffed Croc's skin for a souvenir. Croc was one of the few armored cruisers to be sunk by pistol fire.

Unlike its pets, NOB/NAS Coco Solo will live on, even though in a subdued sort of way. Some 200 civilians and a lesser number of Navy personnel will remain on duty there under present plans. (See page 8.)
Periscope Cameras Show Submarine Kills

One of the most famous photographs of World War II was taken through a U. S. submarine periscope. During the Battle of Midway a U. S. sub torpedoed a Japanese cruiser, and as the Jap warship rolled over on its port side and sank, an officer on board the submarine hastily pushed a 35mm. camera up against the periscope viewscope and snapped the shutter. The dramatic picture of the cruiser in its death throes, the Japanese flag plainly visible atop a turret, was the result.

It was by this method that all periscope pictures were taken during the late war. Usually submarines carried two standard cameras—a 16mm. movie and a 35mm. still camera. One major disadvantage was that the submarine commander could not view the periscope when a picture was being taken. In fact, the photographer usually had to take the picture “blind,” without knowing exactly what was showing in the camera lens at the moment the picture was snapped. While the 16mm. camera was fitted with a viewing device that permitted the operator to see through the periscope when the camera was attached, it was seldom used in actual operation. Ordinarily, the skipper placed the periscope on the target, then the photographer quickly placed the camera on the scope, snapped the picture, and removed the camera.

NEW periscope cameras permit sub skipper to keep target in view while pictures are being taken.

Just as the war ended, BuAer announced the development of a vastly improved camera for periscope photography. Designated as the Mark 4, it overcame many of the disadvantages of the standard camera. Outstanding advantage of this camera is that it permits the sub skipper to keep the target in view throughout the camera, up to the moment that the picture is taken, and then the target is obscured from view only for a period of one second. A watch and counter installed inside the camera automatically assigns each photo a serial number and imprint on the negative the time the picture was taken. At the side of the camera is a slot where a small card—on which may be written such data as the date, ship, longitude and latitude—can be inserted without disrupting the camera operation.

Although the Mark 4 is a still camera, its operation is semi-automatic, allowing approximately 40 pictures per minute to be taken. Regular live and one-quarter inch aerial film is used. The camera is fitted with four hanger studs which permit it to be securely fastened to the camera mounting bracket on the periscope in a matter of seconds. The entire camera unit, with a loaded roll film magazine in place, weighs about 19 and one-half pounds and is about 10 inches square.

One of the most valuable uses of submarine cameras during the war was for photo-mapping. Prior to the invasion of many Pacific islands, U. S. subs would sneak in close and circle the island, raising their periscopes at timed intervals for pictures to be taken.

In peacetime, submarine crews are drilled regularly in the use of the periscope camera. During every exercise, maneuver or reconnaissance cruise, periscope photos are taken and the cameramen drilled in the technique of obtaining good pictures for photo-maps. During war games, periscope photos are taken of “torpedoed” ships for evidence.

While the present Mark 4 submarine periscope camera is the best of its kind in use, BuAer scientists are working toward the development of improved types of periscope cameras.

U. S. Navy Teaches Others

The electronics maintenance school at Great Lakes (Ill.) Naval Training Center fairly crawls with flying electronics and high-frequency radio waves. The instructors move in a rarefied atmosphere where things like thyratron tubes are as familiar as old steaming shoes. But when it comes to discussing such technicalities in Turkish or Spanish, that’s something else again, or could be.

In the class which convened early this year are six Turkish naval officers and one Chilean naval officer. The instructors might well be pardoned for having received with misgivings the news that these people had arrived. Fortunately, it turned out that all the foreign officers had previous experience in electronics or engineering. Also, all were well on the way to learning English. Language difficulties have been surprisingly few.

“If there’s any doubt about a word, it’s an easy matter to look it up,” one faculty member says. “Most Turkish technical terms are simple transliterations from English, anyway.”

The course, for officers only, lasts a year. It offers college-level training in electronics theory and in fundamentals of design, operation, installation and maintenance of all types of electronics equipments. The first half-year consists mostly of classroom work on theory, with math and more math. Language difficulties put a greater strain on the foreign officers than must be met by U. S. Navy and Marine Corps students, but so far all are managing quite well.

“Mathematics is a universal language,” comments the school’s OnC. “Two and two make four in Turkish just as in English. Or perhaps I should say, iki and iki make dört.”

Turks use the same Arabic numbers as Americans do. In fact, they were using them when our own Anglo-Saxon ancestors—who could count—were scratching their heads over Roman V’s and X’s.

Turkish navymen are well known at Great Lakes. Shortly more than a year ago nine Turkish naval officers were graduated from electronics maintenance school and 27 enlisted Turkish sailors were graduated from the 42-week electronics technician course. All had high final marks.

Personnel of the Turkish navy are selected for training on a basis of electronics experience and proficiency in English. Because both officers and
As in school, the Turkish navymen are successful in the social sphere. Schooled in European social graces, they are quite at ease at dinners and formal dances. Occasionally, their imperfect pronunciation of English words brings unforeseen results, as is to be expected. One group, visiting a Milwaukee cafe, ordered iced tea — pronouncing the term as one word, with the accent on the “iced.” The waiter, puzzled, looked doubtfully at the strange uniforms.

“Raw or cooked?” he asked after a moment’s thought.

It was the Turks’ turn to look puzzled now. “Cooked,” they decided at last.

The waiter departed. Presently he returned bearing bowls of — oysters (iced teas). They were cooked, of course.

American sailors have doubtless had similar misadventures in almost every foreign country. Meanwhile the U. S. Navy instructors and the Chilean and Turkish students at Great Lakes continue to get along all right. When you get down to the finer points of *denizalti savunma aleti* osciliators, Turkish is no worse than any other language. In English, they would be subaqueous hypersonic magnetostriiction transducers — if that makes it any clearer.

**Transfer of Ships to MSTS**

Transfer of approximately 162 ocean-going ships from the Army to the Military Sea Transportation Service is now under way.

Seventy-two vessels located in New York, San Francisco and Seattle harbors are now a part of MSTS, which is under jurisdiction of the Navy. Approximately 90 other Army ships, assigned to overseas commands at the time of the earlier transfer, are slated to be under Navy jurisdiction by 1 June 1950. Of the 72 vessels already transferred, nine are owned by the U. S. Maritime Commission. These were turned over to the Navy on a loan basis.

Formal transfer of the 72 ships located in U. S. ports was made at the New York, San Francisco and Seattle ports of embarkation. Impressions ceremonies marked the event in which the colors of the Army Transportation Corps were hauled down and replaced by Navy insignia.

Former names of the ships will be retained under Navy operation. Typical examples of these names follow: transports — *General A. W. Greely*, *General Alexander Patch* and *General H. F. Hodges*; cargo ships — *Haiti Victory*, Colonel William J. O’Brien and *Private Francis X. McGrath*. More than 17,000 civilians formerly employed by the Army on ships and in administrative organization units based ashore are being transferred to the Navy.

Responsibility for operating Army port terminals will continue to rest with the Army. This includes loading and discharging cargoes, operating certain harbor craft, and storing, routing and controlling personnel and supplies for shipment. At other ports, loading and discharging cargo will be the responsibility of the department for which ocean transportation is furnished.

The Army’s transport service was born at the outbreak of the Spanish-American War, although some transports had been used by the Army in the Civil War. During World War II, the Army employed 1,706 ships, totalling almost 16 million tons. These vessels transported 7,290,000 passengers overseas during the war years, as well as more than 126 million tons of cargo from Army ports alone.

For an earlier story on the Military Sea Transportation Service, see ALL HANDS, November 1949 (pp. 30 and 31).
Here’s How You Stand on the Shore Duty Eligibility List

What’s your status on the Shore Duty Eligibility List?
From the following information on the shore duty situation — the third tabulation, published in ALL HANDS every six months — you can figure out your own position in regard to how close you are to shore duty.

Since new requests to the Bureau of Naval Personnel change the picture from time to time, the information below should be considered only as a general guide.

In some cases, a few men on the Shore Duty Eligibility List might have a longer period of continuous sea duty than is listed for the top men in the following tables. Also, remember that men in the following categories are not included in Table I or Table II:
• Discharged, with no information in BuPers on reenlistment.
• Hospitalized.
• Presently ashore for duty of less than one year’s duration.
• Serving west of Hawaii on other than rotated ships, less than one year, without dependents at duty stations.
• Serving outside continental USA with dependents at duty station.
• Less than six months on board since returning from a naval school.
• Undergoing instruction at a naval school on a returnable or non-returnable quota.

"After 20 years, at last I’m home on the range."

- Less than six months on board newly constructed vessels.
- At receiving station when request was submitted and no information on present location.
- Being held by BuPers for screening of jackets pending assignment.
- And here’s a tip you will want to keep in mind: Keep BuPers informed at all times. This pertains especially to personnel who have been placed on the SDEL, and have had a change of address, change or advancement in rating since submission of original request for shore duty, or who desire to change their choices for shore duty. These personnel should inform the Chief of Naval Personnel (Attn: BuPers 6305) immediately, preventing unnecessary delay in sending out your orders to shore duty.

Next tabulation of the shore duty situation will appear in the October 1950 issue of ALL HANDS. To consult the official directive on sea-shore rotation policies, see BuPers Cir. Ltr. 36-50 (NDB, 15 Mar 1950).

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### II. Total Continuous Sea Service of Top Man on SDEL, Now at Sea, request duty at specific location.

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**APRIL 1950**
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### II. Total Continuous Sea Service of Top Man on SDEL, Now at Sea, Who Requests "Anywhere U.S."

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### Officers Trained in Aerology Rotated Under New Plan

Many general line officers (Code 1100) and general aviators (Code 1310) have been postgraduate trained and assigned to aerological duties since World War II.

The Navy’s general plan is to rotate these officers periodically from aerological to general line or aviation duties. However, due to a shortage of trained replacements, many officers currently performing aerological duties have been assigned to these billets for a longer period than BuPers considers desirable.

Because of this situation, BuPers is establishing a new policy in regard to the assignment of general line officers and aviators who are postgraduate trained as aerologists. An increasing number of general line and aviation officers are now being assigned to post-graduate aerological schools.

Effective July 1951, officers who attend the one-year applied aerology course may expect to be assigned to aerological duties for a period of three years following completion of the course, after which they will be released to return to general line or general aviation duties. A later return to aerological duties following a period of general service will depend upon the desires of the officers concerned and the requirements of naval aerology.

Officers who, after completion of the one-year course, desire further specialization in aerology may apply for an additional 18 months course in aerological engineering after completing a three-year tour in aerological duties.

In a directive on this subject, BuPers Circ. Ltr. 9-50 (NDB, 15 Jan 1950) it was pointed out that present requirements for promotion of unrestricted line officers (codes 1100 and 1300) above the grade of lieutenant call for at least two years of sea or foreign duty in current grade. In view of this, BuPers will make assignments to sea duty and shipboard aerological billets on the basis of the needs of the individual officers concerned in order that they may comply with sea duty requirements, maintain their proficiency in general shipboard duties, and qualify for promotion.

Although these officers will be ordered on board ships and to overseas activities with primary duty as aerological officers, commanding officers are encouraged by BuPers to assign these officers to such appropriate additional duties, including watch standing, as will round out their general line qualifications.

### VMF-142 Wins Air Trophy For Outstanding Record

Marine Fighter Squadron 142 has won the Marine Air Reserve Trophy for its outstanding performance during the past year. The award was made at NAS Miami.

The trophy, emblematic of highest efficiency among Organized Reserve fighter squadrons, was awarded on the basis of attendance at summer maneuvers, training proficiency and flight performance.

Originally commissioned a Marine scout bombing squadron in March, 1942, the present VMF-142 won two Navy Unit Commendations in Pacific campaigns. It was decommissioned in September 1945, but was reformed as an Organized Reserve fighter squadron the following June.
Officer Eligibility Is Revised
For Correspondence Course
In Naval Intelligence

The correspondence course in naval intelligence, administered by the U. S. Naval School (Naval Intelligence), NRS, Washington, D. C., has been downgraded from confidential to restricted. As a result of this change, revised instructions regarding eligibility to take the course have been issued.

Persons now eligible to take the course are limited to commissioned officers of:

- The Regular Navy, Marine Corps and Coast Guard on active duty.
- The Naval Reserve, Marine Corps Reserve and Coast Guard Reserve on active duty.
- The Naval Reserve on inactive duty who are classified S(I) or who are in the category of air intelligence (ACI) officers. Applicants must reside within the limits of a naval district.
- The Marine Corps Reserve on inactive duty who are classified as intelligence officers and whose applications are approved by the directors of the appropriate Marine Corps Reserve Districts. Applicants must reside within the limits of a naval district.
- The Coast Guard Reserve on inactive duty who are prospective intelligence officers, and whose applications are approved by the commanders of the appropriate Coast Guard Districts. Applicants must reside within the limits of a naval district.
- The Regular Army who are engaged in intelligence activities (limited to 50 at any one time).
- The Regular Air Force who are engaged in intelligence activities (limited to 50 at any one time).

Officers of the Navy, Marine Corps and Coast Guard on active duty may submit their requests for enrollment in the course to the Director, U. S. Naval School (Naval Intelligence), via their commanding officer. Naval Reserve officers of the Organized and Volunteer S(I) classification and Volunteers in the aviation category (ACI) on inactive duty may submit requests for enrollment via their district commandant. Aviation Organized and Associate Volunteer Reserves (ACI) will submit requests via their COs and the Chief of Naval Air Reserve Training.

Requests for the course may be forwarded by interested Marine Corps Reserve officers on inactive duty, via their Marine Corps Reserve director. Coast Guard Reserve officers on inactive duty may submit their requests via the commander of the Coast Guard District in which they reside.

Complete instructions on such information as these requests should contain are carried in BuPers Circ. Ltr. 8-50 (NDB, 15 Jan 1950). Upon successful completion of the course, officers will be forwarded a certificate by official channels.

Three-Day Course Started
For I and E Officers

A three-day indoctrination course for information and education officers (educational services officers) has been started in the 11th Naval District.

A quota of 20 has been set for the new course. Commanding officers desiring to send personnel to this indoctrination course should forward requests to the Commandant, 11th Naval District (Attn: District Director of Training), San Diego, Calif.

Classes scheduled between now and mid-year are set for 5-7 April, 10-12 May and 7-9 June.

Children of Naval Personnel
Eligible for Scholarships

Scholarships totaling $18,000 awarded by the Sidney Hillman Foundation will be available in 1950 for sons and daughters of officer and enlisted personnel of the Navy, though not on a preferential basis.

Schools awarding the scholarships are Brandeis University, Waltham, Mass., $2,000; Howard University, Washington, D. C., $2,000 New School for Social Research, New York City, $2,000; New York State School of Industrial and Labor Relations at Cornell University, Ithaca, N. Y., $2,000; Roosevelt College, Chicago, $5,000; and the Chaim Weizmann Institute, Rehovoth, Israel, $5,000.

Interested candidates should contact the school of their choice for detailed information.

Semi-Annual Schedule Set
For Intelligence Course; Will Begin in July 1950

Beginning in July 1950, the regular intelligence courses (including foreign language instruction) at the U. S. Naval School of Intelligence, Receiving Station, Anacostia, D. C., will convene twice yearly on 1 July and 1 January.

According to BuPers Circ. Ltr. 24-50 (NDB, 15 Feb 1950), the input to each regular class at the school will be composed of one half the annual quota provided by the Personnel Allocation Plan, plus naval aviators and line officers scheduled for assignment to intelligence billets as class vacancies permit. The combined classes will be limited to 45 students.

Conversion from an annual to a semi-annual schedule of new classes leaves the period of July to December 1950 with one-half of the annual student quota vacant. During this period only, a concurrent intelligence class (not including language instruction) will be conducted at the school.

Interested officers have been invited to submit their applications for this course to the Chief of Naval Personnel (Attn Pers-8111H). To be considered, their requests must reach BuPers not later than 15 Apr 1950. Nine naval aviators and 14 line officers will be ordered to this special class.

A limited number of officers selected for the regular intelligence course which convenes in July and who are available earlier may be enrolled in any of the foreign language courses which convene annually in April. This will permit completion of the language phase of the course prior to commencing the regular intelligence course. A circular letter, issued annually by BuPers, invites applications for all courses given by the Postgraduate School, including the regular intelligence courses.

AB Training Course Added
To Those Used by the Fleet

One more training course for advancement in rate has been added to those already in use in the fleet. It is:

Aviation Boatswain's Mate, Vol. 1, NavPers 10382.
Two 'Fitness Reports' Will Be Submitted on CPOs and PO1s

Reports on the performance of chiefs and first class petty officers will be submitted to the Bureau of Naval Personnel twice within the next year to provide vital personnel information in a manner similar to the fitness reports currently submitted on officers.

The form will be submitted only twice — on 15 July 1950 and 15 Jan 1951 — unless it is later decided to extend the plan beyond the latter date. Each report covers the man's performance for the previous six months—and thus the period to be covered in the first evaluation sheet has already begun, in January 1950.

For CPOs and PO1s transferred within 30 days prior to the specified submission date, the report will be made out at the time of transfer.

From these two highly important reports, BuPers will derive enough information, supplementing other service documents, to provide guidance in selecting personnel for special missions, for duty as instructors, and for promotion to warrant officer or limited duty officer status.

Announcement of the evaluation plan was made in BuPers Circ. Ltr. 23-50 (NDN, 15 Feb 1950).

"Since the Evaluation Sheet will become one of the most important records available to the Bureau on senior petty officers," the directive stated, "commanding officers will insure that careful thought is given to the completion of this report."

In the larger commands where direct contact between commanding officers and senior petty officers may not be possible, the directive states that the form may be filled out by a subordinate officer, but not an officer on a level lower than a department head. Other division and watch officers are to be consulted on the performance of CPOs and PO1s under them.

Unsatisfactory or unfavorable marks or comments made on an evaluation sheet will be turned over to the CPO or PO1 reported on, and he may either add his own explanation or sign a note that he desires to make no comment.

BuPers expects that the results will determine whether the present quarterly marking system in the case of CPOs and PO1s may later be revised. Comment, the directive notes, "is invited on the value, format, and desirability of continuing the use of this Evaluation Sheet."

The form to be used is a new one prepared especially for the purpose—"The Chief and First Class Petty Officer Evaluation Sheet" (NavPers 1389) — which will be available to commanding officers at the district printing and publication offices.

NavPers 1389 is a condensed, concise form which is complete on two sides of a single sheet of paper. On the front side are spaces for grading the person in 16 different traits, with the more favorable to the right and the least favorable to the left.

The front side contains all of the grading marks in the form, and since many personnel will want to know what they will be marked on, the entire page is reproduced for their information on the next page.

On the reverse side of NavPers 1389 are spaces in which the person is marked as to qualifications for officer status — none, fair, good, excellent, or outstanding — and another space for recommendation for promotion to CPO, warrant officer, or limited duty officer. Another space provides for a "yes" or "no" recommendation for reenlistment.

Besides these items on the reverse side, there are several blank lines for comments, a space to indicate the relationship of the reporting officer to the individual, and a last space for signature, rank and file number of the reporting officer.

Following are the complete instructions to the reporting officer, to be used in making out the form:

"Evaluation should not be based upon general impression; it should be based upon actual, observed performance. The mark given in one trait should not influence the mark given in another trait. Men can be expected to vary in strength from one trait to another. Complete and careful observation should support a mark in each one of the 18 listed traits.

"The following is a step-by-step procedure for using this form:

- Consider the first trait listed in the left column.
- Read the descriptive phrases listed to the right of the trait.
- Decide which of these descriptive phrases best describes the individual.
- Mark the individual in one of the boxes under the most fitting descriptive phrase. These boxes run from the least favorable to the left, to the most favorable at the right.
- Repeat this same procedure for each of the listed traits, keeping in mind that each trait should be considered separately, and that the mark in one trait should not influence the mark in another trait. Also keep in mind that the majority of personnel can be expected to fit into the middle or average category.
- Now in the space indicated in the lower half of the back page, make a brief comment describing any general impressions you have of the individual; indicate the degree to which you feel the individual is qualified for officer status; indicate your recommendation regarding reenlistment. If this recommendation is negative, include reasons in comments. If the individual has outstanding ability in some technical specialty, so state and identify the specialty."
| Ability to Understand Instructions | Ability to Solve Problems | Ability to Plan and Organize Work | Industry | Reliability, Including Responsibility | Basic Technical Knowledge and Background | Ability to Apply Technical Knowledge | Effect to Increase Both Knowledge and Technical Ability | Human Understanding | Ability to Properly Delegate Responsibility and Authority | Initiative | Teaching or Instructational Ability | Ability to Build or Maintain High Morale | Exemplary Conduct | Perseverance | Military Appearance | Name | Rate and Rating | Service No. |
|----------------------------------|--------------------------|----------------------------------|----------|--------------------------------------|------------------------------------------|--------------------------------------|---------------------------------------|------------------|-----------------------------------------------|------------|--------------------------|-----------------|------------------|------------------|------------------|-----------------|----------------|------------------|---------------|------------------|
If Ship Is on This List, You Can Get Free Copy of History

More than 800 histories of ships which fought in World War II are now available upon request.

If you are a former crew member or if you are just interested, you may write in and get a mimeographed copy of your ship's history — if your ship's name is listed below.

Campaigns, battle actions, citations and honors, ship's size and complement and much other interesting information about your ship has been crammed into these descriptive accounts.

To compile these histories and the others which will follow, Navy writers pored over mountains of log books, as well as stacks of Action Reports, War Diaries, Commanding Officer's Histories and other official records.

To get your copy of your ship's history, write a card or a letter to Ships' Histories Branch, Room 2511, Department of the Navy, Washington 25, D. C.

Don't write, however, if the name of your ship does not appear in the following list. It will only use up valuable time answering your query and it won't get a history of your ship to you any sooner.

Approximately 7,000 more ship's histories remain to be written. ALL HANDS readers will get the word just as soon as new histories are ready for distribution.

Here are the ones that are now ready:

- Aaron Ward (DD 483)
- Alhambra (AV 5)
- Albert W. Grant (DD 649)
- Alysone (AKA 7)
- Alfred A. Cunningham (DD 752)
- Allen M. Sumner (DD 692)
- Alexander (AKA 53)
- Alshain (AKA 85)
- Alabama (BB 60)
- American Legion (APA 17)
- Allasee (SS 218)
- Ammen (DD 527)
- Albany (CA 123)
- Aneon (AGC 4)
- Anderson (DD 411)
- Angleter (SS 240)
- Antietam (CV 38)
- Anzio (CVE 57)
- Apogon (SS 308)
- Appalachian (AGC 1)
- Arcadia (AD 23)
- ARD-29
- Argonaut (SS 475)
- Ariel (AF 22)
- Aristaeus (ARB 1)
- Arizona (BB 39)
- Arkansas (BB 33)
- Arneb (AKA 56)
- Asheville (FF 1)
- Astoria (CA 34)
- Astoria (CL 90)
- Atlasca (AO 68)
- Athena (AKA 23)
- Atlantis (CL 104)
- Atlanta (CL 51)
- Atlas (ARL 7)
- ATR-25
- Audrain (APA 59)
- Augusta (CA 91)
- Aurelia (AKA 29)
- Bache (DD 470)
- Badoeng Strait (CVE 116)
- Bailey (DD 492)
- Balroko (CVE 115)
- Baker (DE 136)
- Baltimore (CA 68)
- Balch (DD 363)
- Bang (SS 358)
- Bangor (PF 16)
- Barb (SS 280)
- Barnett (APA 5)
- Barton (DD 722)
- Bataan (CVL 29)
- Beale (DD 471)
- Bear (AG 39)
- Beatty (DD 756)
- Beaufort (PF 59)
- Beaumont (PG 69)
- Beaver (ARB 19)
- Behas (DE 10)
- Belleau Wood (CVL 24)
- Benham (DD 897)
- Benham (DD 796)
- Bennett (DD 473)
- Bennington (CV 20)
- Bergall (SS 302)
- Besugo (SS 321)
- Big Horn (IX 207)
- Biloxi (CL 80)
- Birgit (AKA 24)
- Birmingham (CL 62)
- Biscayne (AGC 18)
- Bismarck Sea (CVE 95)
- Black (DD 666)
- Blackfish (SS 221)
- Blenny (SS 324)
- Block Island (CVE 21)
- Block Island (CVE 106)
- Blue (DD 387)
- Blue (DD 744)
- Blue Ridge (AGC 2)
- Bogue (CVE 9)
- Boise (CL 47)
- Bon Homme Richard (CV 31)
- Bordelon (DD 881)
- Berie (DD 215)
- Berie (DD 704)
- Boston (CA 69)
- Boulder Victory (AK 227)
- Bowditch (AGS 4)
- Boxer (CV 21)
- Boyd (DD 544)
- Boyle (DD 690)
- Bradford (DD 545)
- Braine (DD 630)
- Brant (AMS 43)
- ex (YMS 113)
- Bray (APD 139)
- Bremerton (CA 130)
- Bridge (BY 1)
- Brill (SS 330)
- Brooklyn (CL 40)
- Brooks (APD 10)
- Broome (AG 96)
- ex (DD 210)
- Brule (APA 66)
- Brush (DD 745)
- Buchanan (CVE 28)
- Buck (DD 484)
- Buck (DD 420)
- Buck (DD 761)
- Buckley (DD 651)
- Bulmer (AG 86)
- Bully (AO 86)
- Chappo (AO 34)
- Chesapeake (AO 34)
- Chowanoc (CV 17)
- Chub (SS 329)
- Buoyant (AM 153)
- Burn (FD 435)
- Burke (APD 65)
- Burke (DD 588)
- Burruss (SS 312)
- Burns (DD 529)
- Butler (DMS 29)
- Cable (ARS 19)
- Cabot (CVL 28)
- Cadillac (DD 605)
- California (BB 44)
- Calvert (APA 92)
- Camp (DE 251)
- Canberra (CA 70)
- Camp (DD 494)
- Canopus (AS 9)
- Capitaine (CVE 109)
- Capitaine (SS 336)
- Carol (CVE 11)
- Carlson (DE 9)
- Carps (SS 538)
- Carpsell (APD 198)
- Cascade (AD 16)
- Cassin Young (DD 793)
- Catamount (LSD 17)
- Caleb (ARG 6)
- Charles A. W. Swift (DD 570)
- Charles E. Brannon (CE 446)
- Charles F. Hughes (DD 425)
- Charles F. C. Lec (DD 835)
- Charles R. Ware (DD 865)
- Charleston (PG 51)
- Charr (SS 328)
- Chemung (AO 30)
- Chief (DD 469)
- Cheyenne (CA 27)
- Chicago (CA 136)
- Chicago (CA 29)
- Chippewa (AO 34)
- Chowanoc (CV 17)
- Chub (SS 329)
- Clay (APA 39)
- Cleveland (CL 53)
- Clarksburg (DE 205)
- Cobbler (SS 344)
- Colahan (DD 658)
- Colhoun (APD 2)
- Colhoun (DD 801)
- Colonial (LD 18)
- Colorado (BB 45)
- Columbia (CL 56)
- Comstock (IX 20)
- Cook (APD 130)
- Cooper (DD 695)
- Coral Sea (CVE 43)
- Corbett (DE 438)
- Corduba (APD 182)
- core (CV 13)
- Corvus (AKA 26)
- Cowell (DD 547)
- Cowpens (CVL 25)
- Craven (DD 582)
- Crescent City (APA 21)
- Crewe (AMS 8)
- Carrick (AV 7)
- Dame (SS 247)
- Damato (DD 871)
- Dashiel (DD 659)
- Dauntless (PG 61)
- Dauphin (APA 97)
- Dayton (CL 105)
- Decatur (DD 541)
- DeHaven (DD 469)
- Dever (CL 58)

Finding a Windfall

Back in the days of wooden ships, every nation ambitious of sea power looked carefully to its source of timber needed in the construction of men-of-war.

Britain, for centuries among the mightiest on the sea, guarded well her oak trees as insurance that she would have the ships to maintain the supremacy her crafty sea lords had achieved. As a result it was part of the law of the land that no oak trees could be cut in England except for the Navy.

When trees were blown down, however, they were exempted from the ruling. The windfall, consequently, became a term denoting an unexpected, good find.

Navy Men Set a Record for Blood Donors

Navy donors contributed 414 pints of blood in a single day at Tongue Point Naval Station, Astoria, Ore., to set an all-time record for one day's work by a collection unit. The Red Cross bloodmobile was at the station for two days in all. A total of 601 sailors volunteered blood donations during that time. Of these, 595 were Navy people and six were Coast Guardsmen. Approximately one-third of all Navy and Coast Guard personnel at the station contributed. The rejection rate of volunteers was only 3.19 percent—much lower than the 20 per cent rejection rate usually expected. A large recreation hall was used as a collection center, with special "blood busses" delivering donors at regular intervals. Sailors went through the collection process at 15 at a time, finishing up with a 40-minute rest period. Blood sent to Portland, Ore., for storage at the end of the two-day bloodmobile visit totaled 577 pints.

The previous one-day record for blood collection stood at 355 pints, with employees of a California aircraft factory serving as donors.
Boolet Gives Newcomers the Good Word

Bothered with dizziness? Bilious? Can't sleep nights?—More to the point, do you have "that lost feeling" when reporting at a new station?

Only suggestion for the first three ailments is to consult the nearest HM, but you wouldn't be bothered by the last if you were reporting to Fleet Air Electronics Training Unit, Pacific Fleet, at NAS San Diego. And if all commands followed FAETUPac's lead, "that lost feeling" might be relegated to the same status as small pox in a list of epidemics no longer troublesome to Navy men.

FAETUPac gives two items to each man reporting aboard: (1) a big welcoming smile, and (2) a pocket-sized mimeographed booklet on the cover of which appear "Saludos amigos!" (roughly, "Hi, mates!") and "Welcome aboard!"

What appears inside, though, is no species of Spanish-American double talk. First comes a cheerful message from the C.O. ("...a very warm and hearty Welcome. We will endeavor to make your stay a happy and enjoyable one. We sincerely wish that this little booklet... may act as your official guide.")

Follows a clear explanation of the unit's chain of command, its history ("...the command was famous for the Ream Field Raiders football, basketball and softball teams...the fans became known as 'Little Brooklynites.' ") its job, its uniform regulations, its movies, its enlisted men's club ("...it features a beer garden, a dance floor and television.") etc., etc.

Then there's a good pictorial map with streets and buildings fully identified, and a list of useful telephone numbers—now wait, Mac, there are still some phone numbers you'll have to get by yourself. (However, they're readily available.

Want the word on registration of automobiles? That's in the booklet. On educational opportunities? So's that. On bus schedules? Ditto. On housing? That's there too. (Incidentally, the booklet says housing conditions are now pretty good around San Diego.

And if what you want to know isn't in the booklet, the PIO offers his services in finding the answer to any 64-dollar question.

Midway (CVB 41) Oceanographer
Milwaukee (CL 5) (AGS 4)
Mindoro (A0 187)
(CVE 120) Odon (SS 484)
Mingo (SS 261) Oglethorpe
Minneapolis (AKA 100)
(CA 36) Oklahoma (BB 37)
Mississippi (AG 128)ex (BB 41) Oregon City
Mississippi (CL 620) Orca (AVP 49)
(MD 720) Maddox (DD 731)
(MI 768) Maryland (renamed LST 559)
(MD 720) LST 768
(LST 722) LST 768
(MD 804) Maddox (DD 622)
(MD 902) Maddox (DD 751)
(MD 947) Magoffin
(MD 983) Macdonough
(MD 1014) Main Island (CVE 95)
(LST 1104) Marcus Island (CVE 77)
(LST 1106) Marcus Island (DD 677)
(MD 902) Maryland (BB 46)
(MD 947) Maryland (rename (AG 136)
(MD 983) Frederick (CA 8)
(MD 1014) Mason (DE 529)
(CVE 95) Massachusetts (DD 678)
(DM 59) Melvin (DD 680)
(BB 59) Menges (DD 320)
(MD 983) Massey (DD 778)
(CVE 101) Merrick (AKA 97)
(MD 947) Mertz (DD 691)
(MD 902) Maui (ARG 8)
(CVE 101) Maui (DM 31)
(MD 1014) Mayrant (DD 405)
(CVE 95) McCalla (DD 488)
(MD 902) Malmomonah#
(CVE 95) McCook (DM 86)
(CVE 95) McLaughlin (CM 10)
Reenlistment Mark Set By Crew of USS Verdin

The crew of the USS Verdin (AMS-38) voted to select a new crew mark during a seven-day period, but it is premature to identify the new mark, which is currently being painted on the ship's hull.

Several of Verdin's crew of 29, who consider life aboard an auxiliary minesweeper good duty, shipped over within the space of one week. Admittedly a cruiser or carrier may have a much larger number of men reenlisting during a seven-day period, but Verdin is nothing that is on a percentage basis (a few close to 24.138 per cent but call it 25).

Can your ship beat this?
Roundup of Legislation of Interest to Naval Personnel

Among the many bills introduced or acted upon by Congress are many items of interest to naval personnel. Each month ALL HANDS reviews action taken by Congress on this type of legislation to provide information to the naval establishment. The last legislative summary appeared in ALL HANDS, March 1950, p. 55.

Academy Provisions — H.R. 5532 and H.R. 7058: Favorably reported by House Armed Services Committee; to amend laws relating to the U. S. Military Academy and the U. S. Naval Academy. (Sections pertaining to the Naval Academy are: Section 4, requiring each midshipman appointed to the Naval Academy to sign articles specifying obligatory service. Under present law a midshipman engages to serve in the Navy during the pleasure of the President unless sooner discharged by competent authority; at present, it is the policy not to accept resignations from the time a midshipman enters the first class (the last year) and until he has completed three years service. Section 6 permits more flexibility in appointments and gives more opportunities to outstanding individuals. Section 7 provides for admittance of sons of Air Force and Coast Guard officers to the Naval Academy. Section 3 terminates the special age limit under which men whose secondary school education was interrupted, could complete it and still be appointed to the Academy. Elimination of this waiver brings the entrance requirements back to the 17 to 22 year age limits, the special provision having served its purpose.)

Administering Oaths—H.R. 6171: favorably reported by full House Armed Services Committee; to authorize commissioned officers of the Army, Navy, Air Force and Marine Corps to administer the oath required for the enlistment of any person, the oath required for the appointment of any person to commissioned or warrant officer grade, and any other oath required by law in connection with the appointment or enlistment of any person.

Retroactive Benefits—S. 3145: Introduced; to amend previous law so as to extend retroactively benefits for members of the Reserve components of the armed forces who suffered disability or death from injuries incurred while engaged in training.

Retirement Review—S. 3146: Introduced; to enable any commissioned officer who was discharged, retired, or released from active service without retirement pay for physical disability to obtain a review of his entitlement to retirement pay for physical disability.

Civilian Displacement—H.R. 7467: Introduced; to prevent military personnel from replacing civilians in the Department of Defense.

Reservists’ Status—H.R. 6077: Reported favorably by the House Armed Services Committee as an amendment to Naval Reserve Act of 1938; to clarify the status of Naval Reservists relating to offices of trust or profit under the government of the United States. (Present law has been construed to mean that, as far as Naval Reservists are concerned, no person holding any office of profit or trust under the United States may accept employment with a concern directly controlled by a foreign government. In the past many Naval Reserve aviators have had to be discharged in order to accept employment with foreign controlled air lines. Amendment to the Naval Reserve law reads: “... and the Congress hereby grants its consent to officers and enlisted personnel...”)

New Reservists Will Get Boot Training

Youthful sailors entering the Naval Reserve now go through “boot camp” just like men entering the Regular service.

During his first year in the Naval Reserve, the recruit will get two weeks of basic training either at Great Lakes Naval Training Center or at San Diego Naval Training Center.

The Reservist’s training will be a special two-week version of the 10-week recruit course given the Regulars. He will take courses in military training, small arms fire, seamanship, ordnance and gunnery, physical training and firefighting.

During the busy two weeks he will spend at Great Lakes or San Diego, the Reserve recruit will also get a total of 88 hours of organized study plus general indoctrination in watch standing, care of the uniform, cleaning of quarters and other phases of life in the Navy.

By no means all work and no play, however, recruit training will also offer plenty of time for recreation — hobby shops, library, game rooms, swimming pool and all competitive sports.

The new Reserve recruit schools, operating side by side with the Regular recruit schools, will turn out graduates on a year-round basis. The summer months, however, are expected to see the largest number of recruits attending the schools. At Great Lakes alone, they expect as many as 1,000 recruits to be in camp throughout July and August.

Only after the Reserve recruit has mastered the fundamentals of basic training will he be given a chance to take a two-weeks’ annual cruise at sea. Current plans provide that in his second year in the Reserve program, the Reservist will take his cruise aboard a Naval Reserve ship, and in his third year aboard a fleet ship, if the quotas permit.

In subsequent years, the Reservist will get a chance to attend a service school, to serve a two-week tour of duty in the Reserve or “mothball” fleet, or to take additional cruises in fleet or Reserve ships when space is available.
members of the Naval Reserve while not on active duty, except those entitled to receive retainer pay or retired pay under any provision of law; to accept, subject to the approval of the Secretary of the Navy or such officer as he may designate, civil employment with and compensation therefor from any foreign government or any concern which is controlled in whole or in part by a foreign government.”

Time Extension — H.R. 7235: Introduced; to extend, under certain conditions, the period for initiating a medical or dental course under the Servicemen’s Readjustment Act of 1944.

Pay Revision — H.R. 7246: Introduced; to amend the Career Compensation Act of 1949 so as to equalize credits for service in the armed forces for pay and longevity purposes.

Enlisted Award — H.R. 7271: Introduced; to make certain provisions in connection with the certificate of merit granted to an enlisted man for distinguished service.

Reserve Medal — H.R. 6977: Introduced; to establish an Armed Forces Reserve Medal. (Provides for a medal, together with suitable appointments and devices, called the Armed Forces Reserve Medal for award to persons who have completed a total of not less than 10 years honorable service as a member of any component, except a regular component, of the Army, Navy, Air Force, Marine Corps or Coast Guard. A bronze star in lieu of another Reserve Medal will be awarded for each additional period of service.)

Reserve Commendation — H.R. 6979: Introduced; to establish an Armed Forces Reserve Commendation Ribbon. (For award to any person who has distinguished himself by meritorious service while serving as a member of any component, except a regular component, of the Army, Navy, Marine Corps, Air Force or Coast Guard. Bronze star to be awarded in lieu of another.)

Women’s Rank — H.R. 7152: Introduced; to provide that the highest temporary rank of the commissioned officers of the various Women’s Corps of the Armed Forces of the United States shall be “brigadier general” or “rear admiral, lower half.” (In effect, this increases the highest rank that now can be held.)

Quiz Answers
Quiz Aweigh is on page 7.
1. (c) Making a fender.
2. (b) Fid. Webster defines a fid as a wooden pin used to separate the strands of a line for splicing, etc. A similar implement made of iron is properly called a marlinespike.
3. (c) Assistant Secretary of the Navy for Air.
4. (b) Assistant Secretary of the Navy.
5. (c) Three. Other than F.D.R., there are USS Midway (CVB 41) and USS Coral Sea (CV 43). All are on active duty.
6. (a) According to Jane’s Fighting Ships 1947-48, these vessels carry 137 aircraft “including large bombers of latest type.”

Directives in Brief
This listing is intended to serve only for general information and as an index of current Alnavs, Navacts, and BuPers Circular Letters, not as a basis for action. Personnel interested in specific directives should consult Alnav, Navact and BuPers Circular Letter files for complete details before taking any action.

Alnavs apply to all Navy and Marine Corps commands; Navacts apply to all Navy commands; and BuPers Circular Letters apply to all ships and stations.

NavActs
No. 1 — Concerns procurement of Form 214, Report of Separation.
No. 12 — Concerns approval of captains (line).
No. 13 — Announces selection board to recommend officers for promotion to lieutenant commander, commander and captain.
No. 14 — Announces President’s approval of promotion of officers in the Marine Corps.
No. 16 — Announces results of selection for commander.

BuPers Circular Letters
No. 17 — List of BuPers directives in effect as of 15 Jan 1950 or cancelled.
No. 18 — Information concerning the new “flat-type” enlisted service record.
No. 19 — Establishes certain new officer designators and classifications.

No. 20 — Concerns hospitalization of naval pilots for treatment of illness or serious injury.
No. 21 — Announces four-year scholarship to Rensselaer Polytechnic Institute.
No. 22 — Concerns joint use of U.S. Military Academy and U.S. Naval Academy Preparatory Schools.
No. 23 — Institutes evaluation sheets for petty officers first class and chief.
No. 24 — Concerns intelligence training for the year 1950 (fiscal).
No. 25 — Establishes special Naval Classification System (Job-Code).
No. 26 — Calls for applications for Naval School, Cargo Handling, Naval Supply Center, Oakland, Calif.
No. 27 — Concerns Roster of Officers (NavPers 353).
No. 28 — Concerns The Brig Manual.

What’s in a Name
Mother Carey’s Chickens
The stormy petrels, birds that fly far from land, feeding on small surface-swimming creatures and refuse from ships, were once held in superstitious regard by sailors. They were given the name of Mother Carey’s chickens.

The birds are about six inches long and are dark in color except for a white spot on the rump. They have a batlike flight and seem to tickle their toes on the waves.

Their style of low flight perhaps accounts for their name of petrel, which is believed to be a diminutive of the name Peter, so called in allusion to St. Peter’s walking on the sea.

The name, Mother Carey, is said to be an Anglicization, in sailor’s use, of moer cara, an epithet of the Virgin Mary who was regarded as a protector of sailors.
Here's More Information on Benefits Under the New Pay Bill

This is the second in a series of articles which ALL HANDS is printing to interpret the new pay law—the Career Compensation Act of 1949.

The new pay law was passed by Congress in September 1949 and went into effect for all Naval personnel on 1 Oct 1949. It will take some time before all questions raised by the new law will be ironed out by the Bureau of Supplies and Accounts and other bureaus, but its provisions in general have become clear.

This article deals with the changes that have been made in payments to service personnel for quarters, subsistence, and for family allowance benefits payable to their dependents.

Family Allowance Ends—For many enlisted men, the entitlement of their dependents to receive family allowance payments ended with the passage of new pay law. This law provides that all family allowance payments to dependents shall be stopped by 1 July 1952 and, for many dependents, shall be stopped before that date.

Briefly, family allowance payments are those payments made by family allowance check to the families of dependents of enlisted men. Contributions toward this family allowance are made both by the individual enlisted man and by the government.

On each payday, a certain amount is deducted from the enlisted man's pay check and is sent, together with an additional amount contributed by the government, to the family of the enlisted man. The total amount of the check depends upon the number of dependents entitled to receive benefits.

The family allowance was originally intended to provide for the support of dependents of enlisted personnel who were called into the service or who voluntarily enlisted in the service in World War II. When Congress passed the new pay law, it decided that the family allowance payments should now be discontinued.

However, there is an additional provision in the new pay law which protects most servicemen from a reduction in their total "take home pay" as a result of the passage of the new pay law and its elimination of the family allowance.

This provision is popularly known as the "savings clause" and, generally speaking, provides that an enlisted man may draw either his new base pay plus quarters plus subsistence plus any special pay to which he is entitled under the new pay law; or, on the other hand, he may draw "saved pay" which means he gets the pay and allowances that he was receiving at the time the new pay law went into effect.

In other words, subject to certain exceptions that your disbursing officer can explain to you, you are entitled to draw your revised pay and allowances under the new pay law or your old pay and family allowance, whichever will give you more money.

A number of different factors enter into the determination of whether you will draw your new pay and allowances or whether you will draw this "saved pay." Your disbursing officer has a whole pile of instructions which he must consult to figure out what your pay will be under the new pay law.

To check on your pay under the new pay law, look at ALL HANDS, November, 1949, p. 45. The chart on this page will give you all the major items in your new pay figure except special pay (i.e., sea pay, flight pay, hazardous duty pay, etc.). Compare the final figure you get here with the total pay you were drawing on 30 Sept 1949. If the 30 Sept figure (including the government’s contribution to the family allowance pay-

How Did It Start

She

Back in the 16th and 17th century, the seaman's ship has not always been referred to as feminine, despite the fact that she, her and hers are nowadays used whenever reference is made to a ship.
able to your dependents) is larger, chances are that you should be drawing "saved pay."

How long can you continue to draw "saved pay," if you are drawing it, and how long can your dependents continue to receive family allowance payments? In general, here are the answers to these questions.

- If, on 1 Oct 1949, you were serving in an enlistment or reenlistment contracted prior to 1 July 1946, and you are otherwise entitled to draw "saved pay," all your qualified dependents who were receiving family allowance payments on 30 Sept 1949 are entitled to continue to receive family allowance payments until the expiration of such enlistment or until 1 July 1952, whichever is earlier.

- If you are serving in an enlistment or reenlistment contracted on or after 1 July 1946 and prior to 1 Oct 1949 and you are otherwise entitled to draw "saved pay," your wife and children can receive family benefits until the expiration of your current enlistment or 1 July 1952, whichever is earlier. Your brothers and sisters, however, will not be entitled to receive family allowance payments after payment for April 1950 if you have a wife or child receiving family allowance benefits. However, if you have no wife or child receiving family allowance payments and your father and mother or both are receiving family allowance payments because they are dependent upon you for their chief support (more than half their support), then your father or mother or both can continue to receive family allowance payments after payment for April 1950 if you are reenlisting within one month of that time, and you are otherwise entitled to "saved pay," any of the dependents shown in the paragraph above who were receiving family allowance benefits on 30 Sept 1949 will continue to receive such benefits until the end of your enlistment or until 1 July 1952, whichever is earlier, if they continue to qualify as your dependents under the law.

- If your enlistment expired after 1 Oct 1949, you are not entitled to "saved pay" and your dependents are not entitled to family allowance payments even though you may have extended your enlistment or immediately reenlisted. There are no exceptions here.

Also, generally speaking, the new pay law provides that, if you are receiving "saved pay" after 30 Sept 1949, you may be discharged from the service if you make application for it by 1 Oct 1950. In other words, if the new pay bill, which was intended to provide an increase in pay for all personnel, doesn't increase your pay, you may request a discharge.

**Quarters Allowance** — To take the place of the old family allowance, the

### Navy's Chestiest People Come from West

"Chestiest" people in the Navy, if a survey of a small group can be indicative of the whole, are personnel from the Western and north Midwestern sections of the U. S. A. Recording tapes reeled out, on the average, nearly 34 inches in circumnavigating such home-grown, full-blown ribs as come from them parts.

And the greatest chest expansion belongs to personnel from another group of Midwestern states, averaging more than three inches of expansion per man at full blast.

This does not imply that personnel from other sections of the country have either concave chests or inferiority complexes, or even that the facts are true of the Navy-wide situation. Chest measurements used in the Bureau of Medicine and Surgery survey were from recruits taken into the Navy and Marine Corps in the space of one month — 6,090 recruits in all, or approximately one seventieth of the total force today.

But, taken for what they may be worth, the facts are interesting. They show that Marine Corps personnel may be more chesty than Navy men, 33.58 inches to 33.35, in average chest measurement at expiration. But they also show that Navy recruits won the day in chest expansion, averaging 2.90 inches to 2.76 for the Marines.

As compiled for the publication Statistics of Navy Medicine, here are the comparative figures on chest measurements of recruits by recruiting areas:

- First, recruiting area four, with an average chest expansion among its recruits of 3.04 inches.
- Second, recruiting area seven, 2.98 inches.
- Third, recruiting area eight, 2.97 inches.
- Of the remaining five areas, the lowest averaged a chest measurement of 32.78 inches on its recruits. Averages for chest expansion were:
  - First, recruiting area four, with an average chest expansion among its recruits of 3.04 inches.
  - Second, recruiting area seven, 2.98 inches.
  - Third, recruiting area eight, 2.97 inches.

In the other five areas, the lowest of all was 2.61 inches — nearly half an inch difference from the highest. For reasons of security (editor's security), the area with the lowest will not be published.

What does it all mean? Well, to an unofficial observer it would seem that Californians are capable of longer windedness than even Texans and Brooklynese, seeing as how they rank as being both chesty (first) and expansive (third). However, when queried as to this point, the BuMed statisticians replied: "No comment."

Of the remaining five areas, the lowest averaged a chest measurement of 32.78 inches on its recruits. Averages for chest expansion were:

- First, recruiting area four, 3.04 inches.
- Second, recruiting area seven, 2.98 inches.
- Third, recruiting area eight, 2.97 inches.
Transporting Transplantable Sponges

Off the shores of Ailinglapalap Atoll in the Marshalls are large areas of thriving sponge beds, providing a means of income to the local natives. At Ebon Atoll a few hundred miles away, there were no sponges and little stock available—but growing conditions were excellent.

Now sponges are among the more delicate of animals. They won't stand much of a temperature change, and die fairly quickly out of water.

But if the living porifera could be transplanted from Ailinglapalap to Ebon, they would be almost a sure success and a future aid to the economic welfare of the natives.

The problem: How to transfer growing stock from Ailinglapalap to Ebon?

Thus came about a mission somewhat unique for a Navy plane, a PBM SA Mariner based at Kwajalein. Providentially, perhaps, the name of the plane was "The Missionary."

With Lieutenant Leroy F. Smith, USN, and Lieutenant (junior grade) Charles C. O'Hearn, USN, in the pilot and co-pilot chairs, "The Missionary" took off from Kwajalein at 0645 one bright morning to see what could be done about the situation. In her after station were nine wooden barrels, pickle barrel size, half-filled with water to swell the joints and prevent leaking.

Also on board was a special party headed by a University of Hawaii zoology professor, on assignment with SIM (Scientific Investigation of Micronesia). Their special task was to investigate and advance production of sponges.

At Ailinglapalap the Navy plane was set down within a few hundred yards from the sponge beds and the SIM party disembarked into Marshallese native boats.

Over the sponge beds the party pulled up about five wires loaded with sponges. The wires had been anchored by small blocks and kept upright by bottles floating in the water. Now they were gathered in and towed intact to "The Missionary."

While the gathering was going on, the plane's crew emptied the barrels and took on local water to minimize the variation in temperature. Then the crew stripped down and loaded the sponges from the stringers one by one into the buckets for transfer into the barrels — a back-break ing job.

Once loaded, the plane took off for Ebon. About 40 full-grown sponges were transferred in this manner. For transplanting in the new beds, they provided about 500 slips.

At Ebon the pilot used the Mariner's reversible propellers to back the large plane within 200 feet of the beach, where it was then anchored. Natives swam out in pairs and, two to a barrel, pushed them ashore and then down the beach about half a mile to the sponge beds.

"These sponges," said the pilot, "never left the water for even a fraction of a second during the whole transfer."

The new quarters allowance replaces the former "rental allowance" for officers and the "station quarters
allowance” and “money allowance for quarters” for enlisted men.

Under the new pay law, the definition of “dependent” remains much the same as it has been under existing regulations. Here are the exceptions:

- Under the new pay law, to be entitled “basic allowance for quarters” (BAQ) for a father or mother, the father or mother must, in fact, be dependent on the serviceman claiming them as dependents for over half of the father or mother’s support and must actually reside in the household of the serviceman.
- The term “dependent” includes unmarried, legitimate children of the serviceman over 20 years of age, who are incapable of self-support because they are mentally defective or physically incapacitated, and who are in fact dependent upon the serviceman for half of their support.
- Children of a female member of the armed services must in fact be dependent upon the servicewoman for over half of their support, even though the father of any dependent children is deceased.
- Regulations governing entitlement to BAQ for enlisted persons without dependents remain the same as they were under the old pay regulations for “station quarters allowance.” However, additional regulations will be issued in the future to more fully cover this group.

Subsistence Allowance—In today’s Navy, all officers receive a basic allowance for subsistence on a monthly basis. Enlisted personnel, if subsistence is not available for them or if they are permitted to eat off the station to which they are assigned, are entitled to “basic allowance for subsistence” or BAS if they fall in one of the three categories listed below. Beside each category is the amount a man will receive should he fall under that category:

- When rations in kind are not available — $2.25 per day.
- When permission is granted to mess separately — $1.05 per day.
- When assigned to duty under emergency conditions where no government messing facilities are available — not to exceed $3 per day.

All officers are now entitled to $42 a month subsistence, notwithstanding the number of dependents they may have. Under the old system, officers were allowed 70 cents a day, or $21 a month (with no dependents), $42 a month (with one dependent) and $63 a month for certain other ranks.

As they were under the old law, enlisted men shall be entitled to receive the appropriate BAS even while they are on authorized leave or while they are sick in a hospital, provided of course that they aren’t being fed by the government.

### New Service Record Folder Offers Distinct Advantages Over Older Wallet-Type

The new flat type enlisted service record folder was made available in all district publications and printing offices in March 1950, and is to be placed in use at the earliest practicable date. Details appear in BuPers Circ. Ltr. 18-50 (NDB, 31 Jan 1950).

Personnel whose records are to be kept in the new folder are (1) all Regular Navy enlisted men on continuous active duty.

Service records of inactive Fleet Reserve personnel, retired personnel and members of the Organized Reserve may be converted at the discretion of the Commandants. At this time the flat folder will not be used for Volunteer Reservists.

Initially, the adoption of the flat record form will involve only transfer of pages and correspondence from the old jacket into the new folder. New pages for use within the folder are currently being printed and should be available in approximately three months.

Some predicted advantages of the new folder:

- Saving in stowage space; five new folders can occupy space formerly used for three of the old jackets.
- Increased neatness and safety of contents; all papers in the new folder are laid flat and clipped securely.
- Reduction of duplicated information, with consequent reduction of paper work and time.
- Conformity with systems and format in use in other branches of the Armed Forces.
- Reduce the time necessary for entering or extracting information in the record.
BOOKS:

- *I Was There*, by Fleet Admiral William D. Leahy; Whittlesey House. This is a story of World War II—almost a day-to-day story—as observed from the center of the ring, so to speak. No American was closer than was Admiral Leahy to the vital centers of operation, decision and command.

The volume begins with the author’s being relieved of the governorship of Puerto Rico to become ambassador to France in January 1941. It shows the state of affairs and the diplomatic battles he encountered there during that year and his return to the U. S., to assume the post of Chief of Staff. From there it carries on through all the important events up to the defeat of Japan.

*I Was There* is an inside picture of the workings of the High Command and shows the pressures and tensions that accompanied everything during the war years. It highlights the turning points and crucial occurrences at home and abroad.

As advisor, confidant, military expeditor and general assistant to Presidents Roosevelt and Truman, the Admiral lived in the White House. He held a private conference almost every morning with the Chief Executive of the nation. He attended the famous conferences at Washington, Quebec, Cairo, Tehran, Yalta and Potsdam. He observed, advised and debated with the great and controversial figures of the decade. As Chief of Staff, he coordinated the work of our top-ranking military leaders. All of this qualified him to write a book of this type, and qualified him fully.

It’s well illustrated with photographs and includes a foreword by President Truman.

* * *

- *The American Mind*, by Henry Steele Commager; Yale University Press. This, as the title would indicate, is a picture of the emotional and intellectual temper of America. It opens with a profile of the 19th century American and moves on to the present time.

While this is a long way from the reading diet of the comic-book boys, it will be of interest to many besides the PhDs in your crew. Don’t be surprised if you find yourself liking it a lot—and gaining a wider and fresh outlook by reading it through.

* * *

- *Mr. Midshipman Hornblower*, by C. S. Forester; Little, Brown and Company. It was a windy day in January 1794, and His Majesty’s Ship Justinian was tugging at her moorings just off the English Channel. A shoreboat came plunging out toward the battleship, rowed by two brawny women. In its sternsheets huddled a thin, seasick figure—that of Midshipman Horatio Hornblower, aged 17.

“Well, obey orders, learn your duties,” the captain told him when he had reported aboard, “and no harm can come to you.” But the skipper failed to warn the youngster of the imminent return of Senior Warrant Officer John Simpson. And before he had learned to find his way readily about the ship, Midshipman Hornblower found himself at pistol-points with Simpson.

Young Hornblower had been the laughingstock of the ‘tween-decks—the boy who was seasick in Spithead. But that was before the duel with Simpson and before Hornblower was transferred to His Majesty’s Frigate Indefatigable. All that was finished by the time he went aboard the French ship Marie Galante with a prize crew to put into port with a cargo of rice...

Here is another of the Horatio Hornblower books. It will take its place among the many others that unnumbered people have read with great pleasure.

* * *

- *King-Doctor of Ulithi*, by Marshall Paul Wees and Francis Beauchesne Thornton; The Macmillan Company. Here is the true account of a Navy doctor’s stay on the island of Fassarai in the atoll of Ulithi. Lieutenant Wees was sent to Fassarai to cure the natives of yaws, and stayed on to do many other things. These things included inaugurating some rather drastic sanitation, introducing swings and orange juice for the children, and supplying the people with English lessons, movies and a new church.

The inhabitants wanted him to be king, but the doctor agreed only to be co-king.

Says Doctor Wees, “The more I brooded on my six months among these people, the more I was convinced that the story should be told to the great public hungry for wisdom and insight. This is my story, stranger than fiction and far more splendid.”

* * *

- *The King of Fassarai*, by A. D. Divine; the Macmillan Company. Hardly could such a stirring tale as the foregoing escape the notice of the novelists. Consequently and quite naturally, a novelist did latch onto the saga of Dr. Wees to form him the framework of a thumping good tale.

Here we find the people of Fassarai dying. The Navy, moving in to set up a command base for Halsey’s fleet, has given them food, medical treatment, everything but the will to live. Then Lieutenant Reis, who had dreamed of combat, comes to the atoll. He lives, works and feasts with the natives, pleads for them and steals from them, giving them new health and spirit...

It’s a first-rate novel, full of humor, realism and charm.

* * *

Try some of this month’s selections for size and texture. BuPers has chosen them and the Navy has purchased them for ship and station libraries.

NARRATIVE LEADS

APRIL’S BOOK LIST

BIG THREE conclaves are described by FADM Leahy (at FDR’s right) in his new book, *I Was There.*
PROTECTOR AT SEA

OFF NEW ENGLAND: 1781
Wherein Ebenezer Fox signs as cabin steward on board the Massachusetts state ship PROTECTOR and cruises in the Atlantic. From the book "Revolutionary Adventures."
**PROTECTOR AT SEA**

To a young farmer's apprentice trying to run away from his master, it seemed ill luck that he had chosen a night when the countryside was in turmoil. People clustered in every town along the road from Boston, stopping all travelers to ask if the war had really begun.

Of such knowledge the boy had none, but he did know that anyone suspected him to be a runaway, he probably would be returned to his former hard life on the farm near Roxbury.

It was 18 April 1775. Later in the night, Paul Revere would ride out of Boston, warning these same people of British redcoats on the march. Tomorrow some of them might become the Minutemen of Lexington Common, where the 'shot heard round the world' would be fired.

Ebenezer Fox, 12 years old and a farmer's apprentice for the last five years, finally made his way to Providence and shipped as cabin boy (four dollars a month) in a merchant ship, beginning a series of episodes that long afterward became favorite tales for grandchildren.

In merchantmen he sailed for San Domingo, dodging British warships. In the army under General Washington, he campaigned in New York. In the frigate Protector he became a successful privateer—until they met up with the British Roebuck, 40 guns, and Media, 28 guns. As a prisoner ready to do anything to get off the notorious "Old Jersey," the British prison ship anchored near New York, he enlisted in the British Navy for service at Jamaica. He deserted, thereby risking hanging, and made his way to an American vessel. Finally he reached home, in 1782—all before he was 20 years old.

The 26-gun frigate Protector was built and manned by the State of Massachusetts, one of many state-owned vessels of the Revolution. If the states could raise, feed, pay and equip their own troops, why not their own sailors, too? Besides, state patriotism was high and the Continental treasury was low.

At the time (1780) of the following narrative, Ebenezer Fox was a barber's apprentice in Boston. Primary duty: collecting clipped hair for use in wigs and cushions. His restless spirit was stirring.

I CONTINUED to perform my duties in the shop and was contented with my employment till I was about seventeen years of age, when a spirit of roving once more got possession of me and I expressed a desire to go to sea. The condition of the country was at this time distressing; and, as my master had not more business than he and one apprentice could perform, he expressed a willingness to consent, upon condition that he would receive one half of my wages and the same proportion of whatever prize money might fall to my share.

Our coast was lined with British cruisers, which had almost annihilated our commerce, and the State of Massachusetts judged it expedient to build a government vessel, rated as a 26-gun ship and named Protector, commanded by Captain John Foster Williams.

A rendezvous was established for recruits at the head of Hancock's wharf, where the national flag, then bearing thirteen stripes and stars, was hoisted. All means were resorted to, which ingenuity could devise, to induce men to enlist. A recruiting officer, bearing a flag and attended by a band of martial music, paraded the streets to excite a thirst for glory and a spirit of military ambition.

The recruiting officer possessed the qualifications requisite to make the service appear alluring, especially to the young. He was a jovial, good-natured fellow, of ready wit and much broad humor. Crowds followed in his wake when he marched the streets, and he occasionally stopped at the corners to harangue the multitude, in order to excite their patriotism and zeal for the cause of liberty.

When he espied any large boys among the idle crowd around him, he would attract their attention by singing in a comical manner the following doggerel:

> All you that have bad masters,
> And cannot get your due,
> Come, come, my brave boys,
> And join with our ship's crew.

A shout and a huzza would follow, and some would join in the ranks. My own excitable feelings were aroused; I repaired to the rendezvous, signed the ship's papers, mounted a cockade, and was in my own estimation already more than half of a sailor.

The ship was as yet far from being supplied with her complement of men, and the recruiting business went on slowly. Appeals continued to be made to the patriotism of every young man to lend his aid, by his exertions on sea or land, to free his country from the common enemy. Promises of gain were held out, which set truth at defiance, and offers the most tempting that the impoverished state of the finances of government could promise. About the last of February the ship was ready to receive her crew, and was hauled off into channel, that the sailors might have no opportunity to run away after they were got on board.

Upwards of three hundred and thirty men were carried, dragged, and driven on board, of all kinds, ages, and descriptions, in all the various stages of intoxication, from that of "sober tipsiness" to beastly drunkenness, with the uproar and clamor that may be more easily imagined than described. Such a motley group has never been seen since Falstaff's ragged regiment paraded the streets of Coventry.

The wind being fair, we weighed anchor and dropped down to Nantasket roads, where we lay till about the first of April, then set sail for a cruise of six months.

We continued to cruise along the coast for a few weeks, without meeting any of the enemy, when some indications of tempestuous weather appearing, our captain judged it expedient to steer for the banks of Newfoundland, that he might have more sea room in case of a gale. We arrived off the banks, where we cruised for nearly eight weeks, most of the time in a dense fog, without meeting friend or foe.

On the morning of June 9th, 1780, the fog began to clear away and the man at the mast-head gave notice that
he saw a ship to the westward of us. As the fog cleared up, we perceived her to be a large ship under English colors to the windward, standing athwart our starboard bow. Our relative position gave us an opportunity to escape, but our valiant captain did not see fit to avail himself of it.

As she came down upon us, she appeared as large as a seventy-four; and we were not deceived respecting her size, for it afterwards proved that she was an old East-Indiaman, of eleven-hundred tons burden, fitted out as a letter-of-marque for the West-India trade, mounted with thirty-two guns, and furnished with a complement of one hundred and fifty men. She was called 

Admiral Duff, commanded by Richard Strang, from St. Christopher and St. Eustatia, laden with sugar and tobacco and bound to London. I was standing near our first lieutenant, Mr. Little, who was calmly examining the enemy with his spy-glass, when Captain Williams stepped up and asked his opinion of her.

The lieutenant applied the glass to his eye again and took a deliberate look in silence, and replied, "I think she is a heavy ship, and that we shall have some hard fighting. But of one thing I am certain—she is not a frigate. If she were, she would not keep yawing, and showing her broadsides as she does. She would show nothing but her head and stern. We shall have the advantage of her, and the quicker we get alongside the better."

Our captain ordered English colors to be hoisted and the ship to be cleared for action.

The enemy approached till within musket shot of us. The two ships were so near to each other that we could distinguish the officers from the men. I particularly noticed the captain on the gang-way, a noble-looking man, having a large gold-laced cocked hat on his head and a speaking-trumpet in his hand. Lieutenant Little possessed a powerful voice, and he was directed to hail the enemy. At the same time the quarter-master was ordered to stand ready to haul down the English flag and to hoist up the American.

Our lieutenant took his station on the after part of the starboard gangway, and, elevating the trumpet, exclaimed, "Hallo! whence come you?"

"From Jamaica, bound to London," was the answer.

"What is the ship's name?" inquired the lieutenant.

"Admiral Duff," was the reply.

The English captain then thought it his turn to interrogate and asked the name of our ship. Lieutenant Little, in order to gain time, put the trumpet to his ear, pretending not to hear the question. During the short interval, thus gained, Captain Williams called upon the gunner to ascertain how many guns could be brought to bear upon the enemy. "Five," was the answer.

"Then fire, and shift the colors," were the orders.

The cannons poured forth their deadly contents, and with the first flash the American flag took the place of the British ensign at our mast-head.

The compliment was returned in the form of a full broadside, and the action commenced. I was stationed on the edge of the quarterdeck, to sponge and load a six-pounder, which gave me a fine opportunity to see the whole action. Broadsides were exchanged with great rapidity for nearly an hour. Our fire, as we afterwards ascertained, produced a terrible slaughter among the enemy, while our loss was as yet trifling.

I happened to be looking for a moment towards the main deck, when a large shot came through our ship's side and killed Mr. Benjamin Scollay, a very promising young man who was, I think, a midshipman. At this moment a shot from one of our marines killed the man at the wheel of the enemy's ship, and, his place not being immediately supplied, she was brought alongside of us in such a manner as to bring her bowsprit directly across our forecastle.

Not knowing the cause of this movement, we supposed it to be the intention of the enemy to board us. Our boarders were ordered to be ready with their pikes to resist any such attempt, while our guns on the main deck were sending death and destruction among the crew of the enemy. Their principal object now seemed to be to get liberate from us, and by cutting away some of their rigging, they were soon clear the distance of a pistol shot.

The action was then renewed with additional fury. Broadside for broadside continued with unabated vigor, at times so near to each other that the muzzles of our guns came almost in contact, then again at such a distance as to allow taking deliberate aim. The contest was obstinately continued by the enemy, although we could perceive that great havoc was made among them, and that it was with much difficulty that their men were compelled to remain at their quarters.

While Captain Williams was walking the quarter deck, which he did during the whole action, a shot from the enemy struck the speaking trumpet from his hand and sent it to a considerable distance from him. He picked it up with great calmness of manner and resumed his walk, without appearing to have been at all disturbed by the circumstance.

The fight still continued with unabated vigor on both sides, till our marksmen had killed or wounded all the men in the fore, main, and mizzen tops of the enemy. The action had now lasted about an hour and a half, and the fire from the enemy began to slacken, when we suddenly discovered that all the sails on her mainmast were enveloped in a blaze. The fire spread with amazing rapidity, and, running down the after-rigging, it soon communicated with her magazine, when her whole stern was blown off and her valuable cargo emptied into the sea.

All feelings of hostility now cease and those of pity were excited in our breasts for the miserable crew that survived the catastrophe.

Our enemy's ship was now a complete wreck, though she still floated, and the survivors were endeavoring to save themselves in the only boat that had escaped the general destruction. The humanity of our captain urged him to make all possible exertion to save the miserable, wounded, and burnt wretches, who were struggling for their lives in the water. The ship of the enemy was greatly our superior in size and lay much higher out of the water.

Our boats had been much exposed to his fire, as they were placed on spars between the fore and main masts during the action and had suffered considerable damage. The carpenters were ordered to repair them to the utmost expedience, and we got them out in season to take up fifty-five men, the greater part of whom had been wounded by our shot or burned when the powder magazine exploded. These men exhibited a spectacle truly heart-rending to behold. Their limbs were mutilated by all manner of wounds, while some were burned to such a degree that the skin was nearly flayed from their bodies. Our surgeon and his assistants had just completed the task.
of dressing the wounds of our own crew, and then they directed their attention to the wounded of the enemy. Several of them suffered amputation of their limbs, and the wounds of the others were treated in a skillful manner. Every attention was paid to them which our circumstances would allow.

We ascertained that the loss of the enemy was prodigious, compared with ours. This disparity however will not appear so remarkable when it is considered that, although their ship was larger than ours, it was not so well supplied with men. Having no marines to use the musket, they fought with their guns alone, and, as their ship lay much higher out of the water than ours, the greater part of their shot were over us, cutting our rigging and sails without injuring our men. We had about seventy marines, who did great execution with their muskets, picking off the officers and men with a sure and deliberate aim.

Our sailors were busying employed in picking up the various articles that were floating and getting them on board, while the carpenters and riggers were engaged in repairing the damages we had received.

In a few days we came in sight of Boston lighthouse and anchored in Nantasket roads, where we remained a short time, then stood up the harbor and hauled in at Hancock's wharf. The sails were ubent, the sick landed, the ship unloaded, and all hands, who were not disposed to enlist for a second cruise, were paid off and discharged.

Thus ended my first cruise in Protector. Although I had not added to my wealth, I had gained some knowledge of a sailor's life and felt disposed to try my fortune a little more in the like manner by enlisting for a second voyage.

A rendezvous was opened; a recruiting party paraded the streets under the American flag, accompanied by a band of martial music and the excitement usual on such occasions. Amid loud huzzas for liberty and independence, sailors fell rapidly into our ranks, and our complement of men was obtained in a short time.

In the meantime our ship was thoroughly overhauled, her bottom scraped, rigging repaired, and everything was done to put her into perfect order.

About the last of October, 1781, our boats were hoisted on deck and secured, and we dropped down into Nantasket roads where we remained a few days and then set sail upon our second cruise. We cleared Cape Cod the first of November, directing our course for Halifax, off which we cruised a few days then steered for the Grand Banks. We arrived there and cruised about for three weeks, and not discovering any of the enemy's vessels, we directed our course to the West Indies and arrived off the islands, where we cruised for some time.

Finding it necessary to obtain a supply of water, we put into St. Pierre, in the island of Martinico, for that purpose, after which we steered towards Dominica, an island north of Martinico. The next morning we espied an English sloop sailing to leeward of us close under the wind. We gave chase and soon came up with her. Our captain sent an officer and some men on board, and took possession of her.

We then bore away with our prize for San Juan, in the island of Porto Rico, where our captain disposed of the sloop and cargo, part of which consisted of fourteen Negroes who were sold to the Spaniards.

We then continued our cruise and in a few days fell in with an English schooner, which we took. Putting some men and a prize-master on board, the captain ordered her for Boston, where she arrived in safety.

After cruising for some time and not falling in with anything, our captain concluded to leave the West India seas and steer for the southern coast of the United States. We arrived off the bar of Charleston, South Carolina, and in the course of a few days fell in with a ship called Polly, a letter-of-marque of twenty guns, bound to London. We gave chase late in the afternoon and, as it soon grew dark, we lost sight of her.

A thunder storm came on, and all hands were watching for her; and in the flashes of the lightning we at length discovered her, standing in a different direction from what we had at first seen her pursuing. We accordingly shifted our course and soon came up with her.

"What ship is that, and where from?" roared our lieutenant through his trumpet, in a voice that bore no slight resemblance to the thunder which rolled above our heads.

"The ship Polly, from Charleston, bound to London," was the reply. The lightning, flashing upon her colors, showed that they were English, and the enemy had the same means of seeing the American flag flying at our mast-head.

We were completely prepared for action. The matches were lighted, the lanterns burning fore and aft, and all of us were anxiously waiting for the commands of the officers. One shot was fired, and our captain ordered the enemy to "haul down his colors or he would blow him out of the water.

The appearance of our ship being formidable, our captain's demand was instantly complied with. Our boat was lowered and a prize-master and crew put on board, who took possession of the ship, and she was ordered for Boston.

Shortly after, we steered for New York, and arrived off Sandy Hook in the spring. After cruising here nearly a week, one morning the man at mast-head cried out: "A sail on the larboard quarter."

Lieutenant Little ascended to the top, and after examining her with his glass, declared her to be a British brig standing in for New York. We immediately gave chase, came up with her, and ordered her to heave to till we could send a boat alongside. She complied; and taking her crew on board of our ship, we put a prize-master and crew on board of the brig and ordered her for Boston.

While we were manning the prize, the man at the mast-head gave another notice: "A sail on the larboard bows."

We lost no time in commencing the pursuit, and soon came alongside of her.

She proved to be a British schooner going into New York. We took from her a quantity of bread, cheese, and pork.

Our cruise thus far had been prosperous, and we thought the "evil day was afar off." We continued merely on our course without seeing friend or foe during the next day, but the following morning the man at the mast-head cried out, "Two sail to the leeward."

Lieutenant Little ascended to the main top with his glass and soon ascertained that they were two large ships,
closely hauled upon the wind, in full chase of us. The brig we had in tow was quickly cast off, and she and the schooner were ordered to make the best progress they could. Our yards were braced and all sail crowded on that the ship could carry.

The chase continued, without gaining much upon us till about noon, when, the wind shifting, they fell into our wake and gained up on us very fast.

A few days previous to this, we had fallen in with a brig from Havana for Boston, commanded by Captain Cunningham, having a large quantity of specie on board. Thinking that the money would be more safe on board an armed ship, he requested it as a favor of Captain Williams to receive it on board. Captain Cunningham arrived with his brig in safety, but to his regret as well as ours, his money fell into the hands of the enemy.

Our captain, calling all hands aft on the quarterdeck, expressed his opinion that the ships in pursuit of us were English and that we might be captured.

He then distributed among us the money which he had received for safe keeping, in sums of fifteen dollars to each, upon conditions that it should be returned to him if we were so fortunate as to escape.

It was now nearly sunset and the enemy were gaining upon us rapidly. They had exchanged their French for English colors, thus ending our hopes and doubts respecting their character.

Our capture was now considered no longer problematic; and, being unwilling that the stores — especially the crackers, cheese, and porter beer — should fall a prey to the appetite of the enemy and not knowing when we should have an opportunity of enjoying such luxuries again, I invited about a dozen of my friends into the store room where we exerted ourselves to diminish the quantity of this part of the prize which we thought would shortly be in possession of the enemy.

The porter made us cheerful if not happy, and having eat and drank to our satisfaction, we shook hands as friends soon to part, uncertain when we should meet again, and returned on deck without our absence having been noticed.

We found that the two ships had got up with us. They proved to be Roebuck, a forty-gun ship with a double deck, and Media, of twenty-eight guns.

Roebuck took her station on our larboard quarter, Media on our larboard bow, and sent an eighteen-pound shot over our quarter deck.

To attempt resistance against a force so much our superior would have been unjustifiable, and the flag of thirteen stars and stripes, under which we had sailed with much satisfaction and success, was reluctantly pulled down.

The boats of the enemy were manned and sent alongside our ship. Our crew were now permitted by our officers to collect their clothing and their little property together, and secure them in the best manner they could.

By this time, the boats had arrived alongside and the enemy had ascended the deck.

Our crew were ordered to pass down the side of the ship into the enemy's boats, but were forbidden to carry anything with them. Some of our crew fastened their bedding upon their backs and tumbled themselves head foremost down into the boats, and as it was quite dark, they would unperceived get into the cuddy with their bedding, trusting to future circumstances for opportunity to use or hide it.

We arrived alongside and were ordered on to the quarter deck of our captors. Some English sailor among our crew, to recommend himself to the favor of the British captain, had given information respecting the money we had secreted about our persons. The sergeant of arms was ordered to search every one of us till the sum of fifteen dollars was found upon each of us.

Such was the art which some had exercised in hiding the money, that they were stripped entirely naked before it was found.

In the capacity of cabin steward on Protector I was, most of the time in the cabin and had recommended myself to the favorable notice of the American captain by performing my duties to his satisfaction. Therefore, when the money was distributed among our crew, the captain gave me a double share. I put fifteen dollars in the crown of my hat, which I pressed down upon my head as closely as possible, and the remaining fifteen I placed in my shoes, between the soles.

At length my turn came to be searched. Like the rest of my fellow-prisoners had done, I denied having any money. This assertion, however, did not avail; I was seized by the collar and shaken so violently that my hat fell off, and the dollars rolled out upon the deck. The sum of fifteen dollars being found, it was concluded that I had no more, and I was sent into the ship's hold, where I found those of the crew who had been previously searched.

A considerable number of us contrived by various stratagems to save our money, for dollars were found to be quite plentiful among us for some time after our capture. They proved a great convenience, as money generally does among friends or foes.
ONE of our staffmen, H. O. Austin, JOC, usn, has talked of the Canal Zone in glowing terms ever since he was there on duty 12 years ago. Early this year, on an assignment to write several area stories (see p. 8), he had a chance to go back and see what it was like.

Austin, who's an anti-climactical guy anyway, says the change which astounded him most was a road sign. It read, “Puerto Pilon, 5 miles” and indicated a smooth paving which you could drive in a few minutes.

“Twelve years before,” the chief says, “a friend and I walked to Puerto Pilon on a Sunday from the submarine base at Coco Solo. We had slogged along for hours, ankle-deep in thick red mud. Finally reaching Puerto Pilon we were hailed almost as missionaries, by people who hadn't been out of town in a year. The road, you see, was too bad then even for horse-drawn carriages.”

How to entice recruits and influence people, or, that's the way we heard it anyway: When the “Take One” boxes of Marine Corps recruiting pamphlets seemed to be of only mild interest to the public passing daily through the post office in Texarkana, Tex., the postal custodian got in touch with the recruiting people.

“If you want to get these pamphlets into the houses,” he tells it to the Marines, “come on down and stamp every one of 'em ‘For Men Only.’”

Recruiting sergeant John Kuchta, MSGt., USMC, did just that, and stood off to watch the effect. He was more than delighted. “It's a cinch,” he says. “All the women snitch a copy and carefully bury it in their purse to read in the privacy of their homes.”

All this may have been building up since the centuries-old prohibition against keel-hauling (the quaint old custom of dunking a disobedient seaman over the side and joggin' his noggin against the keel), but today there are many people in the Navy who have never seen a keel.

We happen to know the situation is serious, as evidenced in test results we have from San Diego. Out there a young seaman, writing a promotion exam, came to a question which read, “The lowest centerline longitudinal member of a ship is called a . . . .”

Without much hesitation the young man, whose middle name was Columbus, wrote in the blank: “Deck Hand.”
CHART YOUR COURSE...

YOUR FUTURE IS ASSURED WHEN YOU'RE IN THE U.S. NAVY

profit by the experience of others
learn a trade . . . get steady pay . . .
see the world . . . retire after 30 . . .