Named after one of the U.S. Navy's more colorful admirals, the guided missile frigate Clark slides down the ways at Bath Iron Works, Bath, Maine. The 443-foot warship honors Admiral Joseph J. (Jocko) Clark of World War II fame. The ship, designed for defense against submarines, aircraft and surface ships, was christened by the admiral's widow, Olga, of New York City. (Photo by Ron Farr.)
MAGAZINE OF THE U.S. NAVY — 56th YEAR OF PUBLICATION
JULY 1979
NUMBER 750

Chief of Naval Operations: ADM Thomas B. Hayward
Chief of Information: RADM David M. Cooney
OIC Navy Internal Relations Act: CAPT Robert K. Lewis Jr.

Features
6 FEEDING THE FLEET
Tracing Navy chow from hardtack to today’s ‘Think Thin’ menus

12 THEY EAT BETTER ABOoard DEWEY THAN THEY DO AT HOME
It takes a lot of pride to put out three good meals a day

24 WHO GOES WHERE AND WHY
There’s more to detailing than just writing orders

30 ONE FOOT IN THE UNIVERSE
Dedication of the Albert Einstein memorial at the National Academy of Sciences

32 NAVAL AVIATION MUSEUM — PHASE II
Second part of Pensacola’s building program is complete

39 HIS EYES ARE ON OLYMPIC GOLD
A competitor has only one shot at the rowing event this summer in Moscow

43 PATHS TO A COMMISSION
Eighth in a series on Rights and Benefits

Departments
2 Currents 20 Bearings 48 Mail Buoy

Covers
Front: Working side by side, USS Dewey’s MSN Gary LeFande (left) and MS1 Paulino Amano help turn ordinary food items into savory dishes. See page 12. Photo by PH1 Terry Mitchell.
Back: A replica of the Navy’s first airplane, the A-1, at Pensacola’s Naval Aviation Museum. See page 32. Photo by JO1 Jerry Atchison.

Staff:
Editor: John F. Coleman; News Editor: Joanne E. Dumene
Associates: Richard Hosier (Layout); Michael Tuffli (Art); Edward Jenkins, JO1(SS) Pete Sundberg (Research); and Elaine McNeil (Editorial Assistant)

Send mail to: All Hands, Hoffman No. 2, 200 Stovall St., Alexandria, Va. 22332.
Phone: (202) 325-0495; AUTOVON 221-0495.
Message: NAVINRELACT WASHINGTON DC (PASS TO ALL HANDS)
Navy Counselor Rating (NC)

The Navy is anticipating a need for Navy counselors in both fleet and recruiting commands. Increased emphasis on Navy retention and recruiting efforts will require an increase of 200 fleet billets during the next two years. Personnel with training and experience and/or interest in career counseling or recruiting should consider lateral conversion to the NC rating. Conversion to NC rating offers excellent potential for advancement, development of new skills and opportunities for highly rewarding duty. NAVOP 049/79 explains all factors considered for conversion to NC, outlines application procedures, and gives the requirements applicants must meet.

SECNAV Best Mess Award Winners Announced

Later this month in Chicago, Ill., managers from the four best messes in the Navy will be recognized at a special ceremony at the International Military Club Executives' Association (IMCEA) conference. The awards will be presented by William Carroll, Special Assistant to the Secretary of the Navy for Manpower, Reserve Affairs and Logistics. The managers of the messes named are winners in the SECNAV Mess Awards Program for 1978. The Secretary of the Navy and the IMCEA co-sponsor the awards program. Winners are: Commissioned Officers' Mess, NAS Miramar, Calif., Chief Petty Officers' Mess, NETC Newport, R.I.; Petty Officers' Mess, NAVSTA Rota, Spain; and Enlisted Mess, NAVSTA San Diego, Calif. Selection of the winners was made by an awards committee composed of representatives from the Bureau of Naval Personnel and the IMCEA, following on-site evaluations. The objective of the program is to promote excellence in Navy messes through recognition of activities which have shown outstanding service to their patrons, effective management and sound fiscal control.

Educate for Enlistment

Many young people who seek enlistment in the military services fail the mental eligibility test given to all applicants because their basic educational skills are not adequate. To correct this, the Department of Defense and HEW's Office of Education have announced a pilot project to provide basic educational skills prior to enlistment. The program began last week at three selected locations: Houston, Texas; Memphis, Tenn.; and Albany, N.Y. In these areas, recruiters will encourage applicants who do not qualify for enlistment because of low test scores to enroll in remedial courses in English, math and reading. The applicants will also receive diagnostic testing and individually tailored instruction. Individuals who correct their educational weaknesses will be referred back to the recruiters where, to qualify for enlistment, they will still have to meet service requirements. This is the first program of its kind involving the coordination of DOD, the Office of Education and local learning agencies backed by their state departments of education.
The 10 percent surcharge for Japanese merchandise in the 1979 Navy Exchange Mail Order Catalog was discontinued effective April 22 as a result of continued price reductions. Payments received after April 22 which include the surcharge will be refunded. A list of items that have been reduced below the printed catalog price will be distributed soon.

If you were stationed aboard one of the ships or units listed below during the time frame shown, you're among the newest qualifiers for the Battle Efficiency Ribbon. The ribbon, which is a permanent award, can be worn by officer and enlisted crew members of ships or units that won the Battle “E” after July 1, 1974. This list of qualifiers includes winners in the last cycle of battle efficiency competition. OPNAV Notice 1650 of March 28, 1979, lists administrative procedures. Personnel permanently attached to or serving with the following ships between Oct. 1, 1977, and Sept. 30, 1978, can wear the Battle Efficiency Ribbon:

- Albany
- Andrew Jackson (Gold)
- Billfish
- Blandy
- Bowen
- Charles F. Adams
- Coronado
- Damato
- Dash
- El Paso
- Francis Marion
- Francis Scott Key
- Fox
- Francis Hammond
- Gray
- Hamner
- Harold E. Holt
- Hassayampa
- Kiska
- LCU 1652
- Long Beach
- Lynde McCormick
- Paul F. Foster
- Peoria
- Prairie
- Racine
- Sample
- St. Louis
- Richard E. Byrd
- San Diego
- Silversides
- Skipjack
- Voge
- Virginia
- William C. Lawe
- Personnel attached to the following ships during the period July 1, 1977, through Dec. 31, 1978, can wear the Battle Efficiency Ribbon:
- Badger
- Blue Ridge
- Bradley
- Bristol County
- Bronstein
- Brooke
- Brunswick
- Constant
- Fulton
- G. P. Lipscomb
- Harry E. Yarnell
- Holland
- John F. Kennedy
- Johnston
- Kamehameha
- LCU 1661
- Mahan
- Manitowoc
- Mointester
- Mount Whitney
- MSB 16
- Oak Ridge
- Petrel
- Portland
- Preserver
- Puget Sound
- Takelma
- Towers
- Tulare
- White Plains
- Wichita
- Worden
- The following winners of the Battle “E” have earned Battle Efficiency Ribbons for crew members stationed there between Oct. 1, 1977, and Sept. 30, 1978:
- VS-22
- VA-15
- VA-65
- VAW-124
- VF-32
- VQ-4
- VC-10
- HS-3
- HSL-32
- NM-CB-3
- NM-CB-74
- VP-24
- RVAH-1
- Personnel attached to the following units between Oct. 1, 1976, and Sept. 30, 1978, are eligible to wear the Battle Efficiency Ribbon:
- VA-305
- VF-302
- VR-53
- HC-9
- VP-60
- VAQ-208
Promotion zones for the FY 80 Officer Selection Board have been released by the Chief of Naval Personnel. The junior officers in the promotion zones and junior officers eligible for selection below the zones are listed below for the unrestricted line. Restricted line officers are in the zone if they are senior to the junior URL officer, staff corps officers are in the zone when their running mates are in the zone.

<table>
<thead>
<tr>
<th>Selection To</th>
<th>Junior in Zone</th>
<th>Junior Eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPT</td>
<td>CDR R. D. Thomas</td>
<td>CDR W. A. Efird</td>
</tr>
<tr>
<td></td>
<td>(5358-30)</td>
<td>(5715-90)</td>
</tr>
<tr>
<td>CDR</td>
<td>LCDR J. R. Steel</td>
<td>LCDR D. S. Wallace</td>
</tr>
<tr>
<td></td>
<td>(20032-60)</td>
<td>(20493-70)</td>
</tr>
<tr>
<td>LCDR</td>
<td>LT H. D. Hopkins</td>
<td>LT R. S. McDonald</td>
</tr>
<tr>
<td></td>
<td>(54017-50)</td>
<td>(55990-50)</td>
</tr>
</tbody>
</table>

Listed below are the junior officers in the zone for line limited duty officer selections. Staff corps limited duty officers are in the zone when their running mates are.

<table>
<thead>
<tr>
<th>Selection To</th>
<th>Junior in Zone</th>
<th>Junior Eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDR</td>
<td>LCDR G. E. Wood</td>
<td>LCDR E. E. Sears</td>
</tr>
<tr>
<td></td>
<td>(20277-74)</td>
<td>(20355-20)</td>
</tr>
<tr>
<td>LCDR</td>
<td>LT T. P. Hornuth</td>
<td>LT J. D. Lose</td>
</tr>
<tr>
<td></td>
<td>(53399-50)</td>
<td>(55780-00)</td>
</tr>
</tbody>
</table>

For women officers of the line, the junior in zone and junior eligible are listed below. Women officers of the Supply, Chaplain and Civil Engineers Corps are in the zone when their women line running mates are.

<table>
<thead>
<tr>
<th>Selection To</th>
<th>Junior in Zone</th>
<th>Junior Eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPT</td>
<td>CDR S. L. Bostwick</td>
<td>CDR J. A. Weber</td>
</tr>
<tr>
<td></td>
<td>(5425-45)</td>
<td>(5523-45)</td>
</tr>
<tr>
<td>CDR</td>
<td>LCDR C. C. Wylie</td>
<td>LCDR K. O’Brien</td>
</tr>
<tr>
<td></td>
<td>(20018-48)</td>
<td>(20333-08)</td>
</tr>
<tr>
<td>LCDR</td>
<td>LT C. S. Wright</td>
<td>LT L. A. Campbell</td>
</tr>
<tr>
<td></td>
<td>(53609-00)</td>
<td>(55610-00)</td>
</tr>
</tbody>
</table>

Promotion percentages for officers being considered by FY 80 selection boards have been released by the Chief of Naval Personnel. In the unrestricted line for promotion to captain, up to 60 percent may be selected with up to 10 percent of selectees from below the zone. Promotion opportunity to commander is 80 percent and up to five percent may be picked from below zone. For lieutenant commander, up to 90 percent may be selected and five percent from below the zone. Line limited duty officer commander selection is 80 percent with five percent selection possible from below zone. For lieutenant commander, the promotion opportunity is 90 percent with five percent from below zone. However, on Sept. 30, 1979, the Navy's authority for considering LDOs below the zone expires. Therefore, the LDO below zone opportunity is contingent upon congressional passage of proposed relief legislation before the boards convene. For women line officers in the zone for captain, up to 75 percent may be selected and below-zone maximum is 10 percent. For commander, the promotion opportunity is 80 percent and below-zone picks can be up to five percent. Up to 90 percent of women line officers in the zone for lieutenant commander may be selected and five percent can come from below the zone.
'79 Sailors of the Year

Sailors of the Year Named....The FY 79 Sailors of the Year were announced in NAVOP 78/79. The Atlantic Fleet Sailor of the Year is PH1 William H. Miller Jr., USS Spruance (DD 963); the Pacific Fleet Sailor of the Year is IC2(SS) Tommy L. Couch, USS Gurnard (SSN 662); and the Shore Sailor of the Year is EN1(DV/PJ) Robert R. Schamberger, Naval Coastal Systems Center, Panama City, Fla.

New Detailer Record Line Established

Ever have trouble getting through to your detailer? Or, have you misjudged the time zones and reached Washington after hours? Now, you can call and leave a message on a new telephone message recording service installed recently by the Naval Military Personnel Command (NMPC). The service is intended to be used by all personnel having urgent or time sensitive matters and who were unable to contact their detailer during normal working hours. Offices, NMPC codes and AUTOVON numbers for officer and enlisted detailers are as follows:

<table>
<thead>
<tr>
<th>Office</th>
<th>NMPC Code</th>
<th>AUTOVON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Force Master Chief</td>
<td>4C</td>
<td>291-5656</td>
</tr>
<tr>
<td><strong>Officer Assignment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surf LCDR</td>
<td>411</td>
<td>291-5935</td>
</tr>
<tr>
<td>Surf JO</td>
<td>412</td>
<td>-6013</td>
</tr>
<tr>
<td>Aviation LCDR/JO</td>
<td>432</td>
<td>-5623</td>
</tr>
<tr>
<td>Major Staff/MAAG/MSN/MILGRU</td>
<td>442</td>
<td>-6062</td>
</tr>
<tr>
<td>SUB/NUC Power Assign/Placement</td>
<td>421</td>
<td>-6025</td>
</tr>
<tr>
<td><strong>Enlisted Assignment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seabee/Diver/EOD/UDT/SEAL</td>
<td>401</td>
<td>291-5766</td>
</tr>
<tr>
<td>Engineering</td>
<td>402</td>
<td>-5780</td>
</tr>
<tr>
<td>Nuc/Strategic/Weapons/AUX/STS</td>
<td>403</td>
<td>-5823</td>
</tr>
<tr>
<td>Aviation</td>
<td>404</td>
<td>-5834</td>
</tr>
<tr>
<td>Admin/Deck/Supply</td>
<td>405</td>
<td>-5727</td>
</tr>
<tr>
<td>AAW/ASW/COMM/OPS</td>
<td>406</td>
<td>-5843</td>
</tr>
<tr>
<td>HM/DT</td>
<td>407</td>
<td>-5708</td>
</tr>
<tr>
<td>When necessary to use commercial lines, the prefix is (301) 427-XXXX.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ney Winners

Ney Awards....The following ships and activities have been named the first-place winners in the annual Captain Edward F. Ney Memorial Awards program for 1979: USS Detector (MSO 429); USS Lockwood (FF 1064); USS Duluth (LPD 6); USS Kitty Hawk (CV 63); Naval Communication Area Master Station, EASTPAC, Wahiawa, Hawaii; and Naval Air Station, Patuxent River, Md. The award is presented for unequaled achievement in overall enlisted dining facility operations. (See page 12 for story about Navy cooks.)
“Serve God, love one another, and preserve your victuals,” English naval commander Sir John Hawkins admonished his crew before setting sail in 1562. These were the “big three,” faith, love and food—and a goodly supply of each was essential for a successful voyage.

Sir John reasoned that faith would preserve the mind throughout interminable hardship under way; love would engender harmony and quell seditious thoughts; and food, of course, would restore vitality sapped by the rigors of sea duty. Predictably, faith sometimes faltered and love turned to hate—neither failing, however, caused significant loss of life. The culprit—more deadly than storms, war or bo’suns—was bad food.

Survival without eating was impossible; so were the “victuals.” Lack of proper food caused more illness and death among early sailors than anything else. Between 1600 and 1800, scurvy, an easily preventable vitamin deficiency disease, killed more than a million seamen. (By comparison, during participation in nine wars over a period of 200 years, the U.S. Navy lost 130,000 people to all battle-related maladies.) Add to that million the uncounted thousands of deaths the world over directly traceable to improper diet, unsanitary food preparation, and deficient storage facilities, and the importance of good food to a navy is apparent.

“There is a common proverb, that nothing will poison a sailor,” wrote Nathaniel Knotts in his 1634 edition of An Advice of a Seaman. Obviously aware of the adage, “old Navy” administrators took it to heart. For instance, early 20th century U.S. Navy cookbooks contained this advice: “The presence of wormholes in coffee should not occasion its rejection...since they generally indicate age, weigh nothing and disappear when the coffee is ground.”

Navy doctor Captain Louis H. Roddia wrote in A Short History of Nautical Medicine: “The hardtack aboard naval vessels was often hard as flint and all too frequently infested with weevils. Knocking the bread against the edge of the mess table to remove weevils was a regular practice and the noise made by this procedure was as regular a sound at meal time as the rattle of mess gear...indeed the sailors regard bread not infested as suspicious...too bad for even the weevils to eat.”

CAPT Roddis later found some confirmation for seamen’s suspicions, when, in 1914, he was called upon to survey some hardtack issued during the Spanish-American War in 1898—of course, it was 16 years old by then. “They closely resembled rotted cedar shingles,” the doctor wrote, “and when crumbled, the powder was like sawdust and not a weevil was found.”

Similar stories are told about salt beef. Frequently, it wasn’t of high quality nor carefully cured or aged. Some salts who who were handy whittlers claimed that when the meat was allowed to dry, it could be carved into small boxes. The boxes were then shellacked and the salts swore no one could tell them from those made of fine mahogany. Clearly, a career in Uncle Sam’s early Navy was only for iron men with steel stomachs.
The 19th and 20th century Navy offered a severely limited selection in its messes because of a lack of preservatives other than salt and brine. Moreover, the food available was generally poorly prepared by "chefs" who had everything in their cooking except their hearts. If menus varied at all from day to day, changes were superficial—beans substituted for rice, or salt beef for salt pork.

Cooks had no use for such culinary conventions as recipes or measuring spoons. They tossed whatever they fancied into the stew with little regard for individual tastes or seasoning preferences. If, by chance, one had a special dish favored by the crew, its ingredients remained a secret the cook carried to his grave.

There're Meals and There are Meals

A Navy like ours, accustomed to steaks, eggs-to-order, and a wide variety of nutritious foods, would no doubt consider physical action if served the typical meal on an old Navy "good feeder." Savor this day's ration aboard USS Portsmouth, sloop-of-war, in the late 1800s.

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>prunes</td>
<td>corn pone</td>
<td>cracker hash</td>
</tr>
<tr>
<td>hardtack</td>
<td>salt horse</td>
<td>hardtack</td>
</tr>
<tr>
<td>molasses</td>
<td>hardtack</td>
<td>molasses</td>
</tr>
<tr>
<td>coffee</td>
<td>coffee</td>
<td>tea</td>
</tr>
</tbody>
</table>

Compare that to a day's ration aboard USS Hunley (AS 31), a 1978 Ney Memorial Award winner, and vow never again to complain about being served roast beef twice in the same week.

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>buttered grits</td>
<td>tomato soup</td>
<td>bean soup</td>
</tr>
<tr>
<td>fried eggs to order</td>
<td>roast turkey</td>
<td>beef sukiyaki</td>
</tr>
<tr>
<td>breakfast steaks</td>
<td>stuffed fish</td>
<td>roast of veal</td>
</tr>
<tr>
<td>grilled ham slices</td>
<td>mashed potatoes</td>
<td>veal gravy</td>
</tr>
<tr>
<td>minced beef, toastham browns</td>
<td>oyster dressing</td>
<td>steamed rice</td>
</tr>
<tr>
<td>hot cakes, waffles</td>
<td>natural gravy</td>
<td>snowflake potatoes</td>
</tr>
<tr>
<td>hot syrup</td>
<td>buttered carrots</td>
<td>buttered potatoes</td>
</tr>
<tr>
<td>pastry bar</td>
<td>asparagus</td>
<td>broccoli</td>
</tr>
<tr>
<td>French toast</td>
<td>pastry bar</td>
<td>pastr&quot;y bar</td>
</tr>
<tr>
<td>coffee, tea, milk</td>
<td>salad bar</td>
<td>salad bar</td>
</tr>
<tr>
<td></td>
<td>assorted beverages</td>
<td>assorted breads</td>
</tr>
</tbody>
</table>

Given Hunley's typical daily menu, it's not surprising that the Navy spends $235 million a year on food. Sailors consume enough food annually to feed a medium-sized city—26,400,000 pounds of beef, 2,600,000 pounds of coffee, 8,200,000 dozen eggs, and 19,500,000 pounds of potatoes, to list a few biggies.

Even on a local level, the figures are impressive. During one quarter of 1978, the crew of USS America (CV 66) consumed 11,087 pounds of bacon, 22,755 pounds of chicken, 16,596 gallons of milk, 27,054 pounds of bread, and 7,182 bottles of catsup. Obviously, today's sailors like plenty of good food and the Navy sees they get it.

"I believe we give men and women of our all-volunteer Navy a variety of food items they prefer," said Captain Henry

---

"Fleet chow at Little America Station in the Antarctic: a lot of things have changed in 30 years, but the need for freshly baked bread isn't one of them."
Feeding the Fleet

E. Hirschy Jr., SC, commanding officer of the Navy Food Service Systems Office. “NAVFSSO’s (pronounced Nav-Fisso) job is to provide the best food available within the limits prescribed by the Navy Ration Law, thereby ensuring high morale and sustaining the Navy’s reputation as the best of the military feeders.”

To do that, NAVFSSO provides technical guidance to all enlisted, CPO and officer dining facilities afloat and all enlisted dining facilities ashore.

Additionally, NAVFSSO sets overall Navy foodservice policy, provides menu guidance, recipe services, financial reporting assistance, dining facility planning and mess management training.

(Re)Searching for Good Food

“Old Navy” veterans would be shocked at the foods offered today’s volunteers. Modern Navy fare, ranging from Newport fried chicken to steaks-to-order, is far from the slapdash affairs depicted in comic strips and old war movies. Recipes are the carefully planned products of scientific research, constant testing and tasting, scientists, food technologists, dietitians, and home economists at the U.S. Army Natick Research and Development Command in Massachusetts.

“Natick runs the research and development program for everything from protective clothing to Custom foods,” CAPT Hirschy said. “Anything along food lines which NAVFSSO wants researched is sent to Natick. They worked on the fast food project aboard USS Saratoga and are now examining other projects such as the use of ID cards in lieu of signing in at ashore dining facilities, automated food service systems for shipboard use, freeze-dried foods, combat meals and the hydroponic farming at Argentia, Newfoundland.

“The Argentia project,” the captain said, “is currently one of our most interesting experiments. Hydroponic farming is a process of growing fresh vegetables through the use of liquid mineral solutions and special lighting. It has application in areas with unfavorable weather for growing crops year round. The entire operation can be handled by one person and currently the Intensive Agriculture Unit there is producing enough produce to provide two salads daily for each of the 200 people who eat in Argentia’s dining facility.”

Natick is also studying the development of an automated foodservice record-keeping system to eliminate repetitive, cumbersome record-keeping tasks aboard ship, and an automated system to analyze dining facility menus for caloric and nutrient content. Both projects are expected to be fully developed by 1982 and implemented fleetwide shortly thereafter.

The armed forces have led the way in developing freeze-dried foods because they can be easily prepared under combat conditions and require much less space aboard ship than unprocessed foods. “Milk, for instance, is a bulky item with a relatively short shelf life,” CAPT Hirschy said. “We finally have a new dried milk product being tested on submarines and, so far, sailors indicate they like it as much as the milk they’ve been drinking all their lives.”

Foods such as dried milk are called “Custom” foods—Convenient Uniform Space-saving Tailored-to-taste Operationally-efficient Manpower-saving product. Custom foods conserve storage space, an essential requirement aboard ship, because all are canned, frozen, compressed and dried, or freeze-dried. Additionally, they are energy-efficient products because many require little or no preparation other than the addition of hot water.

An amazing feature of Custom foods is that, once prepared, they taste fresh and lose none of their original texture. Some currently in use in the fleet are coffee (freeze-dried), green peas (dehydrated, compressed), and shrimp (freeze-dried). Another to be introduced soon is shelf stable, dehydrated celery (glycerol or gum-treated) and similar vegetables in which crunchiness is a must. Natick has long been able to “Customize” that type of food, but only recently have they been able to restore the crispiness which is lost in the drying process.

Books for the Cooks

“The goal in our operation is excellent food served in a pleasant atmosphere,” CAPT Hirschy said.

A major step in ensuring excellent food Navywide was taken in 1902 with the introduction of the first Navy cookbook, a skimpy volume containing less than 100 recipes. Reaction by foodservice people to this invaluable aid was less
than favorable—most cooks considered a mandatory recipe book an invasion of their culinary privacy. It and succeeding cookbooks continued in use for 44 years and the standardization they brought steadily improved Navy chow.

Cookbooks, however, had several drawbacks—they were unwieldy to handle while trying to mix ingredients for hundreds of portions; they could be easily misplaced, even incorporated in the stew; and recipe revision, deletion or addition was impossible without printing a new edition.

So, in 1946, the Navy introduced the Navy Recipe Service, a collection of 5-by-8-inch recipe cards listing the exact proportions of ingredients required to feed 100 people a given dish. In 1962, it became the Navy-Marine Recipe Service, and continued acceptance and expansion brought about the Armed Forces Recipe Service in 1969, used now by all services.

With 1,450 recipes—each tested in the kitchens at Natick—the Armed Forces Recipe Service incorporated standardized weights and measures and easy-to-understand directions on color-coded cards for food preparation. Sixty-five “how-to” cards were also added. They contain information useful to
Feeding the Fleet

MSs, such as how to adjust a 100-portion recipe to feed any number of people.

Each recipe, if followed exactly, produces an appetizing dish. "What makes the difference in foodservice from one ship to another is command interest and 'TLC' of foodservice personnel," CAPT Hirschy said. "One MS, for instance, can make a super steak every time while another always ruins it. The end product reflects the motivation of the cooks and the foodservice management at their command."

Thinking Thin in the Galley

Navy interest in weight control has led to an ongoing "Think Thin" campaign in the galleys. "The Navy is basically a group of healthy individuals who are responsible for maintaining their fitness," CAPT Hirschy said, "but we at NAVFSSO offer guidance for streamlining standard menus so commands can provide nutritious and tasty foods for dieters. Think Thin menus include all basic items, but exclude high calorie extras like sauces, gravies, pastries and high-cal toppings."

Think Thin menus are the backbone of the low-calorie system and many commands regularly serve meals with an ample selection of diet items for weight watchers. NAVFSSO periodically publishes tips on offering low calorie items and methods of making Think Thin meals appetizing. Some ships even list the calorie content of menu items on their weekly menu plans.

"I don't see our getting into a low-calorie food program per se; however, we do try to offer a wide selection so that people can find food to meet their individual needs," CAPT Hirschy said. "We get a lot of queries about vegetarian menus too, so we try to make ample non-meat products available. Still, the bulk of the foods served are those our studies have shown Navy people prefer most—steak, eggs-to-order, fried chicken and milkshakes."

Training the Team

Many of today's MSs started in the scullery and, through on-the-job training, became food service management experts. That, of course, is one way to learn the rating; formal training in one of the Navy's 18 MS schools is another.

Formal "schoolhouse" training is available at bases all over the country; curricula range from basics taught in Mess Management Specialist Class "A" School in San Diego to Commissary Store Operations taught at the Meat and Produce Management School in Norfolk. Regardless of how much formal training a person receives, nothing can replace on-the-job experience enhanced by a visit from the Navy Food Management Team.

The Navy Food Management Team concept began more than 25 years ago with a Field Food Service Team of one supply officer and three commissarymen operating out of Norfolk. From that beginning, there are now five specialized cadres (located in Norfolk, Va.; Charleston, S.C.; Mayport, Fla.; San Diego, Calif.; and Pearl Harbor, Hawaii) consisting of senior MSs and hospital corpsmen (for sanitation instruction) who visit ships and shore stations to help commands with food service problems and conduct training sessions. "These are the trainers who go out and assist the fleet on location," CAPT Hirschy said. "They are not inspectors; they
are teachers. They brief the CO on their findings and that information goes no further. The job requires travel all over the world and, I think, it epitomizes where an MS who knows his job can go in the Navy.

A regular assistance visit lasts two weeks, though shorter visits may be arranged to accommodate schedules. During their stay, members roll up their sleeves and teach “do as I do” techniques of menu planning, food preparation, foodservice equipment operation, accounting procedures, sanitation, food item requisitioning and issue procedures. Team members answer questions about foodservice problems, advancement, retention, and other professionally related subjects.

In addition to OJT and formal training, NAVSUPINST 4061.11D mandates the Standards of Food Service. Altogether, the instruction lists more than 300 dictates which foodservice people must be aware of and strive to attain. Some are:

- Menus for all three-day national holidays will feature dishes known to be crew favorites.
- A different a la carte breakfast menu will be featured each day.
- Maximum use will be made of draperies, wall paneling, acoustical overheads, murals and other decorative motifs.
- Coffee urns will be of adequate size to ensure freshly brewed coffee for patron demands.

The Challenges of Tomorrow

A World War II veteran would be hard pressed if required to recommend improvements for Navy foodservice today, especially after eating a meal on a Navy Memorial Award-winning ship; yet improvements will be made.

“We have some challenging and exciting programs that will do very much to enhance overall foodservice in the Navy,” CAPT Hirschy said. “The Intensive Agriculture Unit in Argentia shows great promise for expansion to other areas and we are planning an a la carte operation at all continental U.S. shore stations. They will be similar to the one being tested at Alameda, Calif., where Navy people are permitted to purchase only the items they want in the dining facility instead of having to buy an entire meal.”

Additionally, NAVFSSO is working on more programs to upgrade qualifications of foodservice personnel and consequently make Navy food even better. Perhaps the biggest challenge will be replacing out-dated equipment on a peace-time budget. Advances are being made in that area through self-help programs administered by local commands. Research at Natick continues to produce new and better foods and NAVFSSO is working closely with the Bureau of Medicine and Surgery to improve menus for weight control, nutrition and sanitation.

“We are continually striving to eradicate any conditions that might jeopardize the health of our crews and thereby reduce combat readiness,” CAPT Hirschy said. “NAVFSSO is constantly seeking innovative improvements to accommodate food preferences of our Navy men and women. I’m excited about the possibilities. I have no doubt about our ability to ensure that our Navy remains the best fed and healthiest in the world.”
BY JO1 DAN WHEELER  
Photos By PH1 Terry Mitchell

It was 9:15 a.m.

Less than two hours earlier, USS Dewey's (DDG 45) crew had eaten a breakfast of eggs-to-order, grilled ham, hot buttered grits, juice, toast and coffee. More food was the furthest thing from their minds as they turned-to in Charleston, S.C.

Not so, however, for Mess Management Specialist Third Class Dave Adkins, acting starboard watch captain—he thought of nothing else. Only two hours and 150 pounds of uncooked chicken parts stood between him and the first wave of hungry crewmen, each expecting a lunch of "Southern fried chicken" with all the trimmings.

Perhaps, if Adkins had time to consider how much had to be done by 11:15, he would have been worried. But he didn't. Since 4:30 a.m. he'd been bustling to prepare breakfast; now, even with the morning clean-up about done, there was still no time for a breather.

He pulled a recipe card from a box of more than a thousand. Within minutes his hands were covered with pre-seasoned flour and the first batch of chicken breasts were turning crispy brown in the deep fat fryer. MS3 Roy Keil and MSSN Gary LeFande—also on duty—were chopping vegetables, bacon and hardboiled eggs for the salad bar; preparing garnishments of celery stalks and dyed potato slices; whipping potatoes and doing the dozens of little chores which make or break a shipboard meal.

As quickly as one job was finished, there was another to be done—throughout the morning the pace never let up. Hissing steam, rising temperatures, 1MC announcements and constant traffic through the galley would have frayed the nerves of amateurs, but these professionals cooked on, chatting among themselves as they went. After all, this was just another routine day in Dewey's galley. Pierside or under way, it would have been no different.

Far from feeling like the proverbial slave over a hot stove, Adkins was enjoying himself. "I love to cook," he said. "I started when I was 16 in a little place called Bill's Grill in Xenia, Ohio, my hometown. Now, at 27, cooking is in my blood." With no more effort than it takes to button a shirt, Adkins twisted dozens of chicken wings into compact units and rolled them in the seasoned flour.

"Cooking is what I do best and I guess I'll be doing it the rest of my life." He dropped another handful of chicken into the fat, shook the basket to prevent sticking, and turned again to the raw wings.

By 10:30, Keil had moved alongside Adkins and began helping with the chicken. LeFande was still preparing items for the salad bar. "It takes one man all morning to chop enough to stock the salad bar," LeFande said. "Then the job's still not done—you have to keep restocking it throughout the meal. Stuff like bacon and croutons goes fast."

Keil was wearing the orange-striped shirt which all of Dewey's MSs wear. But, while most wear white foodservice caps, he wore a green "helmet" of paper which covered not only the top of his head but all of his face except for eyes and nose. "Those of us who have beards have to wear this type of cover," Keil said, "so there isn't any chance of getting hair into the food. Of course, all of us—foodservice men included—have to keep our hair cut short, fingernails clean and maintain a neat personal appearance.

"At 10:30, either the messdeck master-at-arms or the leading chief inspects the foodservice men. He keeps an eye on us MSs all of the time."

At exactly 10:30, about 15 foodservice men were lined up in the enlisted dining facility as MSC Edgar Aldridge, the leading MS chief, inspected for shaves, haircuts, clean uniforms, and cuts that might be subject to infection. Five minutes after the muster, MSC Aldridge dismissed them: "All of you try to get a little more polish on those boondockers. I don't mean they have to be spit-shined, but some wax from time to time will stop them from rotting. OK? Finish setting up for lunch."

As lunchtime approached, the last baskets of chicken were fried to perfection and stacked on top of a layer of bread in a serving tray. "That's a trick I learned in MS 'A' School in San Diego," Adkins said. "The bread absorbs the grease and keeps the skin crisp." He also learned how to use the Armed Forces Recipe Service cards, recipe conversion techniques, how to use galley equipment and cooking tools, and several other quality control procedures.

One of the most important quality control measures taught to MSs—and the one most frequently ignored—is the...
use of standard recipe cards. "Contrary to what some MSs think," said MSCS Mario Ignacio, a member of the Navy Food Management Team in Charleston, "failure to use the Armed Forces Recipe Service usually hurts, rather than helps, the meal because it's easier to make a careless mistake. Once in a great while," he said, "a cook improves on the recommended recipe. However, more than 20 years' experience has shown me that 98 percent of the recipes are excellent if followed to the letter."

Though Adkins has prepared Southern fried chicken hundreds of times during his four years in the Navy, he still refers to the recipe card. "Follow this card and you can't go wrong. Sure, there are some chicken recipes I like better than this one," he said as he waved the orange card, "but it's designed to please the majority and it will."

Then, moving a tray of hot chicken to the serving line as the foodservice men lifted the partition separating the galley from the enlisted dining facility, he said, "Following those cards, however, won't ensure well-prepared food. Only personal pride can do that. If I didn't take pride in what I do, I wouldn't be good at anything. That's my secret of quality control."

Every duty day, each MS puts himself and his work on the serving line. He stands before the crew as if to say, "This is what I've cooked, and I alone am totally responsible for the results."

"I couldn't face the crew like that," Adkins said, "if I hadn't done my best."

Sometimes, even your best is not enough. "Sailors are hard to please," said MSC Felix Cabanting, another member of Charleston's Navy Food Management Team. "I've heard them complain about everything, but most sailors are eating better on Dewey than they eat at home. Even on USS Hunley (AS 31), a Navy Award Winner in 1978, sailors complain about the chow. And Hunley has a wider selection of properly prepared foods than most restaurants!"

I'd rate it as satisfactory, maybe less," said a crew member who had been standing in the chow line for about 10 minutes. "It's not that bad," said another, "but it sure ain't all that good either!"

As if following an inviolate Navy tradition, sailor after sailor either damned the cooks and food with faint praise or complained about such things as: "I don't like butter. I like margarine and we never get any." Then a brave soul said, "The food on this can is about the best I've eaten since I joined the Navy."

Their courage bolstered as the grasp of peer pressure began to loosen, several sailors conceded that the food was good and the cooks tried hard to please them. "I'll tell you this," said Fire Control Technician (Missiles) Third Class Dave Dallas, "a lot of sailors here say they don't like the chow, but when 'lunch for the crew' is passed there's always a long line and people running to be first. I complain too—who doesn't?—but I never miss a meal."

An hour later, foodservice men work-
ing the scullery had proof positive of how the crew really feels about Dewey’s meals. “We rarely have more than half a trashcan of garbage after any meal and most of that’s water and coffee,” said one scullery hand. “After feeding 380 people, that seems to say that something is being done right in the galley.”

One of an MS’s few rewards for a job well done is a word of appreciation from the crew after they’ve eaten some “good trashcan of garbage after any meal and tend to stay there: Those who say chow.” According to the MSs who have well done is a word of appreciation from one scullery hand. “After feeding they like the meal; those who say the complaints go up after we’ve been at sea for a little time.

“Most people don’t say a thing about the meal until we prepare something which isn’t exactly to their liking,” MSC Aldridge said. “The number of complaints go up after we’ve been at sea for awhile; a lot of crew members are just blowing off steam they built up somewhere. What they don’t seem to remember is every day—every day of the week, regardless of schedules—the MSs have to prepare three meals. We’re like a DK who has to hold payday for the crew three times a day.

“Not even holidays bring relief,” he said. “There’s an old saying about Holiday Routine among the cooks: ‘Yea, it’s Holiday Routine all right—holiday for the crew; routine for the cooks.’

Lack of appreciation and long hours tend to turn some MSs into cynics. “I used to think it was great being a so-called ‘unsung hero,’ said MSSN Kenneth Young. “But after you bust your tail 16 hours a day, month after month, you realize that you’re not an unsung hero—you’re just another unknown soldier.”

When the praise does come, it doesn’t go unnoticed. “Hell, man,” said MS1 Paulino Amancio, “when you say you like the meal, that makes my day.”

Fortunately for MSSN Ron Pettitt, a former machinist’s mate, he didn’t switch rating to MS for the compliments. “I knew a good thing when I saw it,” Pettitt said. “I like the liberty.” In some shipboard ratings, a statement like “I like the liberty” would be considered less than the reflection of a 4.0 attitude. But, in the MS rating, few could stand the pace without what is known in galley parlance as “Five and Two.”

As used aboard Dewey, “Five and Two” means that each MS works for five straight days and gets all or part of five days off. Then he works two straight days and gets all or part of five days off.

“The schedule is basically the same whether under way or in port,” MSC Aldridge said. “However, when Dewey is under way, the cooks may work extra hours because the entire crew eats every meal. That’s the only chance we have to get all of the MSs on board at the same time to do such things as repainting the enlisted dining facility and other habitability work. Also, when under way, we have a night baker who works all night baking bread, pastries and desserts.

What the baker bakes and what the MSs cook is determined by the leading chief. He has to write the menus, predict the right amount of food to break out for each meal, and stay within the ship’s food budget. While each responsibility is important, operating within Dewey’s $70,000-a-quarter budget is probably the most difficult to do without arousing the wrath of the crew.

“Meat is supposed to account for about 50-60 percent of your daily budget,” MSC Aldridge said. “Say that amounts to $400 a day, for instance, and you want to serve steak which will run you $500 for a single meal. What you have to do is plan the other meals that day and the next day using less expensive meats, like ground beef, so you can balance out.

“We are faced with a problem, no matter what we serve,” he said. “We know we can’t please everyone, so we try to serve high acceptability items like steak, cheesesburgers, and fried chicken as often as possible. Liver and cold cuts, both low acceptability items, are served as little as possible.”

Calculating “acceptability” is more complex than simply listening for the yuks and wows. A formula is used; the unknowns are taken from records compiled after each meal. Each day MSC Aldridge gives the watch captain a Food Preparation Worksheet on which he has already copied the day’s menu for each meal, special instructions for preparation, the time each dish should be prepared, and the number of portions to cook. Before the watch captain gets the worksheet, MS3 Harry J. Wells Jr., Dewey’s Jack-of-the-Dust has already lugged the boxes and cans required from the storerooms below to the galley and adjusted his inventory.

At the completion of each meal, the watch captain fills in his part of the worksheet. He records how many people actually ate, how many portions are left over, and any other information which would be helpful to the chief in calculating acceptability. “If we were serving steak for supper and 90 people showed up instead of the 225 the chief had predicted,” MS1 Amancio said, “he would want to know that there had been an early liberty. On the other hand, if a lot of people showed up for liver, it might be significant if it was the day before payday.”

MSC Aldridge considers all of these things when planning his six-week menu. Every Monday a new seven-day menu is posted at the head of chow line and those meals are served whether in port or at sea. The only thing that could possibly change spaghetti to cold cuts would be General Quarters.

When Dewey goes to GQ, the cooks close the drains in the galley, set condition Zebra, get into battle dress and continue cooking the next meal...if it is something which can be served as battle rations. Usually they know whether the crew will have to be fed on station, fed under relaxed battle conditions in the enlisted dining facility, or fed in small groups in the facility. Everything is
hunky-dory if either of the last two is the case; if feeding is on station, something has to be prepared which will fit in a "box lunch."

Unlike some Navy ships, Dewey doesn't publicize special meals other than the traditional Thanksgiving and Christmas Day affairs. "Just because we're serving spaghetti, we don't call it 'Italian Night,'" MSC Aldridge said. "However, we do serve ethnic dishes from time to time and the ones the crew likes most, we serve frequently."

Birthday meals are another story. They're special and they're publicized in the plan-of-the-day and over the -1 MC. Once a month, the MSs prepare a lunch of steak and baked potatoes for crewmen celebrating birthdays. "The meal isn't for the whole crew; that would take something away from it," the chief said. "It's just for them. They get to eat 30 minutes early and I imagine a lot of bargaining goes on that day because each guest of honor gets to bring a friend."

Birthday celebrations for officers fall under the jurisdiction of the wardroom mess. If there is one, the cook who bakes the cake is an MS taking his turn at wardroom pantry duty. Six of Dewey's 17 mess management specialists work in the wardroom and the others rotate there as the chief dictates.

"The pace up here is slower than that in the enlisted dining facility," said MS2 Manny Mangayao, a former steward with 11 years' service. "We have to prepare meals for only 26 instead of more than 300, so we have a little more time for relaxation. One thing extra we do is keep track of the food drawn from the enlisted galley and the storeroom so it can be added to the wardroom bill each month."

Some things about the chow-slinger's rating never change. One of the good ones is liberty; one of the bad ones is equipment failure. At present, Dewey, a 20-year-old former DLG, has one freezer out of order, a compressor on order for the salad bar, and her potato peeler is on the blink.

"Let's face it," MSC Aldridge said, "getting foodservice equipment funded has always been a problem because it's a low priority item. A warship's mission is not to feed, but to fight; the money goes for engineering and weapons."

That fact could well be a disguised blessing from the training viewpoint. Who but a Navy cook could still put out a meal on time when faced with equipment malfunctions, out-of-date appliances, loss of steam, loss of power, or water hours? "This is a unique training situation," the chief said, "and I think it prepares a person for any type of difficulty he might someday face in his work."

Experience, however, is not quickly acquired. It's gained gradually as an MS continues to do his job the best he knows how. Then, one day he discovers that tasting pineapple upside-down cake, for instance, isn't the only way to tell if it's been properly prepared. The texture tells him. The smell tells him. The color tells him. Even the uncooked batter reveals its secrets to the experienced eye.

"That's something you'll never be able to do unless you have great pride in your work," MSC Aldridge said. "We here on Dewey have that kind of pride and I think it shows in every meal we serve."

MSSN Ron Petitt, a Dewey cook and occasional night baker, wears the foodservice cover required of those with beards.
Understanding the Navy Ration Law

“Why can’t we have steak and lobster every Friday night? They’re my favorites!” “How come the MidRats served on my ship always seem to be leftovers when I know there is plenty of ‘good’ food on board?” To find the answers to these and other questions, All Hands talked with Senior Chief Mess Management Specialist Mario Ignacio of the Charleston Navy Food Management Team who explained the Navy Ration System.

Q. What is a ration?
A. A ration is one day’s legal allowance of food for one person. Three meals—usually breakfast, lunch and dinner—equal one ration.

Q. Who determines the amount of money the unit’s Food Service Office (FSO) can spend to feed one person three meals for one day?
A. That is done by the Navy Food Service Office in Washington, D.C. NAVFSSO issues a directive each quarter which prescribes the money allowance each FSO can spend to feed one person a ration a day. The money allowance is called the Basic Daily Food Allowance (BDFA).

Q. Why must NAVFSSO re-evaluate the BDFA quarterly?
A. Because the cost of food items fluctuates from day to day. The only way the Navy can ensure that each ship and station will get enough money to feed their crews is by adjusting BDFA as needed. Some recent BDFAs were:

1 January-30 March 1979: $3.36 per day per person
1 April-30 June 1979: $3.41 per day per person

Currently, the $3.41 per day BDFA applies only to overseas personnel stationed ashore and to personnel stationed in ships. Personnel stationed ashore within the continental United States are allotted $3.30 per day. Ships which feed 149 or less at any given meal are allotted an extra $.25 per day; submariners get an extra $0.45 per day regardless of the number fed.

Though the BDFA has been steadily increasing, that doesn’t mean the FSO can afford steak and lobster every day. You have to remember that the cost of food has been steadily increasing. The BDFA just tries to keep pace.

Q. If the BDFA is $3.41 per person per day and a ship has 250 enlisted people on board, what is the maximum amount the FSO can spend daily?
A. That is figured by multiplying the BDFA by the number on board: $3.41 X 250 people = $852.50. I still find it amazing that the Navy can serve three well prepared, balanced meals a day (which allow for serving “seconds”) for that little money.

Q. What percentage of the BDFA is spent for each meal?
A. The proper percentage is 20 percent of BDFA for breakfast; 40 percent for lunch; and 40 percent for dinner. That works out to about $0.68 for breakfast, and $1.36 each for lunch and supper.

Q. Referring only to sea duty, what is the definition of in port?
A. That means the ship is berthed or at anchor in the United States or overseas.

Q. If the ship is in port, can the FSO claim the maximum daily ration allowance for the entire crew?
A. No. In port, the FSO can submit a claim only for the number of meals and portions actually served. The FSO is required to accurately count the number of persons actually fed while the ship is in port and is only paid for that number of rations. That is why it is very important for the leading chief to accurately estimate how many members of the crew are going to eat in the enlisted dining facility at each meal while the ship is in port.

Q. And if the ship is under way?
A. Then it is assumed that all members eat three meals a day and the FSO can claim the full ration allowance for each enlisted member on board who is entitled to be fed in the enlisted dining facility. It is not required that the actual number fed be counted. For accounting purposes, days at sea include the day of departure and the day of return, regardless of the time.

Also, during simulated cruises pier-side (Fast Cruises) the at-sea procedure for taking ration credit should be used.

Q. Some ships serve night meals; what are they?
A. Night meals are full meals offered to enlisted members who missed a meal during normal serving hours because of night watches or other duties. A person who has eaten three meals during normal hours is not entitled to a night meal. Any time night meals are served, the FSO can claim ration credit.

Q. What is the definition of Mid-Rations (MidRats)?
A. MidRats are food items such as soups, crackers, sandwiches, leftovers and other inexpensive dishes normally offered to sailors before assuming the mid-watch and to those who are being relieved.

Q. Can the FSO claim ration credit for MidRats?
A. No, because MidRats are offered to personnel who have already eaten breakfast, lunch and dinner during normal serving hours. The Ration Law specifies that only one ration credit per day per person may be claimed. This is why ships and stations cannot afford to serve expensive dishes during MidRats.

Perhaps with this information, it will be easier for sailors everywhere to understand why all of their favorite foods can’t be served all of the time. The daily allowance for food is specified by higher authority and the food service officer must stay within his budget. Still, Navy people are the best fed sailors in the world.
Aerial Target Tests

The Navy's new BQM-74C surface and air launchable aerial target is being tested at the Pacific Missile Test Center, Point Mugu, Calif. The new target is an improved version of the MQM-74C Chukar in use by the U.S. Navy and 11 allied nations.

The current test is the first of a three-phase program. These captive flight tests will evaluate how well the target can withstand the rigors of being attached to a high-performance aircraft.

Technical evaluations of surface and aerial launches will take place in the second phase, scheduled to run through August. Included will be some arrested landings and catapult launches to take place at the Naval Air Test Center, Patuxent River, Md.

The target will return to Point Mugu for operational evaluation, beginning in October, which will be conducted by the Operational Test and Evaluation Force.

The new BQM-74C will be used for various missions such as training pilots in air-to-air combat and as a target for anti-aircraft gunnery and surface-to-air missiles. It will also be used to simulate a cruise missile profile launched from beyond the horizon.

Sharing the Ride

For families of the crew aboard USS Guadalcanal (LPH 7), it was an opportunity that doesn't come along very often.

They took part in the ship's 25-hour journey from Norfolk, Va., to the Philadelphia Naval Shipyard for a routine overhaul. In addition to her crew, Guadalcanal carried wives, children, cats, dogs and, instead of helicopters on her deck, there were cars, trucks, vans, motorcycles and stacks of furniture. It was a change of home port that gave dependents the opportunity to spend a day and night aboard the ship that is home away from home for their Navy men.

"It was a great experience and I loved the chance to share that part of my husband's life," said one wife.

The several families on board Guadalcanal have since set up housekeeping in the Philadelphia area, where they will reside while Guadalcanal is in dry dock.

—JO3 Dean R. Sprague

‘Gotta’ Retire Soon

His features and his gray hair suggest that he's been around. He has, since 1943. Equipment Operator First Class Mickey Dunlop has spent 17 of his 52 years as a Seabee. More important, he started with the originals—the fighting Seabees of World War II.

Attached to Naval Mobile Construction Battalion 62, Dunlop isn't about to let anyone put him on a shelf. He's in charge of rock-crushing operations at the Orote Point quarry on Guam; and every working day he puts his muscle against time and cranky machinery in the same steady way he's been doing his job for years.

Dunlop was 17 when he joined the Navy in 1943 in Seattle.

"I took boots in Williamsburg, Va. I don't know when I first heard about the Seabees," he said.

He was assigned to NCB 9 at Port Hueneme, Calif., as a Construction Driver Seaman Apprentice, and was deployed with the unit to Tinian. "We called our outfit plain old ‘Nine.’ There were so many damn battalions of Seabees back then I think they ran out of nicknames.

"When we got to Tinian there were snipers all around," said Dunlop. "And they were still there when we pulled out. At night we could see the lights from their cigarettes. Our night patrols weren’t very effective.

"The Japanese would come down at night and steal supplies. Even with double guards, it didn’t seem to matter. Those guys could sneak away with anything."

The Japanese eventually found their task hopeless and they began to surrender to the Americans in a slow but constant trickle. But, some of the snipers stuck around. Dunlop remembers when one Seabee was shot off a steam shovel.

"That shovel just kept spinning and spinning until someone could finally get to it."

The battalion left Tinian in 45 and became part of the invasion force headed for Okinawa. "Supposedly, the Marines always went in before the Seabees, since we weren’t to be used as front line forces," Dunlop said. "But you couldn’t prove it by some of us. Orders
got mixed up and the Seabees got there before the Marines. We were welcomed by enemy fire."

Seabees grew accustomed to changing from their "we build" role to their "we fight" role on a moment's notice. One night on Okinawa, Dunlop thought his number was up. Enemy troops had broken through the camp's perimeter and he wound up in a foxhole firing his carbine. "We came close to being overrun that time," he said. "I could see a lot of shapes, but no faces."

American planes could be nearly as dangerous. While Dunlop stood alongside a causeway, one of the Corsairs lost power, skipped across the water like a flat rock and slid onto the beach about 30 feet from where he was standing. "Happened every now and then."

Although Dunlop had some memorable times, "Home sounded awful good right about then." And in 1945 that's where he went, home to be discharged. Dunlop put on his Seabee greens again in 1948. Since then, he's been in and out of the Navy but says this is his last stint. "I'm getting too old—gotta retire sometime."

The young Seabees at Orote Point—some as young as Dunlop when he first enlisted—rib him about his age: "Hey old man! Get off that 'dozer before you have heart failure!"

Dunlop doesn't mind. He just asks the "kids" when they're going to learn the construction trade.

J02 P.M. Callaghan

Radar Echoes

Scientists at the Naval Research Laboratory in Wash., D.C., are building a unique radar system designed to help high-speed ships avoid floating objects in their path.

Radar echoes from floating debris such as oil drums, logs and other smaller articles normally cannot be detected by conventional radar, except in very mild sea states. As is usually the case, echoes from debris are masked by other echoes from a disturbed sea surface.

The new radar concept being developed at NRL permits sea-return echoes to be distinguished from echoes of rigid floating debris.

Champ Visits

Heavyweight boxing champion Muhammad Ali recently paid a surprise visit to the guided missile destroyer USS Cochrane (DDG 21) in Sydney, Australia. Ali signed autographs for crew members of the Pearl Harbor homeported ship and discussed his career and plans for retirement. Ali was in Sydney as part of a world exhibition tour and Cochrane was there to participate in a tri-national 7th Fleet exercise. With Ali are (1-r) Cochrane's commanding officer, Commander Mack C. Gaston; his wife Lillian; and Ali's wife Veronica.
First of a Kind

How do you go about awarding an insignia that isn't available? You make it yourself, that's how; and that's exactly what happened this March aboard USS Nimitz (CVN 68).

Last December the Chief of Naval Operations authorized the Enlisted Surface Warfare Specialist (ESWS) qualification program. Those Navy people meeting requirements are authorized to wear the silver cutlass breast insignia of an Enlisted Surface Warfare Specialist. However, the insignia wasn't available until late April.

Since the pins weren't available, Nimitz' engineering officer suggested, half jokingly, that they be made on board. Twenty-two man-hours later, three gleaming, finished ESWS insignias were ready.

To make the pins, Dental Technician Third Class Leonardo Pina, used the "lost wax" technique, a centuries old process for casting metals in great detail. Basically, the technique involves carving a finely detailed original in wax, then encasing this original in the center of a block of a cement-like substance. A small hole is left in the block and, when the cement has hardened around the original, the block is heated to melt the wax which is then poured out of the hole.

Back through the same hole goes molten metal. This combination is placed in a centrifuge and spun at high speed to force the metal into the fine details of the cavity. When the whole thing cools, the mold is broken apart leaving a casting in the exact shape of the wax model.

Thanks to DT3 Pina's skill in this art, three of his shipmates—Chief Quartermaster A.J. Panko, Chief Boatswain's Mate L.D. Layman and Photographer's Mate Second Class K.D. Homedale—now proudly wear original evidence of their professionalism in surface warfare skills.

12 Years Without a Scratch

Flying P3-C aircraft, "Blue Dragons" of Patrol Squadron Fifty, homeported at Moffett Field, Calif., logged in their 90,000th hour recently, marking 12 consecutive years of accident-free flying.

VP-50's continued emphasis on safety earned the squadron a salute from Rear Admiral Charles O. Prindle, Pacific commander of Navy patrol squadrons, during a special celebration to commemorate the occasion.

Visit to Paterno

Santa Barbara, Calif., and Paterno, Sicily, are some 8,500 miles, two seas and a significant cultural distance apart. Yet, they historically share the name of Saint Barbara, patron saint of Paterno and patroness of all cannoneers.

Navy men of USS Santa Barbara (AE 28), currently deployed in the Mediterranean, brought these two cultures together recently when they visited Paterno, a small inland community near the port of Catania. The visit followed an earlier trip by a number of Paterno's citizens to the California city last year.

Navymen toured Paterno's city hall and shared lunch with members of the local government. Stops at Paterno's Norman Castle, the Church of Saint Barbara, and a pleasant excursion through town gave the visitors a view of Sicily not often found in her port cities. In return for their hospitality, Santa Barbara hosted several hundred visitors aboard ship the following day. School children were especially interested in a helicopter demonstration.

Citizens of Paterno also challenged Santa Barbara's "Saints" to compete in a variety of sporting events, a full-day affair that delighted spectators. Losing in basketball, volleyball, soccer and tying in baseball were a bit of a surprise to the "Saints," who had little idea the competition was going to be so tough.

Before saying goodbye, citizens of Paterno, the orange-producing capital of Sicily, gave the crew a bountiful supply of oranges. They also presented the ship with a beautifully framed portrait of Saint Barbara, a book on the history of Paterno and Sicily, and a
small replica of the Norman Castle. In appreciation, the sailors gave the Sicilians a plaque with the ship's seal and an assortment of pictures taken of the Santa Barbara. As a special gift, Paterno was given an American flag, which townspeople said they wanted to display at their city hall.

When the brief exchange between ship and city drew to a close, there was a bond of friendship and good feeling between the two—strong enough to suggest that the two cultures are, after all, not really that far apart.

Helo Hop

Rising out of the morning fog, six HS-12 helicopters left San Diego recently for Norfolk, Va., and their new home with CVW-11, embarked in USS America (CV 66). They made the 4,000-mile journey in four days, with overnight stops at several Air Force bases to refuel.

In preparation for the cross-country trek, the squadron's maintenance crews spent weeks changing engines and going over each aircraft from top to bottom. To reduce weight, each helo carried minimum crew and gear.

As they flew over the mountain peaks of California and Arizona, thin air threatened the rotary engines. At these high altitudes, hail, sleet, freezing rain or snow could quickly weigh down the helos. The six finely tuned birds were unaffected, however, and the first leg of the midwinter odyssey ended without even a ruffled feather.

Passing over the wintry plains of Texas and the Mississippi Valley, rain shadowed their flight. As the airmen approached their destination, however, unseasonably mild temperatures greeted their touchdown at the Norfolk Naval Air Station.

Eyes That Speak

Air traffic controllers at the Navy's Fleet Area Control and Surveillance Facility (FACSFAC) at San Diego monitor a 600,000-square-mile area over the Pacific Ocean and control about 250 to 300 Navy aircraft that enter this offshore area every day. A joint effort between the Navy and the Federal Aviation Administration (FAA) has now made this job a lot easier, safer—and faster.

Recently, FACSFAC became the first Navy facility to tie into FAA's National Airspace System at Palmdale, Calif. The San Diego facility, in fact, is the first non-FAA designed computer to tie into the FAA tracking system.

The high-speed computer interface system will relay to the Navy's FACSFAC computer all flight data on aircraft departing Miramar, El Toro, and other military bases in Southern California from FAA's Palmdale Control Center at the rate of 3,600 words per minute.

The FACSFAC facility is a forerunner of similar Navy installations on the East Coast that are scheduled to be automated within the next two years.

Marine at the Helm

A Marine at the helm of a Navy ship is unusual to say the least. Tradition or not, Lance Corporal Curtis L. Coker, captain's orderly aboard the carrier USS Saratoga (CV 60), made up his mind to become a full-fledged helmsman.

From his first day on the bridge of "Sara," Coker wanted to be at the helm. He logged in 20 hours preparing for the test that would qualify him.

The night after he qualified, Coker was back on the bridge, this time working to become a "master" helmsman. Guiding a large ship during underway refueling operations, or when mooring or passing through straits can be a tricky business.

"It just takes time," said Coker, "but the first time is the hardest."

—JOHN B.J. Winkowski
Who goes where and why

BY JO1 DAVIDA MATTHEWS

Few Navy jobs are as rewarding, yet as frustrating as being a detailer. Detailers are caught between fulfilling the desires of the men and women they serve and meeting the needs of the fleet.

On the average, each of the 180 detailers of the Enlisted Assignment Division, Naval Military Personnel Command (NMPC-4), located in Washington, D.C., is directly responsible for the careers of some 2,000 petty officers and designated strikers. (Enlisted Personnel Management Center, New Orleans, La., distributes all non-designated personnel, E-3 and below.)

The job detailers perform goes far past the 500 sets of Permanent Change of Station (PCS) orders they issue each day. Controlling the immediate futures of thousands of Navy men and women and their families is an exacting and demanding business.

"Detailing is more than just the actual writing of orders," said Commander J.J. Hanley, branch head for technical rating distribution (NMPC-406). "Each phone call, letter, special request or piece of official correspondence a detailer receives has to be researched and answered in a timely fashion. Situations change daily and everything a detailer does has to be on a short fuse."

In addition to their regular duties, detailers get involved in other assignments.

"They are the local, and most easily accessible experts," CDR Hanley explained. "They may be asked to make recommendations or review changes in a training program for their rate. Some serve on selection boards for E-7/9, Quality Control Boards, Humanitarian/Hardship Discharge boards—anything having to do with a particular rating means the detailer may be called upon for input."

OSMC Charles Artis is never far from the telephone—and the explanations about who goes where and why.
Selecting detailers—or those who serve as detailers—is, in itself, a serious business. The detailer selection process begins when the in-house detailer nears completion of his or her own three-year tour of duty. He or she screens the records of those available for PCS orders—all in the proper time frame. The detailer passes the records of the best candidates to the branch head who makes further recommendations. From there the division director makes a tentative selection.

“We then contact the candidate’s command to ensure the candidate’s performance has been sustained at the high level noted in the record,” CDR Hanley said. “We also contact the individual concerned to feel out his or her attitude towards assignment in Washington.

“Detailing is a high pressure job—if the person has any misgivings, we want to know before we do any assigning.”

Master Chief Operations Specialist Charles Artis has served for nearly two years as detailer for E-7/9 operations specialists (OS) and supervisor for the two detailers who assign E-6 and below.

“The rewards in this job far outnumber the frustrations. There’s a great deal of satisfaction when you can take what seems like an impossible situation and juggle things around so everyone comes out happy,” OSCM Artis said.

“Of course, that doesn’t happen all the time. There are billets in the Navy that are traditionally hard to fill. But those billets exist for a purpose. As detailers, one of our responsibilities is filling billets so a command or unit can continue to function smoothly.

“You may not enjoy telling people that they are going to a duty station where they don’t particularly like to go, but it’s part of the job and someone has to do it.”

Almost as if to illustrate the master chief’s comments, the phone rings. A senior officer aboard a ship homeported in Mayport, Fla., wants to know why his leading chief’s request for extension of sea duty was denied. And if he can’t stay on sea duty, why was the chief given orders to Dam Neck, Va., instead of the Jacksonville, Fla., area he wanted. Artis patiently explained the situation.

“We often get calls from division officers or COs of the people we detail and we welcome their interest and concern,” he said. “In this particular case, I had already explained to the chief what we had to do. He has orders in hand and his relief has been ordered in, so approving his sea duty extension would place him in excess.

“The chief told me that he was purchasing a home in the Jacksonville area, but we had no billets open there. Additionally, we are in dire need of instructors at our “A” school in Dam Neck,” Artis said. “It’s only a matter of time before the entire rating structure would suffer if we didn’t fill those instructor billets with qualified people. We can only hope that those involved can see past their own inconvenience to the greater good of the rating community.”

“It would be terrific if we could give everyone the orders they want,” said CDR Hanley. “We realize that the detailer is a key player in the retention effort.

“If we can accommodate an individual’s request, we will,” CDR Hanley said. “With senior petty officers, we have a high success rate—nearly 90 percent of the orders we write are in accordance with the person’s duty preferences. However, the rate for our junior people is much lower, around 60 percent.”

“We are trying to dispel the reluctance junior people seem to have in contacting their detailers,” OSCM Artis said. “For example, we try to talk with all “A” school graduates before they leave school. We feel that it will establish a rapport that will last throughout their Navy careers.

“Senior petty officers know that the detailer is there to serve them,” the master chief continued. “They know from past experience how they can help themselves by helping their detailers.”

According to Master Chief Sonar Technician Robert Beaty, a detailer for the ST rating, an up-to-date Enlisted Duty Preference Card is one of the most important elements of a Navy career. “Detailers cannot read minds. And often, when a seagoing rate is involved, the detailer cannot contact the individual,” STCM Beaty said. “It might turn out that what the detailer thinks you want could be 180 degrees out from what you actually desire.

“If we have two people ready for orders and one has an up-to-date Duty Preference Card on file, we can more readily meet that person’s desires,” CDR Hanley explained. “That leaves the person with no current Duty Preference Card to fill whatever high priority billet is open. If we have no indications, either through a Duty Preference Card, letter or phone call, we have to assume, for purposes of detailing, that the person has no particular desires and will be satisfied with wherever we send him or her. We know the assumption may be wrong, but in many cases we have no other recourse.

“The special comments section on the card is your chance to inform the detailer of any factors that could influence your orders,” CDR Hanley said. “For example, if you are married to
armed to help not only their own people but other ratings as well. We can cover nearly every Navy activity in the world in an 18-month cycle,” CDR Hanley said.

“These trips are both physically and mentally demanding,” the commander continued. “The detailers are constantly on the go, with the length of their working day determined by the number of people waiting to talk with them. We’ve found that even on those occasions when the detailers have a chance to relax at the club or other gathering place, people who were reluctant to see them in an official capacity will come up and talk shop. The detailers expect this—that’s why they are there.”

If the person is within four months of a rotation date, the detailer can consult information he or she carries and try to match up the sailor’s desires to actual fleet needs.

“In this day of chits and forms and everything in triplicate, it makes a big impression when a detailer flips through some computer readouts and answers a sailor’s question immediately with ‘How soon can you be ready to go?’” Master Chief Beaty said. “That ability to make an on-the-spot commitment is invaluable to our retention effort.”

The actual detailing process for your next set of orders started when you reported aboard your present command. Your projected rotation date (PRD) was entered on the enlisted master record in a computer. Then, nine months before your rotation date, your name appears on a computer-generated PRD loss report. Among other things, this tells your detailer where you are, your NECs and how long you have been on sea or shore duty.

Normally, a detailer cannot write orders for anyone past a four-month point, so he concentrates efforts on those people. Exceptions to this might be issuing orders for a reenlistment incentive, homeport shift or, to preclude imposing a hardship on someone in an isolated area where orders are required well in advance to move household goods.

When you reach that four-month point, your detailer receives another computer readout called an Enlisted Assignment Document (EAD). This contains a summary of your service record and any duty preferences you may have on file. The detailer notes whether your next assignment will be at sea or shore, then verifies the information on the EAD and may try to contact you if possible.

With your EAD in hand, the detailer then consults the Standard Personnel Requisition, a list of billets that need to be filled in priority order.

“It would simplify the job considerably if all the detailer had to do was match a name with the billet on the top of the list,” CDR Hanley said. “But there are other facts to consider.”

One of those factors is fleet balance, a term used to describe efforts to keep both fleets manned at the same level for each particular rate and rating. Detailers are tasked with maintaining that manning balance within five percent at all times.

Another consideration is cost. “As an example of just how costly PCS moves are,” CDR Hanley said. “the Navy pays $5,329 to move an E-5 with two dependents from Norfolk to Hawaii. That same E-5 costs us $11,667 if we move him from Italy to the Philippines.

“PCS moves are expensive and detailers must make each set of orders as cost effective as possible.”

Detailers also must consider prior training and NECs. As the Navy becomes more technical, the number of NECs is increasing. The electronics technician (ET) rating alone has 85 separate NECs. If a billet has a particular NEC requirement, the detailer either has to find someone with the NEC or, at greater expense, arrange for schooling so someone can acquire that NEC.

“It’s just good personnel and money management to make sure we use everyone to his or her full potential,” CDR Hanley said.

Other factors the detailers take into account include special programs. There are any number of retention programs which may apply to your assignment, such as GUARD III, STAR or SCORE. Also, you could be considered for one of many high priority billets...
such as instructor, recruiting or recruit company commander duty. “These jobs require our very best people and we are always on the lookout for candidates,” the commander explained.

In summary, the detailer sees you listed on the PRD loss report, nine months before your transfer. Within four months of your rotation date, your name comes up on the detailer’s Enlisted Assignment Document.

After studying available billets on the Standard Personnel Requisition and taking into consideration other factors such as costs, service needs, NECs, special programs and your duty preferences, the detailer writes your orders. Still the job is not finished. If you do not meet all the requirements for orders, such as having sufficient time left in the Navy, the detailer must arrange that paperwork. If you are reenlisting under a special program, and the orders are not to your liking, the detailer will go

New jobs for women

During the next few years, as more women report to sea duty, some will wear rating badges never before worn by women.

Four more ratings, dealing primarily with shipboard functions and mostly aboard tenders, have been opened to women. They are: opticalman (OM), molder (ML), patternmaker (PM), and instrumentman (IM). (The instrumentman rating includes precision instrumentman (PI) at the E-9 level.)

**Opticalman.** Scientifically accurate instruments used as visual aids are required in navigation, aviation and weapons systems in the Navy. These include binoculars, sextants, drafting machines, optical gunsights and periscopes. Specialists called opticalmen keep these instruments in good working condition. Graduates of the 16-week OM “A” school at Great Lakes, Ill., go to advance “C” school or are assigned to tenders, repair ships or repair facilities ashore. Usually, OMs spend 50 to 60 percent of their careers assigned to fleet units. Opportunity for entrance into this rating is good.

**Molders.** Molders work in foundries where molten metals are formed into parts. To qualify, you should have a working knowledge of tools, equipment and machines; have physical strength, manual dexterity, resourcefulness and the ability to do repetitive tasks while paying close attention to detail.

After a 13-14 week “A” school in San Diego, Calif., molders may be assigned to naval shipyards and other shore based repair facilities in the United States or overseas, but usually can expect to spend approximately 60-70 percent of their Navy careers assigned to fleet units such as tenders or repair ships. There are fewer than 200 billets for molders in the Navy and, at this time, entry into the rating by women is controlled.

**Patternmakers.** Working closely with molders are patternmakers who help produce metal parts in the foundry by constructing patterns around which a mold is formed. In their 20-week “A” school in San Diego, PMs learn drafting, carpentry, metalworking skills and shop mathematics; “C” school consists of 11 weeks of training in foundry work. At the E-8/9 level, the patternmaker and molder rates are combined and all PMs become MLs.

Like molders, patternmakers spend about 60-70 percent of their careers with fleet units.

**Instrumentman.** Navy instrumentmen install, service, repair, adjust and calibrate a wide variety of small machines such as scales, meters, recorders, watches and clocks. They work from blueprints and schematics to maintain or repair mechanical instruments used by the Navy. Some IMs go from the 18-19 week “A” school at Great Lakes to on-the-job training at their first duty assignment. Others apply for advanced training at “C” school.

IMs work alone with little supervision in repair shops ashore or aboard repair ships, tenders or in aircraft carriers, spending as much as 50-60 percent of their time assigned to fleet units. An instrumentman becomes a precision instrumentman at the E-9 level. At present there are less than 500 instrumentmen in the Navy. Entrance into the rating is open to women. However, they would not be assigned to aircraft carriers on a permanent basis.

Of the more than 70 ratings in the Navy, only those few which are found in combat-related areas are closed to women. These include aviation antisubmarine warfare operator (AW), cryptologic technician interpretive (CT10), electronics warfare technician (EW), fire control technician (including ballistic and surface missile—FT, FTB, FTM), gunner’s mate missiles (GMM), gas turbine systems technician (including electrical and mechanical—GS, GSE, GSM), missile technician (MT) and sonar technician (including surface and submarine—ST, STG, STS).
back and try to work something out to your satisfaction, if it is possible to do so and still remain within the laws and guidelines he or she must follow.

Computers are used extensively in the detailing process... but only as a tool to help us do our jobs, not do our jobs for us," OSCM Artis emphasized. "Anyone who thinks orders are issued mechanically, without careful thought and consideration is terribly wrong.

"I suppose it would be possible to program a computer efficiently enough to take into account all the varying factors and match up a name and a billet," Master Chief Beaty said. "Detailers provide the human element. A computer may 'say' it is more cost effective to send Sailor A instead of Sailor B to that billet.

"If a person requested a certain job, that decision is bound to reflect favorably on his job performance. And getting the billet he wanted will probably influence any career decision towards retention, thus saving the Navy the thousands of dollars invested in his training and experience."

Details cannot fully serve you if you don't communicate your desires. If you have a problem or a question that your detailer cannot help you with, give your detailer a call. Certain overseas locations, such as Subic Bay, have established retention hot lines that you can use to call your detailer. If you can't phone, write a personal letter. LINK, a quarterly publication produced by NMPC, has telephone numbers and addresses.

"Your detailer is the person who can help you get where you want to go," Master Chief Beaty said. "We have been through many of the same situations you are going through—we know all about all the problems of uprooting a family and we haven't forgotten the arduousness of sea duty.

"We understand, empathize—even sympathize with you. But you have to meet us halfway."

### Detailer Phone Numbers

**SEABEE & DIVER ASSIGNMENT BRANCH (NMPC 401)**

- **NMPC 401C (PERS 5111)**
  - (A) 291-5762
  - (C) 301-427-5762
  - Construction Electrician (CE)
  - Utilitiesman (UT)
  - Engineering Aid (EA)
  - Builder (BU)
  - Steelworker (SW)
  - Equipment Operator (EO)
  - Construction Mechanic (CM)
  - Constructionman (CU)
  - Equipmentman (EO), Constructionman/Apprentice (CA/CN)

- **NMPC 401D (PERS 5112)**
  - (A) 291-5771/5772/5773
  - (C) 301-427-5771/5772/5773
  - Divers
  - UDT
  - EOD
  - SEAL

**ENGINEERING & HULL RATING ASSIGNMENT BRANCH (NMPC 402)**

- **NMPC 402C (PERS 5121)**
  - (A) 291-5776
  - (C) 301-427-5776
  - Machinist's Mate (MM)
  - Boiler Technician (BT)

- **NMPC 402D (PERS 5122)**
  - (A) 291-5793
  - (C) 301-427-5793
  - Electrician's Mate (EM)

  - (A) 291-5791
  - (C) 301-427-5791
  - Interior Communications Electrician (IC)

  - (A) 291-5796
  - (C) 301-427-5796
  - Machinery Repairman (MR)
  - Opticalman (OM)
  - Instrumentman (IM)
  - Patternmaker (PM)
  - Precision Instrumentman (PI)
  - Molder (ML)

- **NMPC 402E (PERS 5123)**
  - (A) 291-5786
  - (C) 301-427-5786
  - Hull Maintenance Technician (HT)

  - (A) 291-5783
  - (C) 301-427-5783
  - Engineman (EN)
  - Gas Turbine Systems Technician (GS)

**SUBMARINE, NUCLEAR POWER, POLARIS/POSEIDON ASSIGNMENT BRANCH (NMPC 403)**

- **NMPC 403C (PERS 5131)**
  - (A) 291-5813
  - (C) 301-427-5813
  - Nuclear Power Ratings

- **NMPC 403D (PERS 5132)**
  - (A) 291-5813/5829
  - (C) 301-427-5813/5829
  - Strategic Weapons Ratings

- **NMPC 403E (PERS 5133)**
  - (A) 291-5830
  - (C) 301-427-5830
  - Submarine Basic Training
  - Nuclear Field
  - Strategic Weapons Training

**AVIATION RATING ASSIGNMENT BRANCH (NMPC 404)**

- **NMPC 404C (PERS 5141)**
  - (A) 291-5848
  - (C) 301-427-5848
  - Aviation ASW Technician (AX)
  - Aviation Electrician's Mate (AE)
  - Avionics Technician (AV)
  - Aviation Fire Control Technician (AQ)
  - Aviation Electronics Technician (AT)
  - Aviation Ordnanceman (AO)
  - Tradesman (TD)

- **NMPC 404D (PERS 5142)**
  - (A) 291-5875
  - (C) 301-427-5875
  - Aviation Boatswain's Mate (AB)
  - Air Controlman (AC)
  - Aviation Machinist's Mate (AD)
  - Aerographer's Mate (AG)
  - Aviation Support Equipment Technician (AS)
Detailer Phone Numbers (cont.)

Aviation Maintenance Administrationman (AZ)
Photographer's Mate (PH)
Aircrew Survival Equipmentman (PR)

NMPC 404E (PERS 5143)
(A) 291-5867
(C) 301-427-5867

NMPC 404C (PERS 5143)
(A) 291-5847
(C) 301-427-5847

NMPC 404E (PERS 5143)
Military Aircraft Structural Mechanic (AM)
Aviation ASW Operator (AW)

NMPC 405C (PERS 5151)
(A) 291-5729
(C) 301-427-5729

 NMPC 405C (PERS 5151)
Journalist (JO)
Lithographer (LI)
Yeoman (YN)
Personnelman (PN)
Postal Clerk (PC)
Illustrator Draftsman (DM)
Legalman (LN)
Intelligence Specialist (IS)
Religious Program Specialist (RP)

NMPC 405D (PERS 5152)
(A) 291-5740
(C) 301-427-5740
Aviation Storekeeper (AK)
Disbursing Clerk (DK)
Mess Management Specialist (MS)
Ship's Steward (SH)
Storekeeper (SK)

NMPC 405E (PERS 5153)
(A) 291-5753
(C) 301-427-5753
Boatswain's Mate (BM)
Quartermaster (QM)
Signalman (SM)
Master-At-Arms (MA)

TECHNICAL RATING ASSIGNMENT BRANCH
NMPC 406C (PERS 5161)
(A) 291-5844
(C) 301-427-5844

Detailer Message Recording Service

If you cannot get a call through to your detailer on a number listed above and you have an urgent or time-sensitive message, you can leave a recorded message by calling one of the following numbers. This service is to be used only if you are unable to contact your detailer during normal working hours.

NMPC 492D (PERS 5022)
(A) 291-5618
(C) 301-427-5618
Washington Area Major HQ Staffs
Washington Area Flag Writers
Joint Staffs-MAAGS
Operation Deep Freeze
Equal Opportunity Program Specialist
Human Resources Management Specialist
Drug/Alcohol Abuse Counselors
LMT/LMET

NMPC 492D (PERS 5022)
(A) 291-5618
(C) 301-427-5618
SERE Instructors
AFEES
SGT Majors Academy
Operation Deep Freeze
Equal Opportunity Program Specialist
Human Resources Management Specialist
Drug/Alcohol Abuse Counselors
LMT/LMET

NMPC 724 (PERS 724)
(A) 224-4630/4650/4631/4609
(C) 202-694-4630/4650/4631/4609
Musician (MU)

ENLISTED PERSONNEL MANAGEMENT CENTER
New Orleans, La.

NMPC 406D (PERS 5162)
(A) 224-3131
(C) 202-694-3131
Communications Technician (CT)

MEDICAL/DENTAL RATING ASSIGNMENT BRANCH
NMPC 406D (PERS 5162)
(A) 224-3131
(C) 202-694-3131
Communications Technician (CT)

RECRUITING/SPECIAL PROGRAMS
NMPC 407C (PERS 5171)
(A) 291-5705
(C) 301-427-5705
Hospital Corpsman (HM)
Dental Technician (DT)

RCRUITING/SPECIAL PROGRAMS
NMPC 407C (PERS 5171)
(A) 291-5705
(C) 301-427-5705
Hospital Corpsman (HM)
Dental Technician (DT)

NMPC 492C (PERS 5021)
(A) 291-5613
(C) 301-427-5613
Recruiters
Career Counselors

NMPC 492C (PERS 5021)
(A) 291-5613
(C) 301-427-5613
Recruiters
Career Counselors

Band and Musician ASSIGNMENT BRANCH
NMPC 724 (PERS 724)
(A) 224-4630/4650/4631/4609
(C) 202-694-4630/4650/4631/4609
Musician (MU)

JULY 1979
It has been said that Albert Einstein "was the only man who could speak across the barriers of race, class and ideology, to people of good will anywhere." Einstein is gone, but his spirit—it would seem—lives on. In a grove of towering elms and holly trees, his memorial—dedicated in April—is on the grounds of the National Academy of Sciences in Washington, D.C. The sculpture is the work of New York artist Robert Berks. Although Berks is best known for his bust of John F. Kennedy, his work also includes other such notables as Harry S Truman, Ernest Hemingway and Pablo Casals.

Einstein, in the familiar though somewhat rumpled dress of his later years, sits on a semicircular bench of white granite. One foot rests on the greater portion of the known universe, portrayed by a circular sky map. Set in Norwegian black larvikite are about 3,000 precisely positioned, stainless steel studs representing stars to the sixth magnitude, as well as the planets, sun, moon and other celestial objects as they were aligned on the date of the memorial's dedication.

The location of each star was plotted by astronomers at the U.S. Naval Observatory.

In his left hand Einstein holds a paper bearing three of his most important equations. Inscribed on the back wall of the bench are three of his more famous quotations, including: "The right to search for truth implies also a duty; one must not conceal any part of what one has recognized to be true."
One Foot in the Universe

JULY 1979
Phase II... Off and Flying

By J01 Jerry Atchison

This year, the story of Naval Aviation—its growth and historic heritage—is going to be told more fully, thanks to a new addition to the Naval Aviation Museum in Pensacola, Fla.

Called Phase II in the museum's master building plan, it will add 60 percent more exhibit space to the existing building which was opened in 1975.

Scheduled to open this summer, the addition comes along—fully paid for and ready to serve museum visitors—at an earlier date than friends of the museum might have expected. Thanks in part to the state of Florida's $500,000 grant that covered about one-half the addition's construction costs. The remainder was raised through private donations to the Naval Aviation Museum Foundation, Inc.

Present museum exhibits tell the basic history of Naval Aviation, from its birth in 1911 to the present. Phase II will provide space to tell more fully the story of Naval Aviation in World War II. New exhibits also will include depictions of the evolution of aircraft power plants, the evolution of air frames and other components like propellers, plus space to give more recognition to individual personnel and their efforts, along with the evolution of the aircraft carrier.

Back in 1975, when the museum opened, it contained only 70,000 square feet of the 260,000 square feet planned for eventual construction on its 30-acre site. Three additional increments (Phase II is the first) are planned for construction as the funds become available.

The state money was an unexpected gift made available after citizens of northwest Florida pointed out the importance of the museum not only to Naval Aviation but to the state of Florida as well. This importance is based upon a variety of reasons:

- Because Pensacola has been Naval Aviation's home since 1914, the histories of Naval aviation and northwest Florida are intertwined. This relationship is presented vividly at the museum.
- During its first four years, the museum has attracted about 185,000 visitors a year. That makes it the leading man-made attraction in that part of the state.
- It is the only museum in the world dedicated solely to telling the story of Naval Aviation and it is one of three federally-sponsored aviation museums. (The other two are the National Air and Space Museum of the Smithsonian and the Air Force museum at Wright Patterson Air Force Base in Ohio.)

The history of the Naval Aviation Museum can be traced to the beginnings of Naval Aviation at Pensacola. In January 1914, the USS Mississippi and the USS Orion steamed into Pensacola harbor and deposited the Navy's entire inventory of aviation paraphernalia and personnel. There is some speculation that Naval Aviation was being sent to what was then a very remote old navy yard with the hope that the "flying fad" would soon diminish and then die.

Instead, Naval Aviation flourished and developed into a primary striking arm of the Navy.

Thus, it was only natural that the first museum be located at the spot where Naval Aviation training began in earnest and where that training continues today.

Approved by the Secretary of the Navy in December 1962, the first museum was set up to provide a continuing Navywide collection of aviation material—planes, flight gear, photos and the like—all having historical, educational or inspirational significance.

A reproduction of the Navy's first aircraft, the A-I Triad, hovering over the 1973 Skylab command module.
Its mission then and now is to “select, collect, preserve and display” appropriate memorabilia representative of the development, growth and historic heritage of United States Naval Aviation.

That first museum, housed in a cramped, temporary World War II structure on base, opened to the public in the spring of 1963. As the artifacts began arriving from around the world, the dwindling exhibit space became a problem, as did the need for construction funds.

Appropriated funds cannot be used for museum construction. However, once construction has been completed and paid for, the Navy is permitted to maintain and support the museum.

To help solve the problem of funds, Admiral Arthur W. Radford, former chairman of the Joint Chiefs of Staff under President Dwight D. Eisenhower, formed a booster organization in 1966. Called the Naval Aviation Museum Association, Inc., it was chartered under the laws of Florida. Its purpose was to promote, foster and enhance the museum while also raising construction funds.

Today, it’s called the Naval Aviation Museum Foundation and, under the chairmanship of Admiral Thomas Moorer, also a former chairman of the JCS, it maintains much the same relationship with the museum as an alumni association does with a university.

With the foundation’s help, then, the museum was built, paid for and opened to the public on April 13, 1975.

Today, more than 100 aircraft belonging to the museum are the focal point of visitor interest. They, more than any single exhibit, point out the diversity and progress of Naval Aviation—from the reproduction of the Navy’s first airplane (the A-1 Triad) to the Skylab command module that carried a three-man, all-Navy crew to and

Clockwise, beginning lower left: Museum’s main display area, unhampered by supporting columns or beams; some of the more than 100 aircraft currently in the museum’s inventory; a WWII era bomber, once privately owned, was seized by U.S. Customs agents at New Orleans when its owner was caught trying to fly drugs into the country; an early two-seater trainer; and the museum’s main entrance.
from Skylab in 1973. Between this range are aircraft marking Naval Aviation's milestones. The actual NC-4, first airplane to fly the Atlantic Ocean, is one (see April 1979 All Hands).

The story of Naval Aviation is also shown by pictures, charts, diagrams, text, artifacts, models, as well as the airplanes. Historical movies of Naval Aviation are shown in the theater daily during the summer months and on weekends and holidays year round at no charge. (Nor is there, by the way, any charge for visiting the museum.)

The daily activites of the museum are also an important part of the training routine of the student naval aviators and naval flight officers in the Pensacola area. Orientation and training classes in Naval Aviation history are conducted at the museum for students.

On the eve of the Phase II opening, things are still bursting at the seams as aircraft memorabilia continue to pour in. They come from private citizens, naval activities, other museums and, occasionally, some unconventional sources. Take the case of the Navy PV-1 aircraft that was recently donated by the General Services Administration. It seems this privately owned World War II-era medium bomber had been confiscated by the U.S. Customs Service in New Orleans after its owner had unsuccessfully attempted to use it to smuggle drugs into the United States. Museum officials are uncertain as to whether they will restore the plane to its original Navy configuration and markings or leave its distinctive customizing job as is.

The opening of the new addition this summer is proof the museum is fulfilling its mission to the Navy, Naval Aviation and the visitor in particular. But that proof is available only if you drop by the museum. It is open to the public at no charge from 9-5 every day of the year except Thanksgiving Day, Christmas and New Year's.

Membership

The Naval Aviation Museum Foundation continues its efforts to raise funds for the planned museum expansions in future years. Memberships are available in a variety of categories. Charter memberships are issued to individuals donating $1,000 or more, organizational memberships have a minimum of $500, life memberships cost $100 and "In memoriam" memberships honoring deceased persons also have a $100 minimum. Annual memberships can be had for $10. All memberships are engraved on plaques or shields, except annual memberships, which are entered in the museum's log.

You may receive more information about the foundation's efforts or apply for your own memberships by writing The Naval Aviation Museum Foundation, Inc., Pensacola, Fla. 32508.

Museum Accessions

According to OpNav Instruction 5750.10C of 24 Jan 1977, the museum's director makes all accessions in the name of the Curator for the Department of the Navy, ensuring inclusion in departmental records and providing a central accountability. Primarily, the basis for establishing suitability of materials for the museum is determined by the extent to which acquisition of a particular item will assist the facility in portraying the growth and traditions of Naval Aviation.

The kind of material desired by the museum consists of such items as: aircraft, including their parts; models of aircraft and ships; engines and engine parts; instruments; ordnance; ammunition and air weapons; radios and electronic equipment; flight gear; navigation aids; landing and launching aids; and ship and squadron insignia.

In the area of personal memorabilia are photographs and photo albums, wing insignia, medals, uniforms or parts of uniforms, flight clothing and strictly personal papers.

Materials considered by commands or individuals suitable for transfer to the Naval Aviation Museum should be reported to the Director, Naval Aviation Museum, NAS Pensacola, Fla. 32508. The director will determine whether the material is desirable and, if so, will notify the holder as to its disposition. Objects which cannot be easily identified or associated with a special event or person, yet appear to have some value, should also be reported by photograph. These photographs may reveal some significance which will lead to preservation of the object.

Facing page—top left: Work continues on reconstructing, refitting old planes. Top right: All the work follows old plans. Middle, right: Old engine looks as good as the day it came off the assembly line. Bottom right: Every part of original engines receives thorough overhaul. Bottom left: Overall view of one of the museum's repair shops. At right: Larger planes in the collection are securely tied down as protection even from hurricane force winds.
It's 5:30 a.m. and the main roads around Washington, D.C., are relatively empty. The sun is beginning to rise and folks are either having their first cup of coffee or thinking about grabbing a few extra winks.

By comparison, the Potomac River is alive with activity.

In spite of the early morning chill, men and women sweat over the oars of everything from 12-foot kayaks to 61-foot, 8-man crew boats. The river takes on an air of confusion as watermen skull or sweep their way up the Potomac, often narrowly missing each other. Knowing the rules of the road is a must, but it's no guarantee against collisions—and there are collisions!

In the middle of this activity Lieutenant (junior grade) Robert D. Espeseth, maintenance officer for the Naval Photographic Center, has just completed 10 power strokes to pull ahead of a competing boat. Espeseth's four-man crew then settles into a 30-stroke-per-minute cadence to maintain the lead.

Like thousands of other young people, Espeseth began rowing soon after he entered college. Standing in the
freshman class registration line at the University of Wisconsin, he couldn't be missed. His six-foot-four-and-a-half-inch frame labeled him a potential candidate for the school's rowing team.

University crew coaches were everywhere. They sized up all the athletic-looking freshmen and talked to them about rowing. Before the new students had a chance to enroll in history, English or math, they were encouraged to try out for the crew team. But Espeseth didn't have to be recruited. He followed in his alumnus father's footsteps (or "Duddles" as Espeseth explains it), trained out of the same boat house and even inherited his dad's nickname, "Espy."

"In collegiate rowing, it's traditional to bet your shirt on a race," explains Espeseth. "By beating another team, you literally take the shirts from the backs of the losing crews." During his four years at Wisconsin, Espeseth's winnings included three varsity intercollegiate titles and 86 shirts.

Between 1973 and 1978, Espeseth competed in Europe on three separate occasions; he participated in the Nottingham International Regatta and the Royal Henley Regatta in England. In 1976, he was a member of the U.S. Olympic team which went to Montreal. As an alternate rower for the eight-man sweep event, Espeseth did not get the opportunity to compete in the games, but the experience of having made it that far encourages him to try again.

"A guy has only one chance during a lifetime to do this," says the 25-year-old athlete. "When you get older it's usually too late."

His goal this year is the annual World Rowing Championships (September 3-9) at Bled in Yugoslavia. And then, the 1980 Olympics in Moscow. Before these two events, however, Espeseth is gearing up for competition in one or more of the Pan Am (Western Hemisphere) Games early this summer.

Epeseth's training schedule is twice-a-day, year-round. This past winter he ran 10 miles a day. Twice a week he swam several miles in an indoor pool. He worked out with weights, lifting 36 to 37 tons each session. On Sundays, Espeseth sprinted up a steep hill near his
home to further increase his strength and endurance.

When the ice melted on the Potomac and spring signaled the beginning of racing season, Espeseth began his daily workouts at the Potomac Boat Club, and joined other crew enthusiasts and Olympic hopefuls for two-hour, 10-mile rowing practices.

Weather permitting, Espeseth rows seven days a week. At night, he runs 10 miles or sprints up the hill, a 30-degree incline about 300 yards long; not a bad run the first time up, but he does it 15 times before he stops to rest. It's a demanding training schedule, but Espeseth agrees that it's necessary if he's going to make it to the Olympics.

Like all contenders, Espeseth looks forward to winning, to making it to the finals, to be among the few to cross the finish line and take a gold medal. He sees the Pan Am Games and the world championships as valuable experience for the '80 Olympics.

Although he somehow manages to work in an occasional game of basketball, golf or backgammon, rowing has always been foremost with him. He says rowing is enjoyable, but, as evidenced by his callused palms, it also requires a great deal of dedication and hard work.

"In some sports you can train as much as eight hours a day. But with rowing, your body can only take so much before it collapses. Although the workouts are not that long, they are very painful.

"It's one of the most physical non-contact sports there is," says Espeseth. He points out, however, that unknowing observers think that rowing simply requires use of the arms. Actually, it's the legs which move the boat; the main reason for the running.

"Each oarsman sits on a sliding seat," explains Espeseth. "He crouches forward with his back toward the bow and arms extended. He then puts the oar in the water and drives his legs downward, providing power to move the boat. The arms do some pulling at the end of the stroke while the hands control the oar through the entire stroke."

Epeseth adds that "You don't move your blade (oar) through the water, you move the boat past the point where the blade enters the water. You won't get far moving water. When you see a boat that's rowing well, it doesn't look like they're doing much. That's part of what it's all about. When they're really moving (about 15-16 mph), the crew is
extremely coordinated and, essentially, it looks effortless."

Sometimes, however, a crew will momentarily lose that all-important coordination. For instance, if a rower gets the oar caught against his stomach at the end of a stroke, chances are he'll catch a crab—the oar stays pinned against him. If the boat is really moving, catching a crab can result in the oar picking an oarsman up, lifting him out of the boat and dumping him over the side.

"Experienced rowers won't catch a crab, though," says Espeseth.

With seven years of experience and a rigorous training schedule behind him, Espeseth doesn't expect such problems. But the upcoming competition will be the real test—it's a test that will determine if Espeseth will realize his goal of an Olympic gold medal a year from now.

Skulling and the Sweep

In early 18th century England, anyone wishing to cross the Thames River above London Bridge had to hail a ferry, typically a light sculling boat, or skiff, operated by a waterman. About 10,000 watermen earned their living on the Thames River by "rowing" passengers across. Wagering developed between the gentry as to the relative merits (speed and skill) of the watermen manning the ferries, and stakes sometimes ran high. In the years since, the status of professional watermen has given way to the amateur rower, or crews.

The boats are no longer used to transport people, but instead have become shells crewed by one, two, four or eight people who compete in skulling or the sweep. Skulling, normally restricted to a one-or two-man boat, is an event where each crewmember rows with two oars. The sweep—each crewmember pulling one oar—is often used in the two-man event, but always used with four-and eight-man crews.

Artwork by DM1 Ed Markham
Paths to a Commission

There are many paths to a Navy commission. There are commissioning programs for students in college and others for college graduates. Specialists in certain professional and scientific categories may qualify for a direct commission. Certain enlisted men and women who are outstanding performers may qualify for a commissioning program.

By providing many paths to a commission, then, the Navy can more effectively meet its personnel needs while taking into account a variety of individual circumstances and interests. The right road for each individual is determined by weighing and balancing two basic factors—what the Navy needs to man the fleet and what the person is qualified to do.

This article, No. 8 in our series on Navy Rights and Benefits, briefly describes the Navy’s basic commissioning programs. Specific qualifications for entry into any of the programs may change from time to time because of the needs of the service or new legislation.

Naval Academy

Each year, the Secretary of the Navy may appoint 85 enlisted men and women from the Regular Navy or Regular Marine Corps and 85 enlisted men and women from the Naval or Marine Corps Reserve (active or inactive) to the Naval Academy at Annapolis, Md. Under the provisions of Public Law 94-106, women are eligible for appointment and their qualifications generally are the same as those for men.

After rigorous competition, civilians may gain an appointment to the Academy from their senators or congressional representative, the Secretary of the Navy or the president. Those who qualify receive a fully subsidized undergraduate education which leads to a commission in either the Navy or Marine Corps.

Students at the Naval Academy are appointed as midshipmen, U.S. Navy, and receive pay equal to about one-half of an ensign’s basic monthly pay, plus tuition, room, and board. Upon graduation they are awarded a bachelor of science degree in one of 18 majors and an ensign’s or second lieutenant’s gold bars.

The basic, general requirements for an appointment to the Naval Academy are:

- Be a United States citizen.
- Be at least 17 but not older than 22 on July 1 of the entrance year.
- Be unmarried and have no children.
- Possess a good scholastic record.
- Have a general classification test (GCT) plus arithmetic of at least 120.
- Be of good moral character.
- Be in excellent physical condition.

Specific requirements differ somewhat according to individual status at time of application.

Although not a requirement for entry into the Academy, the 16-week program at the Naval Academy Preparatory School (NAPS) in Newport, R.I., can help increase chances for an appointment. Generally, requirements for NAPS are the same as for the Academy. See your career counselor for details about both programs.

BOOST Program

The Navy is engaged in a vigorous effort to ensure that opportunities for a career as a naval officer are open to persons who may have been educationally or culturally deprived, but who have demonstrated that they possess the fundamental qualities and desire necessary to gain a commission. To help those people achieve their potential, the Navy developed the Broadened Opportunity For Officer Selection and Training Program (BOOST). BOOST prepares selected individuals for possible entrance into officer training programs (U.S. Naval Academy and NROTC).

Students who have not graduated from high school can earn a diploma
while in BOOST. A military staff provides physical fitness training, general military training, and counseling for students. A civilian staff teaches the academic curriculum.

General eligibility requirements are:

- Be an enlisted member on active duty in the Navy or Naval Reserve or a civilian agreeing to enlist for four years with BOOST School guarantee.
- Be highly motivated to become a commissioned officer and have the potential for professional growth if afforded the educational opportunity.
- Have two years of active obligated service as of March 1 of the year BOOST training commences, or agree to extend enlistment or active duty agreement for a two-year period. If nominated for an appointment to the Naval Academy or NROTC upon completion of BOOST, the member must agree to accept the minimum service requirement in effect at that time for orders to further training.
- To qualify for entrance to the Naval Academy upon completion of BOOST training, the member must be unmarried and have no children.
- Be at least 17 years old. Other age requirements for BOOST are contingent upon eligibility for one or more related officer procurement programs. Age waivers will not be granted.

- Be able to meet the physical requirements prescribed for each officer program.
- Have no record of conviction by court-martial, or by civil court (other than for minor traffic violations).
- Meet high standards of personal conduct, character, patriotism, sense of duty, and financial responsibility.
- Be a high school graduate. Applicants who are not may apply and obtain a high school certificate during participation, based on military educational experience and GED test results.
- Have a minimum GCT/ARI score of 100. This requirement cannot be waived.
- Have a minimum Scholastic Aptitude Test (SAT) of 850 composite (460 in math).
- Be recommended by the commanding officer of the recruiting activity submitting the application.

BOOST programs are conducted at the Naval Training Command, San Diego, Calif.

Warrant Officer Program

The Warrant Officer Program (along with the Limited Duty Officer Program) is one of the primary enlisted-to-officer programs that does not require a college education. Warrant officers provide technical expertise at a relatively stable grade level in the officer structure.

General eligibility requirements are:

- Be a U.S. citizen.
- Be serving on active duty as a chief petty officer in the Regular Navy, Naval Reserve or TAR program at the time of application.
- Be physically qualified for appointment to warrant officer.
- Be a high school graduate or possess a service-accepted equivalent.
- Have no record of conviction by court-martial nor conviction by civil court for offenses other than minor traffic violations for two years preceding January 16 of the year of application.
- Be recommended by one's commanding officer.

Personnel in paygrade E-9 must have completed at least 12, but not more than 20 years of active naval service as of January 16 of the year in which application is made.

Limited Duty Officer Program

The Limited Duty Officer Program is another enlisted-to-officer program that does not require a college education. The limited duty officer meets Navy's the needs for officer technical management skills through the mid-grade officer level.

General eligibility requirements are the same as those of the Warrant Officer Program with the following exceptions:

- Be physically qualified for appointment to LDO.
- Be serving as a male petty officer first class or chief petty officer (E-6 or E-7) on January 16 of the year in which application is made. If the member is a PO1, he must have served in that capacity for at least one year as of January 16 of the year of application.
- Must have completed at least eight, but not more than 16 years of active naval service on January 16 of the year of application.
- PO1 applicants must complete all performance tests, practical factors, training courses, and service schools required for chief petty officer. Additionally, each PO1 applicant must successfully compete in the annual Navywide examination for advancement to CPO administered in January/February of the year of application.

(1) A candidate whose final exam multiple is equal to or greater than that required to be CPO selection board eligible will be considered LDO selection eligible.

(2) A PO1 is exempt from this requirement when authorization for advancement to CPO has been received by the commanding officer.

Naval Reserve Officer Programs

There are two officer programs which lead to an appointment in the Naval Reserve for enlisted members who possess a baccalaureate or higher: Officer
Candidate School and the Aviation Program.

**Officer Candidate School Program**—This OCS program provides 19 weeks of officer indoctrination training at the Naval Officer Training Center, Newport, R.I. The program is open to male and female personnel except for the nuclear power program (submarine and surface) which is not open to women.

Selectees in paygrades E-4 and below are designated officer candidates and advanced to E-5 upon reporting to OCS. Enlisted applicants in paygrade E-5 and above are designated officer candidates in their current paygrade. The curriculum comprises an intensive program in naval science and human relations management. General eligibility requirements are:

- Be a U.S. citizen.
- Possess a bachelor's or higher degree from an accredited college or university.
- Be physically qualified.
- Current service members must be entitled to an honorable discharge; be serving on active duty in any rate and rating; and have at least six months of obligated service remaining on current enlistment upon receipt of orders to most schools.
- Be of good moral character and have good personal habits.
- Women applicants must meet the dependency requirements outlined in BUPERSINST 1120.35.

Nuclear Propulsion Officer Candidates (NUPOC-Submarine and Surface), Staff Corps and some Restricted Line Candidates will receive additional specialized training following graduation from OCS and commissioning. All successful OCS candidates must retain their Naval Reserve commissions for six years.

**Aviation Programs**—The aviation program provides an avenue to commissioned service for male and female applicants interested in serving as Naval Aviators, Naval Flight Officers, or Intelligence Officers. Enlisted members selected for the program are designated officer candidates and advanced to paygrade E-5 upon reporting to Aviation Officer Candidate School, Pensacola, Fla. After successful completion of 16 weeks’ training, candidates are commissioned ensigns in the Naval Reserve.

Members desiring pilot training enter the Aviation Officer Candidate Program (AOC) and after commissioning, continue their flight training for about eight to 12 months. Following successful completion of the additional flight training, the candidates are designated
Naval Aviators and must serve on active duty for four and one-half years.

Naval Flight Officer Candidates (NFOC), after commissioning, will continue their training leading to designation as Naval Flight Officers and must serve on active duty for three and one-half years. This program is not open to women.

Candidates selected for the Intelligence Program (NAOC-AI) will undergo additional training following commissioning and must serve on active duty for four years in commissioned grade.

The general requirements for the aviation programs are the same as for OCS except applicants for the Aviation Program will be administered the Aviation Selection Test (AST) battery.

**NROTC Scholarship Program**

The NROTC Scholarship Program leads to appointment as an officer of the Regular Navy or Marine Corps in the grade of ensign or second lieutenant. The NROTC programs are maintained to educate and train well-qualified men and women for careers as commissioned officers. Only persons who are reasonably disposed to making the Navy or Marine Corps a career should apply for this program.

General eligibility requirements are:
- Be a U.S. citizen.
- Be under 25 years old on June 30 of the year of commissioning.
- Be a high school graduate or possess an equivalency certificate.
- Be physically qualified.
- Be morally qualified and possess officer-like qualities and character.
- Have no moral obligations or personal convictions which would prevent conscientiously supporting and defending the Constitution of the United States against all enemies.
- Have no record of military or civil offenses.

**Medical Programs Leading to Commission**

Navy medicine offers an alternative to the administrative burden and expense of private practice by giving physicians, dentists and medical service officers a chance to practice in an atmosphere where decisions can be based solely on medical considerations without regard to patients' ability to pay.

**Medical Service Corps of the Naval Reserve**—This program is open to qualified enlisted members on active duty and leads to an appointment to commissioned status in the various sections of the Medical Service Corps, U.S. Naval Reserve. A sampling of the fields in which a Medical Service Corps officer might work include bacteriology, biochemistry, hematology, physics, virology, and radiobiology.

General requirements for entry into the program are:
- Be a U.S. citizen
- Be within the maximum age limit at time of appointment: LT—39; LTJG—38; and ENS—31.
- Be physically qualified in accordance with standards set forth in the Manual of the Medical Department for Staff Corps of the Naval Reserve.
- Must meet professional requirements for entry into the chosen field—all candidates must have at least a
baccalaureate in some medical science or related subject.

Health Care Administration Section of Medical Service Corps—Regular Navy—The Medical Service Corps Inservice Procurement Program is a continuing program which provides a path of advancement to commissioned officer status for senior Regular Navy HM and DT personnel in paygrades E-6 through E-9 who possess the necessary potential, outstanding qualifications and motivation. This program is extremely competitive and enlisted personnel aspiring toward appointment in the Medical Service Corps should begin preparation early in their careers through a sound self-improvement program.

General eligibility requirements for selection are:

- Applicant must be a member of the Regular Navy serving as a hospital corpsman or dental technician in paygrades E-6 through E-9.
- Be a U.S. citizen.
- Must be at least 21 years old and must not have reached age 35 as of October 1 of the calendar year in which appointment can be first made. Women applicants must be at least 21 and under 32 years of age on date of appointment (this is a legal restriction imposed by Title 10, U.S. Code).
- Must meet the physical standards prescribed for officer candidates.
- Have no record of conviction by court-martial for the two fiscal years preceding the date of application.
- Have a combined GCT/ARI score of at least 115.
- Be a high school graduate or the equivalent.
- Must pass a professional examination administered by the Medical Service Corps. The exam tests knowledge of personnel administration, patient affairs, military justice, Navy customs and traditions, and general Navy orientation in addition to their pertinent disciplines.

Uniformed Services University—This is a four-year, accredited medical school which accepts applications from members of the armed forces who have at least a baccalaureate and the academic background to qualify for entry. Graduates are commissioned as ensigns in the Navy (or at their entry paygrade if higher) and incur a seven-year service obligation, and receive a Doctor of Medicine degree. General eligibility requirements are:

- Be a U.S. citizen.
- Be between the ages of 18 and 28.
- Hold a baccalaureate from an accredited university or college.
- Meet the physical qualifications for commissioning.
All Together

SIR: Mail Buoy (March issue) told of three brothers serving together on the guided missile cruiser Biddle. They were curious as to the last time three brothers served together on the same ship.

When I left USS Howard W. Gilmore (AS 16), in Jan. 1978, there were on board at the time four brothers. They were Carl, Mike, Billy and Allen Filyaw. Carl and Mike Filyaw were married and Mike had a little girl. So, in the seaport town of La Maddalena, NW Sardinia, Italy (Gilmore’s home port), there were seven Filyaws.—BMSN William Berryman, USN.

They’re Still Around

SIR: In reference to your article, “Last of the P-3As” (March issue), the last Navy P-3A Orion aircraft has not been phased out of the active service. There are 26 P-3As still employed by several activities and squadrons of the active service, VXN-8 included.

The television series World War II: G.I. Diary, produced by Time/Life Television is a documentary of American military involvement in various conflicts as seen through the eyes of participants. Much information for this series came through letters received from veterans who responded to Time/Life notices placed in several service magazines. These letters were of great help in developing G.I. Diary, but because the series is no longer in production Time/Life requests that no more letters be sent.

G.I. Diary

These 26 P-3As are utilized for a host of missions, such as oceanographic and sea ice research and development, ECM surveillance, ASW and avionics test and evaluation, missile test range control and logistic support, to name a few. The P-3As will continue, of course, in the active service. All Hands is an outstanding publication that I enjoy reading every month. Keep up the good work.—LTJG H. B. Smith

Interest Stirred

SIR: I would like to know if James B. Stockdale has written any books about his eight years in captivity. Your story in March ’79 All Hands has really stirred my interest.—William Wilson.

Although Vice Admiral Stockdale has not written a book about his captivity, he did write “The World of Epictetus” which appeared in the April 1978 issue of Atlantic magazine. Many public libraries keep copies of this periodical.—Ed.

LT Stone Was There

SIR: Your article about the NC-4 (April issue) was interesting. Some of your readers may not be aware of the fact that the navigator of NC-4 was LT Elmer Stone, a Coast Guard pilot. His performance is a standard many Coast Guard pilots set their goals by in their somewhat different, but just as challenging assignments.—CAPT R.B. Bacon, USCG.

According to our records and a recent interview with Walter Hinton, sole surviving member of the NC-4 flight, LT Stone was assigned to the aircraft as co-pilot. Then LTJG Hinton was pilot.—Ed.

Reunions

- USS The Sullivans (DD 537)—8th reunion Aug. 10-12, 1979, in Buffalo, N.Y. Contact Robert R. Sander, 325 Thatcher Ave., River Forest, Ill. 60305.
- USS Vincennes (CA 44/CL 64)—Reunion Aug. 7-9, 1979, in Vincennes, Ind. Contact Peter H. Capp, 1014 Augusta St., Elizabeth, N.J. 07201.
- USS Healy (DD 672)—Interested in scheduling a reunion. Contact R. Adelman, 21-84 E. 28 St., Brooklyn, N.Y. 11222.
Charts not only tell you where you’re going but how to get there safely as well. Loaded with information—especially those dealing with busy harbors—charts are a necessity if one doesn’t care to ruin one’s day at sea. Match the hazards in column A with the symbols in column B.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Symbol B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sunken rock dangerous to navigation</td>
<td>A</td>
</tr>
<tr>
<td>2. Kelp</td>
<td>B</td>
</tr>
<tr>
<td>3. Sunken wreck dangerous to navigation</td>
<td>C</td>
</tr>
<tr>
<td>4. Sunken rock not dangerous to navigation</td>
<td>D</td>
</tr>
<tr>
<td>5. Tide rips</td>
<td>E</td>
</tr>
<tr>
<td>6. Sunken wreck not dangerous to navigation</td>
<td>F</td>
</tr>
<tr>
<td>7. Breakers</td>
<td>G</td>
</tr>
<tr>
<td>8. Eddies</td>
<td>H</td>
</tr>
<tr>
<td>9. Rock awash at level of chart (sounding) datum</td>
<td>I</td>
</tr>
</tbody>
</table>
Phase II at Pensacola • See page 32