in this issue:
Chief of the Boat in USS Haddock
R&B: Educational Programs
No other way to go. When your ship is named after the man with the most famous signature of all time (at least for Americans), what better way to display the name than on the stern? Commander Ron Wilgenbusch, first commanding officer of the new destroyer USS John Hancock (DD 981), had his ship’s name done up in style before commissioning at Pascagoula, Miss. (Litton photo.)
MAGAZINE OF THE U.S. NAVY — 57th YEAR OF PUBLICATION
AUGUST 1979 NUMBER 751

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Chief of Information: RADM David M. Cooney
OIC Navy Internal Relations Act: CAPT Robert K. Lewis Jr.

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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)
NAS Brunswick Garners Gold and Silver Anchor Awards

The base mottos of Naval Air Station Brunswick, Maine, say it all: “People are our business” and “We care.” No empty boast, NAS Brunswick has earned the 1978 CINCLANTFLT Golden Anchor and COMNAVAIRLANT Silver Anchor Awards for having the best career motivation and retention programs of any major naval air station in the eastern United States. NAS Brunswick tackled the challenge of keeping its first term sailors in the Navy by retaining 40 percent of the command’s enlisted personnel last fiscal year. That figure is double the NAS Brunswick FY 77 retention rate and almost triple the figure in FY 76. Early retention figures for this fiscal year show an almost 60 percent rate of retention. In addition to the impressive retention figures, NAS Brunswick was cited for “overall excellence in people programs” when it was presented the Golden and Silver Anchor Awards by Vice Admiral George E. R. Kinnear II, Commander Naval Air Force, U.S. Atlantic Fleet. The command’s career counselor, NCC Bill Jarvis, credited an excellent relationship with the civilian community as one reason for the high retention at NAS Brunswick. “Few other bases can compete with the cordial attitude of the area’s civilians toward the military,” he said. “This results in more enjoyable tours of duty here and enhances job satisfaction and retention.”

Valdez Saves Endangered Lobster Boat

When lobster fisherman Tom DeLong of Medford, Mass., was forced to ground his boat Lela recently, he didn’t know that three weeks later he would be celebrating the event by throwing a lobster dinner for the Navy. After Lela’s propeller shaft pulled out of her transmission on May 19, DeLong was forced to beach the boat. Due to the high tides and waves, however, the boat was in danger of breaking up. Later that day, Commander Harry Korrell, commanding officer of the Boston-based USS Valdez (FF 1096), saw the distressed lobster boat from his home and alerted his ship to the situation. A damage control party of volunteers went to the site and helped DeLong bail out his boat and also rendered the vessel water-tight. When the tide came in the following day, the Navy volunteers righted Lela and rode her out to a temporary anchorage before she was finally towed to safety. To express his gratitude, DeLong planned a lobster dinner on June 9 for CDR Korrell and the seven crew members who helped save his boat. “I would have lost a year’s pay,” DeLong said after Lela was safe. “I had 320 lobster traps in the water. I would have lost them all. I would have lost my boat...”
New Uniforms for Women Okayed

New uniforms, including working khaki, summer white, summer blue, winter blue and winter working blue, have been approved for wear by Navy women. Working khaki may be worn by officers and chiefs on an optional basis after May 15 and may be prescribed after Sept. 1 this year. The khaki uniform articles include shirt, slacks, windbreaker jacket, skirt, garrison cap, combination cap cover and web or double knit belt. The summer white is a short sleeve open-collar white shirt, white skirt, and white shoes for officers and chiefs, black shoes for E-6 and below. The white slacks are not yet authorized. Officers will wear soft shoulder boards with this uniform, chiefs will wear collar devices, and E-6 and below will wear rating badges. This uniform is authorized on Aug. 1. The summer blue uniform consists of a short sleeve white shirt with an open collar. Summer blue ALFA is worn with the blue skirt and summer blue BRAVO with blue slacks. The slacks are authorized on Aug. 1 and the skirt will be authorized on Oct. 1 after it becomes available in Navy exchanges. Insignia are the same as with summer white. Long sleeve blue shirt and blue skirt with the ALFA, blue slacks with the BRAVO, make up the winter working blue and winter blue uniforms. While the winter working blue is open collar, the winter blue uniform is worn with closed collar and the current women’s tie and ribbons. Insignia are collar devices for officers and chiefs, and sleeve rating badges for E-6 and below. These rating badges will be available after Oct. 1 when these uniforms will be authorized on an optional basis. Additionally, short and long sleeve chambray shirts and denim dungarees, all sized to fit women, will be available in the Navy exchange system after Aug. 1. These changes were announced in NAVOP 63/79, and will be incorporated into Navy uniform regulations. Details on material, where to purchase the uniforms, and authorized uniform combinations are included in the NAVOP.

Navy Engineers Receive $25,000 Patent Award

In 1956, a group of four Navy civilian engineers working with imagination and spare parts developed what became the ASW weapon called SUBROC. Last week, Secretary of Defense Harold Brown presented the engineers with a $25,000 patent award, the maximum allowable under law. The award is only the eighth maximum award granted since the establishment of the Federal Incentive Awards Program in 1954. Of the eight, five have been awarded to Navy employees. The award will be shared equally by the four engineers—Robert S. Flum, Roland Daudelin, Lionell Woolston, and the family of Bob Norris, who is deceased. In 1956, all four men were employed by the Naval Ordnance Laboratory (NOL) at White Oak, Md., where they conceived and developed the concept of SUBROC. The group obtained small jet motors and jet vane control systems at no cost, and built an underwater launcher with material from the NOL scrap pile. SUBROC is launched by a submerged submarine and is propelled into the air by a rocket motor which ignites under water. The weapon then reenters the water near an enemy submarine, and at a preset depth detonates its warhead. Development of the weapon began in 1958 and SUBROC joined the fleet in 1967.
Navy Developing Geothermal Energy Source

If you don’t use oil, coal, or nuclear power to make your electricity, what can you use? If you’re at the Naval Weapons Center (NWC), China Lake, Calif., in the 1980s you may use geothermal energy. The Navy is now requesting proposals from private companies to explore and develop geothermal energy sources at China Lake. An area of NWC is a potential major geothermal resource and is capable of supporting commercial scale production of electricity. The geothermal energy is produced by sub-surface fluids which are raised to the temperature of steam by the heat of the earth. The steam is used to turn turbine generators which produce the electricity. Expended steam is then returned to the ground to begin the cycle again. The Military Construction Authorization Act of 1979 gave the Navy authority to develop such geothermal resources. The plan calls for a private contractor to explore further and develop the field, and operate a power plant to produce electricity for the Navy. The first area served will be NWC China Lake. As the electric plant grows, the power will be used to serve other naval activities in Southern California. An existing geothermal energy field in Northern California produces energy equivalent to one-half San Francisco’s electrical needs. Assuming a successful contract is awarded this year, initial power could be on line at the China Lake facility as soon as 1982.

Female Midshipmen Go to Sea for First Time

For the first time in history, female midshipmen will be assigned training duties aboard fleet ships in the Atlantic and Pacific. They are among the more than 7,000 men and women midshipmen from the Naval Academy and the Naval Reserve Officers Training Corps who will report to ships and shore activities around the world for training this summer. Among the group are 54 women first class midshipmen from the Naval Academy who will serve in junior officer positions while they are at sea for four to six weeks during the academy’s summer cruise program. Some 20 Naval Academy women midshipmen will report to west coast ports for sea duty aboard USS Norton Sound (AVM 1), USS Jason (AR 8), and various combatant ships. Another 19 will board USS Lexington (ACT 16), and nine others will serve with the Atlantic Fleet aboard USS Emory S. Land (AS 39) and combatant ships. About six will serve on oceanographic ships sailing out of Atlantic and Pacific ports. Women midshipmen assigned to shipboard duty will complete the same training qualifications as their male classmates. This new opportunity for Navy women is the result of a change to the law which permits permanent duty assignment of women to non-combatant ships, and temporary duty to any ship for 180 days or less if the ship will not be assigned a combat mission.

E-8 and -9 Advancement Exam Policy Modified

NAVOP 62/79 announced a change to the E-8 and -9 advancement policy which eliminates annual exam participation as a prerequisite for advancement to senior and master chief. As a result of this change, candidates for E-8 and -9 who qualify as selection board eligible will retain that eligibility for three consecutive years instead of the present an-
Annual exam participation and qualification. Names of selection board eligible personnel will be retained on file for three advancement cycles. If the eligibles are not selected during that time, the names will be deleted automatically. Once selected for advancement, the names will be deleted from the list even if advancement is later declined or withheld. If the E-8 and -9 candidate is not selected after the three screenings, a reexamination will be required. However, members may volunteer to take the advancement exam before eligibility expires in order to improve their score. The policy is effective for cycle 81 (Nov. 1978 exam) and will be applicable for candidates considered, but not selected for advancement, by the March-April 1979 selection board.

Price Listing for Womens Khaki Uniforms

As announced in NAVOP 63/79, the working khaki uniform for women may be worn by officers and chiefs on an optional basis after May 15 and may be prescribed after Sept. 1. Navy exchanges that carry the new uniform are listed in the NAVOP. Exchanges carry only the double knit uniform. The Naval Uniform Shop, Brooklyn, N.Y., carries both the double knit and the polyester cotton. The following is the Navy exchange price list for the women’s khaki uniform:

<table>
<thead>
<tr>
<th>Item</th>
<th>Polyester Double Knit</th>
<th>Polyester/Cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slacks</td>
<td>$20</td>
<td>$18</td>
</tr>
<tr>
<td>Skirt</td>
<td>$16.50</td>
<td>$16.50</td>
</tr>
<tr>
<td>Windbreaker</td>
<td>Not available</td>
<td>$24</td>
</tr>
<tr>
<td>Short Sleeve Shirt</td>
<td>$12</td>
<td>$10</td>
</tr>
<tr>
<td>Combination Hat Cover</td>
<td>$5.50</td>
<td>$4</td>
</tr>
<tr>
<td>Garrison Cap</td>
<td>$6.75</td>
<td>$5.50</td>
</tr>
<tr>
<td>Belt w/Brass Buckle</td>
<td>$3.50</td>
<td>$1</td>
</tr>
</tbody>
</table>

In Brief...

E-7 Terminal Eligibility Date. Some first class petty officers will be eligible to compete for E-7 one year earlier because of a change in the E-7 terminal eligibility date (TED) announced in NAVOP 58/79. For the January 1980 E-7 exam, the TED will be Jan. 1, 1981, instead of the present Nov. 1, 1980. More information is contained in the NAVOP.

DINFOS Accredited. The Defense Information School (DINFOS), where the armed services train their journalists and broadcasters, has been accredited by the North Central Association of Colleges and Schools. As a result, DINFOS can assign college credit for courses taken at the school and most students can earn an academic semester of credits for attending its journalism or broadcast courses.

Moreell Medal. Lieutenant Commander William F. Burke, resident officer in charge of construction, Trust Territory of the Pacific Islands, has been selected as recipient of the Moreell Medal. The medal is offered annually by the Society of American Military Engineers to a member of the Civil Engineer Corps for the most outstanding contribution to military engineering.
Natick—The Navy’s Clothing ‘Think Tank’

STORY AND PHOTOS BY J01(SS) PETE SUNDBERG

With each measured step, sweat drips from the face of Army Private Kelvin McCumbers. The temperature is 120°F. The straps of his backpack make his shoulders numb.

McCumbers’ lot may not seem unusual—throughout history soldiers have tramped through swamps, across deserts and over mountains. Yet, this young soldier’s situation is different. He wears a submarine deck exposure suit over a liquid-cooled body garment and carries a backpack containing a dry-ice cooling system.

McCumbers’ journey is as endless as the treadmill he walks, and every step he takes is for the benefit of the Navy Clothing and Textile Research Facility (NCTRF) at Natick, Mass. Throughout such testing NCTRF has developed, in addition to dress and work uniforms, more than 4,200 items of protective clothing for the Navy.

Requests for modifications to, or development of protective garments can come from anywhere in the Navy. Regardless of their origin, however, all requests filter through the office of Charles Emberger, Navy Supply Systems Command (NAVSUP) program manager for clothing and textiles, in Arlington, Va.

“Although most of the requests come from either program or functional managers at the Naval Sea Systems Command (NAVSEA),” said Emberger, “we often get requests from ship commanding officers who feel they need a certain type of garment to better protect their people. An improvement to existing gear usually satisfies that request.”

In NAVSEA’s case, however, the request is usually more complicated because it stems from the construction of a new class of ship, addition of an advanced weapons system or recently developed fuel.

“I evaluate the request and determine if we have a garment that meets the requisites,” continued Emberger.

In addition, Emberger explains the Navy’s needs to the Defense Personnel Supply Center (DPSC) at Philadelphia and to his counterparts in the other services. Each contact must then specify whether they have the required garment or would have use for the item if introduced into the supply system. If no one has a garment that meets the Navy’s specifications, Emberger prepares a tasking order for the Natick lab.

The outward appearance of NCTRF—housed under two roofs located three miles apart—tends to destroy one’s preconceived image of a scientific laboratory. Facility headquarters sits on a side street behind a shopping center, while the laboratory, a nondescript brick structure, is nestled (and almost lost) amid Natick’s large Army Research and Development Center.

“You have to realize that we’re not a manufacturing plant,” explained Commander Donald S. Parsons, NCTRF’s only military and the officer in charge.

“We’re a 55-person think tank comprised of textile technologists, chemists, chemical engineers, clothing designers, mechanical engineers and physiologists.”

The NCTRF “thinkers” continually seek better materials and procedures to improve the protective characteristics

Army Private Kelvin McCumbers gets a well deserved rest.

ALL HANDS
of items. At the same time, they closely monitor the commercial textile industry for new developments. Staying on top of textile improvements enables NCTRF to deal with any task placed upon them by NAVSUP.

Few people realize the amount of work required to produce protective clothing for the Navy.

"It can take up to five years of research, development, test and evaluation (RDT&E) before an item is ready for fleet use," said CDR Parsons.

The commander pointed out, however, that five years wasn't the norm and would occur only if NCTRF had to produce a garment from scratch, that is, actually invent the appropriate material.

Five divisions provide the RDT&E expertise necessary in the development of protective clothing. The Materials Research Division analyzes fabrics for proposed items; the Clothing Development Division makes and field tests prototype garments; the Environmental Sciences Division performs engineering and physiological tests and evaluations of items; the Standardization and Specification Division issues the requirements for the manufacture of prototype garments; and finally, the Technical Support Division, located at Philadelphia, works with DPSC and other agencies to supply the new item to the fleet.

As mentioned, NCTRF isn't the most memorable sight in Natick. However, any visitor who has been inside the laboratory facility will testify that outward appearances can be misleading. The building houses seven laboratories in which tests are conducted not only on new items but also on better solutions to old problems.

For example, NCTRF is researching the possibility of adapting the buoyant ballistic armored vest—developed for riverine forces during the Vietnam
The dry-ice cooling system, for which its inventors have recently received a patent disclosure (patent pending), is NCTR F's attempt to solve the age-old dilemma of heat stress.

Heat stress can occur under many conditions. For example, crash-crew firefighters can be weakened because of the heat when they're dressed in their turnout clothing during runway standby operations in warm climates. If an emergency fire condition occurred, the ability of the crew to fight the fire effectively could be impaired.

Explosive Ordnance Disposal personnel are subjected to heat stress when dressed in impermeable protective clothing. The combination of clothing, such as that worn by firefighters or astronauts, work effort, and warm or hot climatic conditions could limit effective work time unless a body cooling system is used. And, of course, the prime heat stress candidates are the engine- and boiler-room personnel required to work in hot, humid machinery spaces.

To combat the problem, NCTR F engineers developed the dry-ice cooling system—a dry-ice, liquid-pulse-pump, portable system for use with various types of protective clothing worn in areas where heat may accumulate. The system contains a backpack filled with dry-ice and uses a cooling mixture of water and methyl alcohol as the heat transfer fluid which circulates through tubing built into an undergarment.

Since normal temperatures in some of the closed spaces aboard a ship can reach 120°F, tests on the dry-ice cooling system are conducted in the Environmental Test Chamber Laboratory. The lab is designed to reproduce temperatures from -60°F to 200°F with 5 to 100 percent relative humidity.

Volunteers—such as McCumbers—assigned to the Army's Research Volunteer Platoon act as test subjects to determine how a person will react under certain conditions. Various types of work activities at different levels of workloads are simulated by use of a treadmill. The test subjects walk at variable speeds and inclines for 10 minutes; rest for 10 minutes and repeat the cycle for two hours. During testing, their physiological responses are monitored through thermocouples applied to various parts of the body.

The chamber has also been used in developing extreme and intermediate cold weather clothing and the close-proximity, firefighting clothing.

While McCumbers and his fellow soldiers sweat it out in the test chamber, the other six labs conduct tests of their own.

Chief physiologist Dale Reins watches volunteers test a new wet-suit.
Natick

- The Physical Test Lab conducts RDT&E on the physical properties of fibers, yarn, fabrics and fabric blends to determine how well an item will “wear.” Technologists test for colorfastness, breaking strength, tear resistance, abrasion resistance, aging, weather resistance, water repellancy, air permeability, adhesion, stiffness and crease resistance of clothing and textiles. The lab is presently snap-testing new polyester, double-knit fabrics for possible use in dress uniforms and also seeking commercial-coated fabrics for use as outer shells for divers’ outfits.

- The Chemical Test Lab tests fibers, yarn, fabrics, coatings, films, laminates, dyes and finishes used in all types of general and special purpose protective clothing and textiles. NCTRPF also conducts research on dye formulations and chemical finishes for fibers, fabrics, leather and silicone rubber products. The lab has recently provided a torpedo handler’s disposable garment for use as protection against the toxic fuel used in the Mark 48 torpedo. In addition, the lab is presently conducting slip-resistance tests on shipboard work shoes.

- The Thermal Flammability Lab evaluates the effects on fabric of thermal energy—flame, conductive, convective and radiant heat. The lab determines and evaluates the amount of heat required to ignite a fabric and the effects on the wearer’s skin. The lab uses direct flame upon a fabric to determine ignition time, rate of burn, afterflame, afterglow and char length of standard and experimental fabrics. The lab is now developing a flame retardant battle dress garment to be worn aboard ship.

- The Air-Sea Environmental Temperature Lab can reproduce air-sea interface temperature conditions which exist anywhere on earth. The air chamber and marine tank combination permits simulation of temperature variations from the Auroral Region (air, -40°F; 28°F) to the Red Sea Region (air, 120°F; sea, 110°F). Physiological tests conducted in the lab figured in the development of the submarine deck exposure suit and the buoyant ballistic armored vest. The lab also developed the recently authorized Ship’s Survival Suits used by the Coast Guard in the Great Lakes regions.

- The Hydrospace Simulator Lab consists of a pressure chamber, instrumentation and pressure control console, and material test devices. The lab can evaluate material test properties such as thickness change, thermal conductance, and stretch-flex characteristics in simulated water environments to

Textile Technician Rosemary Salem conducts a stretch test on a piece of fabric to determine how much the fabric will stretch before it tears.
depths of more than 1,000 feet. The lab tests and evaluates water pressure on divers' fabrics and has performed extensive testing on neoprene fabrics impregnated with glass microspheres. Lab technicians provided the technical guidance for the MK12 diving suit (see March '79 All Hands) and are now working on a non-compressible wet suit.

- And, finally, if fire, pressure, water, chemicals, stretching and tearing don’t affect a garment, it’s sent to the Laundry Lab. The laundry—a typical shipboard model—tests for laundry effects on fabrics and clothing to determine dimensional stability, colorfastness, appearance, and durability of fabrics and fabric finishes with such properties as water repellancy, soil release, flame retardance, and softeners. The lab also determines suitable laundry procedures for general and protective clothing that are subject to shipboard and special care laundering. Lab personnel have also developed a means of recycling rinse water. The system, which uses a tank to filter the rinse water, not only cuts down on water consumption, but also conserves the energy and oil required to continually pump fresh water into the laundry system.

As these labs test the various fabrics, the Clothing Design and Development Laboratory (located at headquarters) designs clothing, develops patterns and prepares prototype garments. The lab also fabricates containers to protect electronic and other equipment against the rigors of environmental hazards.

Determining the technical specifications of a garment is as exacting as the testing of the material. If such commonplace items as button size and placement, type of thread, and stitches per inch don’t follow specifications, the protective qualities of the garment could be adversely affected.

When NCTRF completes its research, a prototype garment is sent to the fleet for up to six months of field testing. During the field test the garment is put through every situation for which it was developed. It’s evaluated by the wearers and the results are studied by Natick.

Typical feedback received by NCTRF are comments which deal with the comfort of the garment.

“Many of the sailors involved in testing the garment sometimes don’t understand exactly what technical attributes or characteristics are required of the item,” said Seymour Lash, director of the clothing development division.

“As a result we often receive comments like ‘it didn’t feel comfortable because it was too loose.’ Although the garment is sometimes designed to fit loosely,” continued Lash, “we’ll reevaluate it to determine if a redesign or

_Army volunteers test a wet suit in NCTRF's air-sea environmental temperature lab._

_A medieval looking mace is used to test fabrics for snag-resistance._

_AUGUST 1979_
modification can make it more comfortable without losing its protective characteristics."

Technical Writer John Mylotte and CDR D.S. Parsons discuss fabric characteristics.

Lash added that although comfort plus protection isn't always compatible, it's a problem that NCTRF is trying to solve by developing such items as the dry-ice cooling system.

Following the field test and any resultant changes to the garment, NCTRF prepares a technical supply package which includes manufacturing specifications, a sample garment, patterns, description of quantity and sizes of the item to be procured and the stock number (NSN). The package is sent to DPSC which then requests bids from civilian contractors, lets contracts and stocks the item for requisition.

Navy men and women, unlike their counterparts in the other services, operate at sea, in the air, on land and beneath the oceans. Consequently, the sailor's daily routine dictates the need for fire-protective clothing, cold-weather garments (including the current RDT&E of cold-weather undergarments for females in the Women at Sea program), deep-sea swimsuit materials, buoyant-ballistic vests, safety shoes and handwear, dress and working uniforms. The list is endless. But it's comforting to know that when the need arises the Navy Clothing and Textile Research Facility can fulfill that need.

Clothing the Sailor Through the Years

Clothing for sailors—protective or otherwise—has not always enjoyed the attention it now receives. It was considered wasteful to clothe military seamen of the 18th century Royal Navy in anything bordering on uniformity.

The Continental Navy man, though faring better than his British contemporary, had the disadvantage of serving in an impoverished Navy. When funds were available they went to the war effort. Uniforms, nondescript as they were, simply reflected practicality and represented a need for protection from the elements.

Pride, not practicality, dictated interest in uniform development during the War of 1812. The Navy's record was impressive and their victories, especially in view of the massive land defeats, caused a new surge of attention to naval matters. And, though there was little progress made on getting uniforms during the war, the government recognized the need for proper clothing. Still, it took another war before Navy clothing showed signs of becoming standardized.

The Civil War brought the Navy into the steam age. New demands were placed upon the Navy, not only to train men to handle new devices, but also to provide suitable clothing for them. Although it didn't happen overnight, the Navy Clothing and Textile Research Facility (NCTRF) was finally born in 1879 as the Clothing Manufacturing Department of the Naval Clothing Depot at Brooklyn, N.Y.

Then called the Inspection Division, NCTRF's main job was to inspect materials in bale, yarn, fabric and garment form; to develop inspection techniques; and work with the textile industry on the introduction of new materials.

In 1943, the Chief of Naval Operations authorized the first research department. The new Textile and Clothing Research and Development Department, independent of the Inspection Department, laid the groundwork for many innovations in the clothing and textile field. They developed such items as the Mickey Mouse boot (a white, heavy rubber insulated boot used during the Korean Conflict and still used in extremely cold regions); the pilot's safety shoe; a semiconductive safety shoe for ordnance workers; and the thermal, waffle-weave, cold-weather underwear which was ultimately picked up by the Air Force and civilian industry.

The R&D department was moved to Natick (20 miles west of Boston) in 1967, became a tenant of the U.S. Army Natick Laboratories, and was renamed the Navy Clothing and Textile Research Unit. In 1967, the Unit was again renamed and became the Navy Clothing and Textile Research Facility.
Only Retirement Ended His Career

BY JO2 LON CABOT

The final chapter of a Navy success story came to a close at the Little Creek Amphibious Base. Master Chief Boatswain's Mate Carl Maxie Brashear, the Navy's first black diver and the first black Navyman to earn the title 'master diver,' retired recently after 32 years of naval service.

What made Carl Brashear's career an unusual success story is that he achieved his greatest ambitions after surmounting a handicap resulting from a devastating injury which would have thwarted many men—the loss of a leg.

"It took more willpower than I ever thought I had to accept the fact that I had lost a leg. Once I accepted that, I knew I would win the fight to become a master diver," said Brashear.

Carl Brashear's Navy career began like many others. He joined in 1948 after deciding his job as a gas station attendant in his hometown, Elizabethtown, Ky., "wasn't the kind of future" he wanted.

"I had no idea back then that I would some day become a diver," he said. "I went to boot camp at Great Lakes and then reported to Key West and began my career as a steward."

But he worked only briefly as a steward before securing a transfer to a beachmaster unit in Key West where he served as a seaman.

"I helped beach the old seaplanes and did a lot of swimming," he said.

Two years in Key West and nearly four years aboard small aircraft carriers out of Norfolk, Va., preceded his assignment to the Navy's Salvage Diving School in Bayonne, N.J. "Completing that school was an accomplishment in itself. In those days, black sailors were not readily accepted into the diving field."

For the next six years, he served as a boatswain's mate and salvage diver in Virginia, Rhode Island and on Guam. In 1960, he entered the Navy's First Class Diver School in Washington, D.C. "I didn't get too far. I dropped out because the academic workload was too much with my limited education," he said.

Serving a year aboard a San Diego-based submarine tender, Brashear reported to Pearl Harbor, where he entered and graduated from the Navy's Second Class Diver School.

After a year aboard a Pearl Harbor-based salvage ship, he returned to First Class Diver School. Six months later he graduated third in a class of 17.

"After I failed the school the first
time, I took courses through the Navy to strengthen my educational groundwork," said Brashear. "When I went back the second time, I was ready for the mathematics and science the curriculum involved."

Following graduation he served a year aboard a fleet tug at Norfolk before reporting to the salvage ship USS Hoist (ARS 40). That was in 1965.

In March 1966, while Brashear was serving aboard Hoist, his career as a diver and a Navyman almost ended. As a boatswain’s mate and acting master diver for the command, Brashear was assisting in recovering a nuclear bomb lost at sea after two planes collided over the Mediterranean.

During the recovery, a stern line on a landing craft broke and slung a pipe attached to a steering mechanism across the deck of Hoist. Brashear managed to push a shipmate out of harm’s way, but the pipe smashed into the back of his left leg.

After five months and seven operations, doctors amputated the leg four inches below the knee. "It’s something you never really get used to," explained Brashear. "I guess you could say that after awhile I developed a ‘grin and bear it’ philosophy. But since I lost my leg, a day hasn’t passed that I haven’t wished I still had it."

For most Navymen, the injury would have ended all hope of returning to the vigorous duties of a boatswain’s mate and diver. Carl Brashear only became more determined to make his dream of being the Navy’s first black master diver a reality.

He began an extensive therapy program at Portsmouth (Va.) Naval Hospital. His new artificial leg in place, he climbed two flights of stairs several times a day while carrying 100-pound barbells.

"The medical personnel at Portsmouth were amazed that I was so determined," he said. "I had to prove I was still capable of carrying out the duties of a diver."

Shortly before he left the hospital, Brashear took his diving gear and a photographer to the destroyer and submarine piers in Norfolk. "First I used a deep-sea rig in about 30 feet of water. I swam 250 yards in scuba gear and then made a shallow water dive in a lightweight diving rig," Brashear recalled.

The photographer captured all Brashear’s activity on film. Afraid disqualification from the Navy’s diving program was imminent, Brashear forwarded photos of himself in action to Washington in 1967.

"Even with documented proof that I could still dive, the people in Washington wouldn’t believe I was capable of serving as a diver," he said.

After hearing of the disbelief that prevailed, Brashear convinced officials at the Bureau of Medicine to let him “audition” at the Navy’s Deep Sea Diving School in Washington.

"I had to do things that I had never seen done underwater," he recalled. "After diving in every kind of rig imaginable and after swimming to depths I’d never been at before, I finally convinced them that I was still qualified."

Brashear’s dogged determination to
A diver drew a flurry of criticism from various medical boards, but the sharpest comment he'll always remember came from a senior member of the last medical board at which he appeared.

"One of them asked me if I really wanted to remain a diver," recalled Brashear. "I told him, 'Yes.' Then he looked me in the eye and said that I was 'one stubborn chief petty officer.'"

Brashear laughed when he recalled the story, but his mood turned somber when he added, "I guess if it hadn't been for my stubbornness, I wouldn't be here today."

Duty with shore and ship commands as a diver and boatswain's mate followed his acceptance into the diving field as an amputee. In 1970, he climbed another rung on his way to the top when he was advanced to master diver. Then, in 1972, he was promoted to master chief boatswain's mate.

Since his advancement to master diver, Brashear has made at least four descents into deep water every six months to maintain his certification. He works out daily and said he has never used the fact that he is an amputee to avoid any unpleasant task that has come his way.

Brashear's story has been told repeatedly since he lost his leg. He appeared on the television show "To Tell The Truth," and was featured in both Navy and commercial films dealing with overcoming handicaps.

"I've given retirement a lot of thought," he said. "I'm a little sad about it, but I guess when you've stuck with something as long as I've stuck with the Navy, you're going to have regrets when you realize it's time to leave."

Carl Brashear has no intention of bringing his diving career to a halt. He said he's had several job offers to work in diving salvage with local shipyards.

"I'm pretty sure I'll be doing the same job as a civilian that I've been doing in the Navy," he says happily. "I just haven't decided where I'll be working yet."

Carl Brashear's retirement will not mark the end of his career but the dawn of another. Of himself he said, "Carl Brashear is someone who believes from experience that you never give up and that there is no such thing as the impossible."

Master Chief Brashear recently appeared on a network television show, "Real People," and discussed his life and plans for the future. He mentioned there is speculation that his life will be the plot of a forthcoming picture. 
Below: "Buck" Parker in a quiet moment with one of his sons, Douglas, 7; Bottom: USS Haddock (SSN 621) at sea.
Arthur "Buck" Parker has survived for years in a world of underwater mountains, hills and valleys, where there is no day or night and pressure is a way of life. But then, he and the men of the Navy's submarine force are a rare breed.

Parker reported aboard his first submarine in 1960. Nineteen years and five subs later, he now is Chief of the Boat aboard USS Haddock (SSN 621), a nuclear-powered fast attack sub, homeported at San Diego.

By his own account, life in the underwater Navy can span the spectrum from demanding to beautiful. Recently, Parker talked about his career in subs and his current job as COB.

"I first became interested in submarines by watching the old TV series, 'Victory at Sea,'" said Parker, a 38-year-old master chief electrician's mate.

"The duty just appealed to me. I thought that if I was going to go, I might as well be in the 'exciting, silent service.' So I came in the Navy with the idea of making a career in subs."

With some high school experience as a butcher in his hometown of Concord, N.C., Parker originally planned to enter the commissaryman rating. But his test scores landed him a slot in the interior communications electrican school in San Diego, and he liked it. From there he went to sub school—and it's been subs ever since.

"There's an undefined quality aboard submarines that keeps a person in this Parker calls this "cobbing it," or being a sounding board between enlisted and officers."
community,” explained Parker. “It's exciting, demanding, and calls on you at times to give all you've got—plus a little more.

“Submarine life is rough—a lot more demanding than any other sector,” he continued. “But I feel more comfortable here because of the caliber of people. They're a lot more dependable overall and you get closer, too. When a sub submerges, I know the odds are it's going to come back up.”

If there's one word synonymous with being a member of the submarine force, Parker will tell you that it's “qualified.” From the day a man reports to his first sub until he retires 20 or 30 years later, he's involved in qualifying for an almost endless chain of watch stations, each one vital to the survival of the boat and its crew.

One such link in that chain is Chief of the Boat—a job that requires the most qualified, most senior enlisted man on the sub. As a COB, Parker speaks for professionalism.

“People aboard subs have to be alert when they do a job because they're always involved in some safety hazard,” he said. “Therefore, there's a greater sense of duty and responsibility in the sub force. You always find someone who is willing to step forward and accept responsibility. When a guy first comes on board, he's like anybody else. You have to work into the new sailor an attitude that the job has to be done, has to be done today, and has to be done right. It's an ingrained process.”

Parker's sub duty has been varied. Since 1959 when he attended submarine school at Groton, Conn., he's served aboard USS Corporal (SS 346), a diesel-powered, GUPPY (Greater Underwater Propulsion Power) sub, as well as three fleet ballistic missile submarines: USS Casimir Pulaski (SSBN 633), USS Daniel Webster (SSBN 626), and USS Robert E. Lee (SSBN 601).

He has seen a lot of technological advances. “The basic design has stayed pretty much the same,” he said, “but the power plant, electronics and communications are all more sophisticated.”

The chief says that interior communications aboard subs has gone from basic electrical mechanisms to computerized circuitry. “It has really advanced—and a lot higher intelligence and education is required in order to do the job now.”

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“The basic function of the COB is to assist the commanding officer and executive officer with anything that affects the crew as a whole,” said Parker.

That includes arranging berthing, assigning watches, ensuring ship's safety, and coordinating with all departments to make sure command decisions are explained, understood and carried out.

In addition to being the sub's most knowledgeable petty officer, the COB works closely with the career counselor. He also is a member of the quality control and retention board, awards board, reenlistment interview board, striker board, human relations council, enlisted advisory council, and welfare and recreation committee.

He's also involved with things ashore at the home port such as commissary, exchange and BEQ advisory boards; CPO, PO, and EM club advisory
boards; and the Navy wives and ombudsmen clubs.

"Mine is a people job that can include anything from a counseling session to conducting an investigation," the chief said.

"Sometimes it’s as simple as saying ‘Hi,’ and stopping to chat with a fellow sailor to see how things are going.

"I learned early in my first tour as COB aboard Daniel Webster that you can’t solve a man’s problem—you can only lead him to a solution. But if you sit down and give him guidance and leadership to help him solve his own problem, it takes less of your time; besides, you’re more effective."

Chief Parker, who says there’s no such thing as a typical day for a COB, also says the closeness and isolation that are part of submarine duty make it easier to get to know an individual both personally and professionally.

"I have to know each man on board—and that includes knowing qualifications, abilities and capabilities. It’s also having a gut feeling that tells you how he would react in certain situations if you put him in a new position of responsibility."

As for what makes a good Chief of the Boat, Parker has no doubts. "It’s one of those intangibles called leadership," he said. "Either you’ve got it or you haven’t.

"You can be a quiet leader or you can be a hard charging leader. Personally, I prefer the quiet approach. I don’t like hollering—I just want to get the job done."

The COB says that serving aboard a submarine calls for a special kind of personal sacrifice.

"It’s hard on the family," admitted Parker. "You lose contact even on weekend operations, and every time you come back you have to update yourself with your family. To come back off a three-month deployment and see your little boy has grown three inches or even a foot can be very trying on the man."

However, as Haddock’s skipper, Commander Daniel K. Bacon, testifies, women like Buck Parker’s wife, Ann, help provide a tremendous boost in the morale of the ship during an at-sea period.

"The COB’s wife plays an important role in aiding the morale of other wives of crew members," said Bacon.

"Whenever the ship is at sea, the COB’s wife and the CO’s wife help the others. They let them know if the ship’s schedule is changing and they make sure they get help if a personal problem arises."

The Parkers, who live in a suburb north of San Diego, have four boys who keep their dad pretty busy when he’s home. The chief is active in Boy Scouts’ activities like camping and fund-raising drives. He has been president of the local little league, too.

Parker says, "Patriotism may not be the old stand up and shout ‘I love my country’ variety of the 30s and 40s. But it’s still there.

"I still love my country—and, yes—I’ll still go to sea and help stand up for the rights of others. That’s basically why I came in the Navy."
STORY AND PHOTOS BY PH2 DAVID LONGSTREATH

For Navy people stationed at Naval Facility Eleuthera, poor television reception is a small price to pay for living in paradise.

Eleuthera, part of the Bahamian archipelago stretching 750 miles east and south off the Florida coast, is one of those Caribbean out islands unspoiled by commercialism. You can walk the beaches of the 110-mile long island for hours and not come across another person nor hear anything but the sound of the sea swirling over coral.

In the middle of it all is the naval facility, a small oceanographic research station, nestled on a hilltop overlooking the Atlantic Ocean.
Something for Everyone on Eleuthera

The daily routine for the 150 Navy people at the facility has been described as life in a small town—with one difference. The scenery and climate do much to eliminate the boredom often prevalent in small communities.

"Liberty and life in general are excellent here," said Commander R. E. Carlsson, the facility's commanding officer. "There's something for everyone, from skin diving to just combing the beaches for shells."

As expected, water-related sports are popular on Eleuthera. Favorite pastime of many is snorkeling for conch, a bright pink, spiral shell found in 10 to 15 feet of water. The shell's white mollusk, when cooked Bahamian style, is a spicy dish comparable to scallops with a blend of Spanish-like flavoring.

Conch, called "konk," along with Bahamian lobster and other seafood, can be purchased in open-air markets along the roadside. "For a few dollars you can get enough conch to feed a family of four at least two meals," said a non-snorkeler.

Navy people don't spend all their off-duty time playing. Because of the helping-hand policy practiced by the Navy, a warm relationship exists between facility personnel and the more than 9,000 local Bahamians.

"We have always invited the Bahamians to come to us for help when they need it," said Carlson. "And the people stationed here have never refused to become involved."

Navy men and women from the facility have helped repair a local settlement's fire engine, donated books to high schools, and organized fundraising drives to help buy an ambulance for the settlement of Governor's Harbour.

The life of the early settlers was far from easy. Their task of making the island productive was often interrupted by attacking Spaniards and roving bands of pirates. Finally, under British rule, the marauders were defeated.

Life on the island has changed dramatically since the English first colonized Eleuthera. However, the pace of living has remained the same. For Navy people, it's an opportunity to experience a different lifestyle—minus the hustle and bustle normally associated with large cities.

Radioman Third Class Bill Coen and his wife, Jan, a Department of Defense school teacher, like their island life. They have a spacious, two-bedroom bungalow complete with a panoramic view of Governor's Harbour.

"There's not much traffic and it's always quiet here," says Jan. "If we want to go snorkeling or swimming, we just step out the front door and the entire Caribbean is waiting."

The couple say the island has a lot to offer, but there are some drawbacks in a garden paradise. "Although we get television, the reception is poor and few off-base homes have air conditioning. But this is a small price to pay."

Ocean Systems Technician Chief Jim Bean agrees. "This is the best duty I've had. The pace is less hectic and, in general, people here have fewer worries."

Eleuthera in the Bahamas—the perfect place to sit back, kick off your shoes and enjoy. It's more than a temporary relief from winter's storms and big city problems—it's a place where Navy men and women enjoy life to its fullest.  ⬆
Duty in the ‘Yard’

“Stand up, young men, the first thing we teach you here is to salute the Superintendent when he passes in uniform.”
—Commander Richard Wainwright
Superintendent, USNA 1900-02

You’re in your stateroom—the ship is relatively quiet. The evening meal is over. You have a few quiet minutes before you check out your division and get ready for the evening watch on the bridge.

Before you—on your desk—is a sheet of paper. You keep staring at it while you doodle along the margins; doodle, that is, when you’re not chewing on the pencil. You’ve crossed out a few words, written in new ones and crossed those out as well. Tonight’s paper doesn’t look much better than last night’s. You have to make up your mind.

OK—from the top—what have you got? Number one—Sydney, number two—London, number three—PG School. There are seven such listings. Next to some you’ve written words like “sailing,” “career enhancing,” “a must,” and the like. Other things are scribbled—“admiral’s aide,” “political science”—random thoughts on a sheet of yellow legal. Meditatively, you write, “Annapolis!!!!”

Wonder if the old place has changed?
Can you beat it—couldn’t get out of there fast enough that last day...company officer made us come back and hold field day on the rooms or else we couldn’t pick up our orders. Brand new ensign busting to get out and I was stuck on the business end of a buffer...been a long time.

Well, why not? Best sailing on the eastern seaboard, best fishing...football on Saturday afternoons instead of “Stand by to receive fuel!”

No need to ask the wife. How many times has she said, “Put in for Annapolis”? Ever since Steve and Marge went there, she’s been after me to go back to Crab Town.

“Reef Points” never said anything about this enigma—the struggle of a junior officer trying to pick his next duty as he nears the end of his first three or four years at sea. Nor did it say anything about the values one should place on duty choices.

Never mind. You’ve made up your mind, Annapolis heads your list of choices—you’ll send it off tomorrow.

Below: Instructors assigned to the Division of Professional Development meet often to discuss midshipmen training program.
Left to right: Lieutenants Randolph Ni, Royal Connell Jr., Martin Deafenhaugh, Louis Deasaro and Rodney Repka.
Giving the balled up sheet a toss (you miss the can), you grab your cover and head topside to CIC. You tell yourself the world needs more decision makers like you—*c'est mois*.

Trouble with any decision like this is the waiting. Anxiety creeps in after a week or so. That turns to desperation as the weeks crawl; you tell yourself bureaucracy is a monstrously slow machine. You begin to convince yourself that choice number two, three and four aren't really that bad. You've become convinced—no way are you going to get number one.

The day comes when you're up to your ears in reports and trying to track down spare parts that you know are on board. The next duty station couldn't be further from your mind. It always happens that way—"Hey, Duke, hear you got Annapolis."

"Huh?"

You're on your way, as soon as that unsuspecting martyr of a relief shows up on board.

What you didn't know is that once your request reached the Naval Military Personnel Command, they went over your record with a fine-toothed comb, looking for your strong points and your weak ones. Capsulized information was forwarded to the Naval Academy and they decided you were the type they'd like to have. Most men are their own worst judges. In your case, the record is clean, fitness reports show a positive, steady improvement, and past skippers have marked you as one of their better officers. And holding a P-Code (subspecialty) further enhances your chances of Annapolis orders.

All this is not to say that only Academy graduates should apply for duty at the Naval Academy. Far from it. Rear Admiral William P. Lawrence, Superintendent of the Academy, looks at non-grads as people who "bring a unique perspective" to the job.

In fact, says the Superintendent, three officers who have held top positions at Annapolis this past year are not Academy graduates—the Commandant of Midshipmen, the head of the Professional Development Division, and the Director of Candidate Guidance.

The degree of education stipulates the placement of new arrivals—especially junior officers, lieutenant commander and below. A bachelor's degree is a must and no one lacking a baccalaureate is ordered into Annapolis. It takes a master's at the minimum to be assigned to one of the 200 military billets in the academic faculty.

On the whole, junior officers without advanced degrees are assigned as company officers or to the Professional Development Division (leadership, law, seamanship, navigation); the remainder serve in various administrative billets, generally under the Commandant of Midshipmen, Captain Jack N. Darby.

Of the 550-member faculty, 50 percent are naval officers and of that number, about half are junior officers. There are some 275 civilian faculty members, 70 percent of whom hold PhDs.

There are few people in the naval service today who don't know the general history of Annapolis. With the advent of steam in 1839 (USS Princeton) and a subsequent appropriation for the building of steam warships, a naval school ashore for the training of midshipmen became a necessity. Secretary of the Navy George Bancroft was the catalyst for the founding of a naval school and the 10 acres of old Fort Severn in Annapolis were ceded over to the Navy for that purpose.

Classes started on Oct. 10, 1845, under Commander Franklin Buchanan, assisted by a seven-member faculty, for 50 naval cadets (they became known as midshipmen in 1902 under Commander Richard Wainwright). It took five years before the Academy was officially designated the United States Naval Academy and those years before 1850 constituted a period of settling down.

From the very beginning, Buchanan stated that the fundamental objective of a cadet's training were: "obedience, moral character and temperance," all hardly changed today.

Admiral Lawrence emphasized the moral objective when he said, "We improve one's ethical values. In fact, we continue this through the entire four years in our leadership program."

On today's 329-acre campus, men and women midshipmen undertake a diversified academic program which leads to seven designated engineering Bachelor of Science degrees or undesignated Bachelor of Science degrees in 11 other areas from chemistry through political science. This is a far cry from the old days when the Naval Academy was concerned only with turning out sea officers. Degrees were not granted until the Class of 1931.
The Academy was first accredited by the Association of American Universities in 1930. It was first accredited by the Middle States Association of Colleges and Secondary Schools in 1947. The 1964-65 academic year saw the establishment of the civilian positions of Academic Dean and Dean of Admissions.

The single purpose of the Naval Academy is to turn out professional line officers, the majority of whom are career oriented. All graduates face the five-year active duty obligation (which one faculty member calls the “five-year opportunity”).

The overview of life at Annapolis for junior officers is positive—there are few gray areas. Admiral Lawrence and Captain Darby are a team, they speak as one person. To both, the Brigade Honor Concept (which Admiral Lawrence helped frame back in the days when he was Class President) is something more than words which say midshipmen won’t lie, cheat or steal.

“What we cover here deals with ethics, morality and honesty on a plane much higher than one was taught by his or her mother,” said CAPT Darby.

“Here we’re interested in moral development. The average university is interested in this as well, but generally as it concerns cheating on exams. Here, we spread this out over the whole four years.”

That’s where the junior officer fits in at Annapolis. “Officers at the Academy,” said the admiral, “have demonstrated performance better than the Navy average. They are involved in character building; the total environment is geared toward this. It’s really a challenge.”

Echoing the admiral’s words, CAPT Darby said that the junior officer “gains a tremendous satisfaction from his work. When he leaves here, he’ll have made an impact on the Navy for years to come.”

The junior officer, the captain continued, “is a counselor, a father confessor. His reward is that he develops himself by dealing effectively with people.”

OK, so you have the general idea of what you’ll be doing at Annapolis. Since the “you” in this presentation is purely fictional, we’ll assume that you now ask a question—“What’s in it for me and my family?”

For you it’s career-enhancing duty, no doubt about it. You have the opportunity to deal with young people and help shape their thinking while correcting some of the myths they have heard about the life of a naval officer at sea. After all, you have served there and you can be sure they’ll want to know what it’s all about—not from textbooks but from you.

You will have the opportunity to deal with young men and women (there are more than 4,300 of them) in groups and on a one-to-one basis. You’ll learn that they will confide in you. From you they’ll reap rewards from other aspects of leadership—guidance and counseling. You’ll see them when they are happy and when they’re not; you’ll see them when they’re buoyed with confidence and when they have their doubts. That’s where the father confessor in you surfaces—the answers you’ll give will be straight and there won’t be any frills attached.

Admiral Lawrence has already said: “You will find them exceptionally bright, eager to learn, and full of questions that demand reasonable answers. Thus, the challenge to you is by no means a small one.”

In this new role, you will hark back to your own days either
as a midshipman at the Naval Academy or as a student at another university. You knew then that there were certain people in the yard or on campus to whom you could unload when things, call it the system, were getting you down. Those people told you what it was all about, what was expected of you, and they were blunt when the need arose. That's where you'll fit in at the Academy and that's what the midshipmen will expect of you in most matters. It goes by several names—some say leadership, others say character building, but it's counseling pure and simple.

You'll work long and demanding hours but you will learn to work out a schedule whereby everything still gets done—much as you scheduled your work in your student days. The wife and kids may not see much of you at first, but then they'll see another side of you—one that's as dedicated as ever to the task at hand but one, too, which has at its center a concern for others. And your wife will become involved. As one junior officer now at Annapolis said, "My wife didn't know the first thing about football when we came here. Now she's the biggest fan in the yard." So it's been with others.

In Commander Wainwright's time it was reported, "His quarters became a frequent rendezvous for cadets, many of his son's class (young Wainwright was a mid). Mrs. Wainwright, had an intense interest in cadets, and extended her kindliness and courtesy to representatives of all classes."

An officer currently at Annapolis echoes those feelings when speaking of the Academy system of sponsoring plebes—having plebes as house visitors on weekends during that mixed-up year. "I'm still amazed how well they fit in and adjust in one's home. It amazes me to see three or four grown men on the floor, on their knees, teaching 12- and 14-year-olds the proper way to play backgammon.

"You find yourself taking an interest in them through their four years here. You're as interested in them as though they were your own."

The Academy is a tight community, one where the wives have activities and so do the children, to the point where a person could hardly call it boring. There are wives' clubs, garden clubs and an assortment of weekly events to keep a woman hopping, in addition to the job opportunities of a state capital city.

Midshipmen engage in 27 varsity and 31 intramural sports, and many of these—such as sailing and tennis—are enjoyed by the Yard's inhabitants. When kids aren't playing, they can...
wander from one field to another in an afternoon watching all kinds of contests. If watching isn’t enough, they can do as one 14-year-old does—get up at six every morning in the summer and hotfoot it over to the nearby Naval Station for a morning of sailing. Pretty good for a youngster whose normal reveille on days off is sometime after 9 a.m.

Besides the obvious, such as sports and scenic Annapolis, officers and their families have a whole range of cultural activities at their doorstep. The famous Forrestal Lecture Series and the Guest Preaching Program allow them to hear notables from Dean Rusk to Norman Vincent Peale, leaders in every field from publishing to the women’s movement to politics.

Then there is the continuing education process. Those assigned can avail themselves of courses at night and on weekends at nearby centers such as Georgetown and American University. For the officer and his family, nearby Baltimore and Washington are gold mines of culture, including the latest Broadway plays and exhibits at world famous museums and galleries. Anything of importance comes to Washington first, the rest of the nation later.

Quarters have been described as large, ample and well cared for and there’s another plus in these days of chronic gas shortages—everything’s within walking distance; the family car gathers dust. Don’t care to walk? Bicycling is great—there are few hills.

From a purely selfish standpoint a junior officer has much to gain from a tour at Annapolis.

First, only the best are sent there. Although one tour hardly makes an entire career look great, it has its advantages. One is in competition with the best of his peers and competition is the machine which produces winners.

One can gain a subspecialty during a tour and, for some, it can be in their major field. Either way, a P-code is an added plus in a record.

Some may be inclined to think that one must go to Washington to fill out the corners of a career; the action is at Annapolis just as well.

What about those who are now at the Academy? How do they feel about their choice? The opportunity came by talking with a small group of five lieutenants in the Professional Development Division. Here the air is charged—one wonders if the deck hasn’t been stacked. These guys like what they’re doing and they can’t see why others don’t feel the same way. This group includes a nuclear submariner just ashore after four years on a sub in the Hawaii area. It includes, too, one lieutenant who is getting out—he’s going to medical school, he hopes, but he’s coming right back to the Navy.

The five have served in seagoing slots—aboard an LST, a frigate, a carrier—and they’ve taken the basic SWOS course at Newport. Their reasons for coming back?
"Out of curiosity, I suppose. Sort of like returning to the scene of the crime. It's a lot more than I expected," said LT Randy Ni.

"I fought like hell to get here," said LT Royal Connell. He's back after seven years, the last two and one-half aboard a DD.

LT Marty Deafenbaugh said, "I'm happy to be here, working with people—working with mids. I have a chance to change my warfare specialty."

What does the distaff side of the Deafenbaughs think about the duty? "She was the number one push behind my decision to come back...the quarters are good, large—fact is, they're beautiful."

Another said his quarters were somewhat less than he had in Charleston, but, then, he owned his own home there which he sold before coming to Annapolis.

All agreed that there was little free time because there was so much to do and so little time in which to do it. "After a while, you run your own schedule," said one, "and things get done."

Deafenbaugh was a little uptight at one point when he thought others in the fleet looked down at duty at the Academy and, as well, those who accepted such duty.

Told that this had to do with some people's idea of "career enhancement" and "getting one's ticket punched in Washington," he relaxed. He obviously didn't put much stock in those lines.

Connell—the more senior by a couple of years—said that the junior officers at the Academy "...provide the link for the midshipmen.

"They look up to us. They want to know what life as an officer at sea is all about. We can tell them and it's rewarding dealing with them."

"We talk on their level and they understand us."

How's bachelor Randy Ni like the duty—all the others in the group are married and have young families.

"Annapolis has a lot of night spots," he said grinning. "But, seriously, this area has a lot of everything—from theater and schools in Washington—and there's a lot to do when we're not teaching or coaching (he assists with lacrosse).

"I like it."

No one leaves the "real Navy" when they come to Annapolis. It's not the operating fleet, true; it isn't some kind of a super school for spartan warriors. Neither is it a place for bosses and those who are bossed.

Midshipmen stand three inspections a day during the week and their officers also stand inspection. Not as many, of course, but they stand inspections. Midshipmen can look out the windows of Bancroft Hall and see company, admin, and faculty officers lined up and braced during a regularly scheduled inspection.

"It does the midshipmen good to see their officers stand inspection," CAPT Darby said. "They know that this is a regular thing in the Navy and being an officer doesn't excuse one from performing regular military duties.

"I think the mids get the message and it sticks with them. We're all part of a professional outfit."

Yes, the Navy and Annapolis are part and parcel of a professional life. The junior officer who serves at Annapolis is serving the Navy at its wellspring. For a professional, "it's a great shore duty."

Your number one choice was right on target.—JFC
More Than Luck

"Your figures were the highest of any ship in the entire Pacific fleet," said Rear Admiral Robert B. McClinton, Commander Naval Surface Group Western Pacific, to the men of USS White Plains (AFS 4), a winner of the 1978 "Golden Anchor" reenlistment award.

White Plains, known as the "Orient Express," led other major afloat commands with an impressive reenlistment record: 75 percent first-term, 83 percent second-term, and 90 percent for career reenlistment.

Commanded by Captain Robert S. Owens, White Plains also won the Battle Efficiency "E." News of this award came while the combat stores ship was en route to her home port of Yokosuka, Japan, after participating in the joint U.S./Korean exercise called "Team Spirit '79."

Living up to her name, "Orient Express" covers the Western Pacific providing "express" service to other ships of the Navy's 7th Fleet. She helps carry the lifeline that 'feeds' the ships which remain on station.

But when she is in home port, her crewmen join their families in enjoying their tour in Japan. As members of the Navy's Overseas Family Residency Program in Yokosuka, White Plains' crewmen and their families take part in frequent get-togethers. The ship regularly hosts family parties, as well as open house events and luncheons for orphans and local school children.

A Minority of One

Minorities normally band together to share common interests. But Navyman Jefferson M. Timothy is a minority of one.

The 27-year-old native of Kosrae, in the Eastern Caroline Islands, said he's "the first and only Kusaien in the United States Navy."

However, he adds, "I don't feel like a minority. Everywhere I go the reception has been terrific; I make friends easily."

Kosrae, formerly Kusaie, is a 42-square-mile island almost on the equator, about 800 miles southwest of Wake Island. It has a population of 5,000.

"Since I was young, I always wanted to become a sailor," said Timothy, now a personnelman second class at the Naval Station Subic Bay, Republic of the Philippines. "Now, it's like a dream come true."

The tenth child in a family of 16, Timothy joined the Navy in 1974 while residing and attending college in Boise, Idaho.

"I left Kosrae in 1971 to go to college at the University of Guam," he said. "While on Guam, I became friends with an American couple from Idaho who..."
a lot of patience. That red tape stretched out for three and a half months and included phone calls to Kosrae's Territorial Office in Washington.

Enlistment wasn't the only obstacle for the determined Kusaien.

"Boot camp was really difficult for me," he recalled. "I was scared to death the whole nine weeks. I'd never had any regimental training, not even Boy Scouts. Obviously, no one from my island had ever been through military training before, so I didn't even have any old rumors to aid me.

"But, when graduation finally rolled around, there I was."

While Timothy's parents are proud of him, their pride is mixed with reservations.

"I didn't inform them I was in the Navy until after I'd enlisted. They were a bit uneasy at first. My father is a minister, and the family is very close knit. Of course, they don't want me involved in any war. Dad still remembers World War II."

Once an administrative clerk on Kosrae, Timothy now maintains diaries for the Subic Bay Naval Station and 28 tenant commands; he is accountable for more than 1,100 service records.

"My job has given me a sense of responsibility. I often get requests for assistance from 7th Fleet ships to help arrange transportation for personnel on transfer orders or to assist a shipmate with a passport or visa."

What about the folks on Kosrae? "The people back home really look up to me now," he said.

PHC Ken A. George

invited me to further my education at Boise State.

"On the island (part of the U.S. Trust Territory), students learn all about America, the land of opportunity. I can still name the three largest cities in each of the 50 states, the capitals of each state and what makes each state famous."

With his knowledge of the United States there was little cultural shock for Timothy when he arrived in the mountainous area of Boise. The climate was another matter. "One thing about America I sure didn't learn," he says, "is how cold the winters are in Idaho."

Following a year as a math major, Timothy's lifelong urge to become a sailor overcame his desire to complete college, and he visited the local Navy recruiter. But enlisting wasn't all that easy.

"The recruiter in Boise went through miles of red tape," he said. "Verifying my birth was the biggest headache of all. The hospital on Kosrae kept no records. The only records available were from my school.

"Happily, that was one recruiter with

Incorrect Identities

Although Lieutenants Dennis and Cheryl Frank (the couple on the left) and Linda and Robert Bird are friends, as well as jogging partners, they don't appreciate having their identities changed as was done on pg. 9, June 1979 issue of All Hands. Our apologies to both couples for inadvertently identifying the Birds as the Franks.
7th Fleet Show Band

‘Down Under’

BY PHC KEN A. GEORGE

Playing 12 shows in 10 days, the U.S. Navy 7th Fleet Show Band, Far East Edition, recently turned Sydney, Australia, upside down with its inimitable brand of show-stopping music.

The 20-member troupe, playing everything from the big band sound of Glenn Miller to the up-tempo beat of disco, participated in the final 10 days of the month-long “Festival of Sydney.”

The annual mid-summer festival features numerous musical and colorful cultural events and ceremonies.

Performing in the new Sydney Opera House Boardwalk and the century-old Sydney Town Hall, and in many other festival activities, Far East Edition warmed the hearts of thousands of enthusiastic music lovers. Band members also led the festival parade. The parade was covered by national television for an audience of millions.

The Far East Edition played everything from disco to jazz to the rock 'n' roll sounds of the 50s; there was something for everyone.
"What a fantastic trip!" said Bandmaster Chief Warrant Officer Benjamin McHorney. "The people were so gracious and receptive to our type of music; dancing, handclapping and toe-tapping; that's what it was all about.

"We put on a family-type show which appeals to varied audiences. Few Navy bands are as versatile as Far East Edition. We have something for everyone."

The disco version of "Star Wars" was a big crowd pleaser, as were "In the Mood," "Rocky Top," and "When The Saints Go Marching In." The real show stopper was the rock'n'roll sound of the '50s.

"Another highlight of the trip was our fiddler extraordinary, Fire Control Technician Second Class A. Mouledous," said McHorney. "He's not a regular with the band but is an excellent..."
performer. He really got the crowds revved up with his 'Orange Blossom Special.'"

This seagoing band toted their two tons of gear to more than 470 concerts last year. Outside of their home port of Yokosuka, Japan, they appeared in Africa, Korea, Malaysia, the Philippines, Singapore, Taiwan, Thailand, and, of course, Australia.

"We're on the road more than 65 percent of the time," said Musician Third Class Vaughn Neiley, "and the schedule is often hectic. I remember a time in the Philippines when the band did 65 shows in 35 days. In Hong Kong we did five shows in one day.

"But performing in Australia makes all the hustle and bustle worth it," said Neiley. "The Australians made me feel important as a musician and as a goodwill ambassador for the U.S. Navy. This is the highlight of my career."

"Their performances gave a lift to the final celebrations of the 1979 Festival of Sydney," said Heather Stewart, band coordinator in Sydney. "The extra zing, the enthusiasm, and the whole-hearted enjoyment came from the music of the Far East Edition."

They did indeed turn "Down Under" upside down.
When a person celebrates a birthday, friends usually throw a party. When Bob Hope celebrates a birthday, it's a different story. Hope recently shared his 76th birthday celebration with 1,300 of his friends—the sailors and Marines aboard USS Iwo Jima (LPH 2) along with millions of others through national TV.

Manhattan's skyline and the helicopter carrier's island formed the show's backdrop, and the audience roared as Hope rattled off one-liners in machine-gun fashion. It was a typical USO Show with Iwo's sailors joining in the action. "Veteran" helo pilot Don Knotts is more fascinated by his retelling of heroic deeds than his listener appears to be. Below: another hat, another show.
Bob Hope Special

on stage, laughing, and applauding performers Sarah Jessica Parker (Broadway's 'Annie'), Charo, Diahann Carroll, the cast of 'Dancin' ' and Don Knotts.

Most of the sailors and Marines had never been to New York nor had ever seen a Hope Show before. "It's exciting," said Radioman Seaman Gary Himes. "A good way to finish the cruise we've been on." (Iwo Jima had just completed a three-week Caribbean exercise.)

The ship learned she would host the show about a month and a half before the taping. "Our first reaction was surprise, then curiosity," said Commanding Officer Captain Walter H. Brown. "We felt fortunate by being chosen."

From the moment the ship arrived on Friday night, May 25, to the show's taping Sunday morning, Iwo swarmed with production people, stage hands, audio and lighting experts all hustling to turn the flight deck into a television stage. Sailors and Marines assisted in every way, from stage construction to feeding the extra hands aboard. Without this voluntary effort the show probably wouldn't have gone on as scheduled. Their work didn't go unnoticed: "They couldn't have been better," said Hope.

It appeared the crew felt the same way about Hope as the standing ovation following the show indicated. All those who had the opportunity to enjoy the show better understood what Hope means when he says, "Thanks for the memories."

Below, left: Broadway's Annie, Sarah Jessica Parker; right: sailors await the show on Iwo Jima's flight deck; and below: Iwo Jima pulls into New York.
Almost Four Decades of Entertainment

Bob Hope has gone a long way, literally, with the USO—an estimated eight million miles since 1941. Twenty-four Christmas shows between 1941 and 1972 brought light and life to numerous service men and women, letting them know that their country had every reason to be proud of them.

The Navy has provided the backdrop for many of Hope's shows through the years including the most recent, his 76th birthday celebration aboard USS Iowa Jima (LPH 2). His inimitable brand of humor is long remembered by the scores of sailors and Marines that have seen similar shows at military installations and aboard ships worldwide.

March 6, 1941—Bob Hope broadcast his radio show from March Field, Calif.—his first show for a military audience.

1943—Hope's USO troupe toured combat areas in England, Africa, Sicily and Iceland.

1944—During his first South Pacific tour, Hope met John Kennedy and his torpedo boat crew on Wendy Island. "Of course, I didn't know who he was at the time—a fact he (Kennedy) enjoyed reminding me of at the White House when he was president."

Navy men beat him to the punch line during his second South Pacific tour. "Are you the Seabees that build the roads the Marines land on?" asked the comedian. "No," one of the men answered, "we're the Seabees that build the roads the Japanese retreat on."

1950—Hope and company put on a special moonlight show for 2,000 sailors aboard USS Missouri (BB 63). Afterwards they took a short hop to USS Valley Forge (CV 45) and entertained another 2,000 men.

1951—Back in the states he performed for crewmen of USS Boxer (CV 21) which was being repaired following damage in Korea.

1952—Hope visited recuperating servicemen at Long Beach Naval Hospital, Long Beach, Calif.

1953—At Oakdale Naval Station, Calif., he met and entertained guys he had met earlier on the front lines of Korea.

1957—that year's Christmas show was performed on USS Los Angeles (CA 135). Hope remembers part of the monologue as "My grandfather was a naval hero. He once shouted, 'I have not yet begun to fight.' And, you know, he never did. You probably remember him, Admiral Tuna, the Chicken of the Sea."

1960s—Hope, along with notables like Raquel Welch and Ann-Margret, toured the Seventh Fleet off Vietnam. His USO show stops included USS Shangri-La (CV 38), USS Ranger (CVA 61), USS Bennington (CVS 20), USS New Jersey (BB 62) and USS John F. Kennedy (CVA 67).

1971—While performing in Rota, Spain, Hope again paid the Navy one of his backhanded compliments: "This is the first time I ever played to a bay full of submarines. It's great. If they like your jokes they just leave the periscopes up."

1972—Hope's last overseas Christmas tour.

1978—The USO honored Hope with the "Bob Hope 75th Birthday Salute" held at the John F. Kennedy Center for the Performing Arts in Washington, D.C. Part of the entertainment included the Navy Band and Chorus.

Bob Hope continues entertaining service men and women through mini-tours to military and veterans' hospitals. He serves as Honorary Campaign Chairman, raising money to build the Bob Hope USO Center in Washington. The center will serve as Washington's USO facility and will be USO World Headquarters. Additionally, it will house Hope's extensive USO memorabilia—a tribute to "Mr. USO."

Airing the old G.I. Journal radio show over the Armed Forces Radio Service network; a young Bob Hope, at left, with Seaman First Class Alvino Rej.
Walter Hinton sits on the patio of his Pompano Beach, Fla., home overlooking the Atlantic. Below, swimmers play but his interest is focused on an airliner winging its way across the Atlantic—a routine flight.

The old man smiles as he thinks about the ease with which the pilot will make the flight. It was another world, 60 years ago, when Hinton wrestled the controls of an ungainly Navy-Curtiss (NC) flying boat through heavy seas and rough weather. He became one of the first to conquer the Atlantic by air.

Today Hinton is the only surviving member of the six-man crew which made the May 1919 flight. Recently he met with the Chief of Naval Operations and the director of the Smithsonian Institution’s Air and Space Museum in Washington, D.C., to commemorate the NC-4’s 60th anniversary. During that visit, the 90-year-old aviator, a walking textbook of early flight, reminisced about those days.

When Walter Hinton enlisted in 1908, naval aviation was, literally, just getting off the ground. It had been only five years since the Wright brothers’ Kitty Hawk flight and it would be
another two years before the first flight from the deck of a Navy ship.

After boot camp at Norfolk, Va., Hinton served aboard the cruiser USS Olympia (C 6)—of Spanish American War fame—the sailing ship USS Hartford—of Civil War fame—the small one-turret ships, USS Ozark and USS Townana, the tender USS Dixie (AD 1), destroyer USS Wainwright, and the cruiser USS Seattle.

During his tour aboard the Guantamano Bay-based Seattle, Hinton was a chief quartermaster. While there he became interested in flying.

"The Seattle carried six Curtiss JN9 seaplanes," said Hinton. "One day Kenneth Whiting (the naval aviation pioneer for whom Whiting Field in Florida is named) came up to the bridge and found me reading some of his books about flying. Whiting asked, 'Hinton, would you like to fly?'"

Whiting explained to Hinton that, because of the possibility of war, the Navy planned to train enlisted pilots. Hinton jumped at the chance, requested flight training and received orders to NAS Pensacola. That was in April 1917. That November he was appointed a warrant boatswain, designated a naval aviator and assigned as a flight instructor in large flying boats.

While serving as an instructor, one of Hinton's students was Lieutenant Richard E. Byrd. It was the beginning of a relationship that led Hinton to a tour of duty at Halifax, Nova Scotia, as Byrd's operations officer and eventually to the planning and execution of the first transatlantic flight.

"Byrd came to me one day and said, 'Hinton, would you like to fly across the Atlantic?' I replied, 'In what?'"

The future arctic explorer told Hinton that the Navy was building four giant sea planes to be used as long-range submarine hunters. Therefore, the feasibility of flying them long distances had to be investigated.

"Suppose I was lucky enough to be the navigator and you the pilot," Byrd told Hinton. "We might as well see what we can do about getting in on it!"

While Hinton and Byrd were preparing for the flight, including redesigning a sextant and drift indicator for aircraft use, four NCs were being readied at Rockaway, Long Island, and plane crews were being picked. As it turned out, Byrd was not selected as a crew member. An order had been issued that no one on overseas duty would be eligible for the flight. That ruled out Byrd because Halifax was considered overseas. Hinton didn't suffer the same fate, because, he thinks, he was one of the most experienced large flying boat pilots in the Navy.

When the final crew selection was made, Hinton, by then a lieutenant (junior grade), was assigned to NC-4 as co-pilot; Lieutenant Commander Albert C. Read was commanding officer and Lieutenant Elmer F. Stone (the Coast Guard's first aviator) was pilot. But when take-off time arrived, Hinton suddenly found himself flying from the pilot's seat.

"When I climbed aboard the NC-4 I found Elmer in my (the co-pilot's) seat. I said, 'Elmer, you're in my seat.' He said, 'No I'm not. That's (pilot's) your seat...you've had the experience needed for this and it's been arranged that you occupy that seat.' I looked up at Read and he smiled and nodded his head 'yes' and so that was that."

The rest is history. Of the three NCs that finally began the flight, the NC-4 was the only one to make it across the Atlantic. (See All Hands, April 1979, "NC-4; They Called Her a 'Lame Duck'.")

Hinton's aerial adventures didn't end with the flight of the NC-4 however. In December 1920, he made the headlines again—this time, as a participant in a long-distance endurance balloon flight.

"The balloon trip was a mistake," he now admits.

He and two other naval aviators left one afternoon from Long Island carrying about 20 bags of ballast, their suitcases, navigational equipment and three carrier pigeons. They planned to turn a
pigeon loose every evening to let the folks back home know they were safe.

The first part of the flight went smoothly and Hinton released one of the pigeons. But strong winds carried the balloon north toward Canada and the three knew they were lost. They began to search for signs of civilization and a place to land.

"At one point we heard a bunch of dogs barking," said Hinton. "We thought it would be a good place to land, but when we came down we found ourselves in the middle of a wolf pack."

Quickly ascending, the balloonists were driven further north. They jettisoned everything "except our pigeons and compass" to gain altitude and rise above the trees and mountains. Eventually, however, the balloon was blown into the forest where it was dragged through the trees and was down for good.

They survived the crash and a subse-
quent four-day trek through deep snow and -30°F temperatures before reaching a fur trading post. However, the aviators' homeward journey wasn't complete—in all, they spent 31 days in the wilds. During that time the Navy gave them up for lost, but the only casualties of the ill-fated flight were the pigeons. "The first night in the woods we wiped them out...."

Despite his brush with death in the north country, adventure still beckoned Hinton. He resigned his commission in 1922 ("I was offered more money than I'd ever seen before") to organize and make the first flight from New York to Rio de Janeiro. The flight was sponsored by the New York World which distributed stories of the aviator's exploits to more than 80 newspapers throughout the country.

During this flight, Hinton again almost met with disaster when he landed his small Curtiss H-16 flying boat in what he thought was Guantanamo Bay.

"I saw what I thought was the windward navigational light which marks the bay," he said. "Actually, it was the masthead light from USS Denver which was anchored further out. I ended up setting down in rough, open sea and tore the bottom out of the plane."

Denver crewmen saw his plane go down but believed it to be a shooting star—airplanes were practically nonexistent in that part of the world.

Meanwhile, Hinton's plane sank to the upper wing.

"I was standing on the top wing when I noticed a lot of commotion in the water around me," explained Hinton. "Then I saw what was making all the racket—sharks!"

When Denver's commanding officer got the word that something had crashed into the water he ordered his men to shine a light on the impact area. There was Hinton, waving his arms, yelling and trying to keep out of the sharks' reach.

He later discovered the reason for the sharks—he had landed in a garbage-dumping area set aside for Navy vessels.

The pilot got another seaplane and continued what turned into a six-month journey to Rio.

"There weren't any airline gas stations back in 1923 so I'd fly 'til I ran out of fuel, land wherever I could and go searching for gas—sometimes it would take days."

When he arrived in Rio he met a man who ultimately provided the means for one of the pilot's more hazardous adventures.

Below: Hinton explains the workings of his "big insect" to Amazon Indians. Right: CAPT Tim Wooldridge, USN (Ret) of the Smithsonian's aeronautics department, shows Hinton some of the sights of the Air and Space Museum. Below, right: Hinton speaks of his early adventures.
"A gentleman came up to me and said, "Would you be interested in flying anywhere in this area?" I told him I'd like to take a look at the Amazon Valley from the air. His face lit up and he said, 'I'm coming down here on my seventh and last expedition into the area and plan to map the tributaries that empty into the Amazon River. If you feel that an aircraft can help map it, you can have anything you want to do it with if you join my party,'" remembered Minton.

"I thought to myself, 'oh well, poor fella, he'll be all right in the morning.'" Hinton later discovered that the man who made the generous offer was multimillionaire Dr. Alexander Hamilton Rice, vice-president of the American Geographical Society and gold medalist in the Royal Geographical Society. The pilot hesitated no longer.

In the past, Hinton had faced many types of danger—wolves, sharks, the elements, and the uncertainty of flight. Now the Amazon offered its share of adventures.

"Rice told me not to make contact with the Indians—let them approach you," said Hinton. "After they got used to me buzzing around over head they decided I wasn't a danger to them."

The same Indians who had attacked an earlier Rice expedition accepted Hinton as a friend. They called him the "white-winged god" and named his plane "bicho grande," the big insect.

During the expedition, the white-winged god aerially explored and mapped some 12,000 square miles of the Brazilian jungle. He learned how to cope with voracious piranhas in the rivers he used for landing strips ("I never dangled a hand or foot in the water") and experienced the viciousness of army ants.

One night Hinton hung his shirt up on a fish line. The next morning when he started to put the garment on it nearly fell to pieces in his hands. During the night a labor battalion of ants had gone up and down the line like a file of coolie coalpassers and cut the shirt to ribbons.

Upon his return to the United States, Hinton initiated an aerial mapping project for the Exchange Clubs of America and later opened a school for aviators in Washington, D.C. During WWII he again offered his services to the Navy but his offer was declined because of his age.

Despite his pioneering exploits as an aviator, few can now tell you who Walter Hinton is. His name won't be found in school history books and if you ask anyone who made the first transatlantic crossing, they'll most likely say "Lindbergh."

Hinton isn't upset over the lack of recognition. He and others of his era viewed such flights as simply a job that had to be done.

Hinton's life is best summarized when he speaks of the NC-4 flight.

"We were more or less confident...we had a good, sturdy plane as near as we saw it. After all, we were out to see if it was feasible to get across the Atlantic. To us it was just another job."

Walter Hinton was awarded numerous decorations for his exploits as an aviator. They include the Navy Cross, British Air Force Cross, Portuguese Knight, Military Order of the Tower and Sword, and a special NC-4 Medal to commemorate the first transatlantic flight of a United States Navy flying boat in May 1919. J.
The invitation to "join the Navy and see the world" is more than just a popular slogan. It's also an invitation to extend your educational horizons. In today's Navy, you can satisfy your wanderlust by traveling to duty stations throughout the world. But it is only through learning experiences that you can come to a greater understanding of your place in that world. Education is the key to understanding yourself, your culture, and the cultures of the world around you. As a Navy person, you are entitled to that education.

In today's Navy, with its advanced technology and sophisticated equipment, great pains are taken to keep Navy people up to date in everything from electronics to English, from sonar to sociology. The Navy provides the opportunity for men and women to apply classroom principles to practical experience.

This article, the ninth in our series on Navy Rights and Benefits, explains how you can get some of that training and earn educational credits during your Navy career. It can help you choose the course best suited to your needs.

Because every educational and training program has its own requirements, obligations and benefits, your first step on the road to more education and training should be to visit one of the Navy's educational specialists. Worldwide, 135 educational specialists work with the Navy Campus for Achievement (NCFA) and Educational Services Offices (ESOs). Together with career counselors, they will provide the guidelines you need.

Navy Campus Certificate/Degree Completion Program

If you are fortunate enough to be ashore for three or more years near a college or university, you will be able to earn a college degree or certificate as a traditional student. Most Navy men and women, however, are subject to overseas duty, sea duty, or duty in isolated locations—they cannot earn a college degree or certificate in the normal manner. The Navy Campus Certificate/Degree Program is the answer for the average, highly mobile Navy man or woman.

The colleges and universities that are members of the Navy Campus Certificate/Degree Program do not require on-campus residence. They do not require that you take their courses, and they recognize all the credits you may have earned through the completion of Navy schools, CLEP tests, DANTES subject-matter tests, TV courses, correspondence courses, extension courses, verified work experience, and challenge examinations. The courses you have completed at other institutions through the Program for Afloat College Education (PACE) and the Tuition Assistance Program are also recognized for credit by the colleges and universities of the Navy Campus Certificate/Degree Program. Additionally, courses you may have completed at your own expense or through Veterans Administration education assistance are recognized.

Education is a steady, never-ending process. While much of that process takes place in a classroom, what you learn daily on the job may lead to a vocational education certificate. If you are in a technical field and have taken several Navy courses, you might choose to work for a vocational certificate rather than a college degree. Or you're trying to study for a college degree. Or, maybe you're trying to gain extra credits. Or, maybe you're working for a high school diploma or a vocational certificate. With a little help from the Navy Campus Program, getting that education isn't as impossible as it may seem.
may decide to begin acquiring credits for an associate degree (two-year junior college) or a four-year college baccalaureate.

With some help from the Navy Campus educational specialist, you can set your goals and begin working toward them. Nearly 20 schools have signed agreements with the Navy Campus Program. They agree to give credit for the courses you complete outside formal classrooms through tests, correspondence courses, service schools, and even on-the-job training. You would sign an agreement with one of the schools and they would accept transfer credits and waive their residency requirements.

The first step is to see what credits you have already acquired from your Navy service schools or outside courses you may have taken. Completion of boot camp, for example, will satisfy the physical education requirements of most colleges. Graduation from “A” or “C” school will also be given credit by most civilian institutions.

The school would evaluate your records and tell you what credits you have and what courses you would need to take to earn the certificate or degree you are working toward. If you are stationed near the school you have an agreement with, you would probably take those courses in the evening. Many accredited institutions offer courses on base. When you are transferred, you could complete the work with correspondence courses, PACE (Program for Afloat College Education), classes on board ship, or competency tests. Your certificate or diploma would be from the school you signed an agreement with, although you might be stationed miles away.

**Navy Campus High School Studies Program**

People enrolled in this program receive instruction in high school level science, mathematics, English and reading. If a commanding officer requests the classes for his crew, these subjects are taught to groups of 10 or more people during duty times (ashore or shipboard) by a civilian instructor. Although high school level courses are taught, this is not a high school completion program since no credits are given. Improvement in these subjects will help you pass a high school level General Education Development Examination (GED), but this must be done on your off-duty time. A Navy Campus educational specialist can explain how tuition-aid funds can be used for high school completion courses or tests. If you're stationed overseas, you can take the GED free of charge.

**PACE**

Through the Program for Afloat College Education (PACE), you can earn college credits while at sea. PACE got started in 1960 so sailors could continue their college educations even though they were far from any regular classroom. Now it is part of the total Navy Campus education package offered to today's Navy men and women.
Ten enrollees are necessary in order to begin a course aboard ship. The ship’s PACE coordinator contacts NCFA so an instructor can be hired. This instructor, usually a civilian, goes out with the ship to teach one or more PACE courses during sailors’ free time. The Navy pays for tuition but students pay for their books and registration fees.

**DANTES**

If you are unable to attend classes, Navy Campus education specialists will assist you in taking tests or correspondence courses provided through the Defense Activity for Non-Traditional Education Support (DANTES). Credit from these tests and courses can be applied to your NCFA college degree or vocational certificate or high school diploma.

Many tests are available through DANTES. One of the most widely known and accepted is the College Level Examination Program (CLEP). Five CLEP general exams in liberal arts and over 40 subject exams give Navy people college credits without attending classes. CLEP exams—normally costing $20—are free to active duty people.

DANTES Subject Standardized Tests (DSSTs) in academic and vocational subjects and the General Educational Development (GED) for high school completion are also offered. Most colleges require either the American College Testing (ACT) Assessment Program or the Scholastic Aptitude Test (SAT) as entrance examinations. Both are available free to active duty people through DANTES. Or, you can earn credit hours by taking the ACT Proficiency Examination Program (ACT/PEP). Civilians pay between $35 and $175 for this test; active duty people using DANTES pay nothing.

Graduate schools normally use the Graduate Record Examination (GRE) as an admission prerequisite, now the newest addition to DANTES’ testing list.

If you prefer working for college credits at your own pace, you should check the independent studies part of DANTES. Their catalog lists over 9,000 courses ranging from high school through graduate levels. These study courses involve fees but you may be reimbursed. Check with NCFA or your ESO for the details.

**Apprenticeship Training**

In conjunction with the Department of Labor, the Navy Campus for Achievement (NCFA) started the Apprenticeship Training Program in 1976. Apprenticeships in five civilian trades have been opened to three ratings (instrumentman, photographer’s mates, and mess management specialist) and others are expected. This program applies Navy training to civilian journeyman certification. Here’s how it works:

Hourly work experience in the Navy can add up to job certification in the civilian market. You’ll probably need more than one enlistment to complete the work experience required, which ranges from 4,000 to 6,000 hours. But you can also add up to 50 percent of your previous experience to that total. This work experience can help you advance in your naval career and help you get a civilian job.

**Instructor Services**

Many other classes are funded through NCFA if 20 active duty people want to take the course. Some of these are on duty and some off duty, but the course must be one that improves individual performance and is not for credit. Classes are usually held ashore with civilian instructors. Commands have requested and received approval for courses such as speed reading, conversational foreign language, and personal money management.

**Rate Training**

Navy schools provide enlisted people with intensive training in chosen areas or areas in which they have special interests and aptitudes. More than three-fourths of Navy enlistees attend Class “A” schools where they learn the basic skills of their ratings. Class “C” schools go beyond the basics into more technical training. The remaining 25 percent of sailors not attending “A” schools go directly to their assignments in the fleet or to shore stations after recruit training. They learn their jobs through Navy on-the-job training (OJT).

**STAR/SCORE**

While the Navy’s OJT is valuable training, sometimes it’s not enough. If you didn’t go to “A” school and you want to attend “C” school, there’s the Selective Training and Reenlistment (STAR) program.

STAR guarantees a school assignment during the first 12 months of an enlistment to lower ranking enlisted men and women. STAR is open to the more critical rating classifications in Career Retention Enlistment Objectives (CREO) Groups A (less than 80% manned), B (80-89% manned), C (90-100% manned), or D (101-105% manned). Eligible persons must have served at least 21 months but not more than eight years total active service. Graduates of “A” schools must also meet these requirements to attend “C” schools under STAR. Sailors who graduate from “C” school under STAR are automatically promoted to E-5.

The Selective Conversion and Reenlistment (SCORE) program guarantees “A” or “C” schooling to a first class petty officer or below working in CREO Groups C, D, or E but converting to a more undermanned rating.

If you are in a rating now where advancement possibilities are slim, you may want to consider SCORE and get into another rating in which you can move ahead.

Successful completion of “A” school leads to automatic conversion to the desired rating. Graduating from “C” school may qualify you for automatic advancement.

To be eligible, you must meet time-in-service (TIS) requirement of 21 months but not more than 15 years. You must also show potential for conversion by
completing practical factors for your rating and getting good evaluations.

If you cash in on STAR, you’re not eligible for SCORE but you may still be able to cash in—literally—because both programs also offer reenlistment bonuses to qualified people. To find out which program is suitable, talk to your career counselor or ESO.

**Change of Rating**

Active duty people may be able to change their ratings in the Navy without changing their paygrades. However, change in rating only applies to first class petty officers and below with less than 15 years of active duty who have an interest or aptitude in another, though undermanned, rating in CREO Group A or B.

To be considered, the applicant must have his or her commanding officer’s recommendation and must not be serving in a critical rating or serving an enlistment for which service bonuses are paid.

A change in rating is a lateral change in an occupational specialty without changing the paygrade. For example, if you are a second class aviation electronics technician, you could change your rating to an aviation antisubmarine warfare technician without losing your E-5 paygrade.

To effect a change in rating, check BUPERS Manual 2230180 for eligibility requirements.

**Servicemen’s Opportunity Colleges (SOC)**

The Department of Defense funds more than 400 SOC institutions. Like the Navy Campus Certificate/Degree Completion Program, SOC gives active duty people the chance to finish college during their off-duty time.

Servicemen’s Opportunity Colleges provide flexible class schedules with on and off campus classes. People transferring to new duty stations can take early exams or continue their educations through correspondence courses or independent studies. SOC also has a “contract for degree” provision similar to the Navy Campus Certificate/Degree Completion Program.

**Tuition Assistance**

You may be thinking that all these educational options the Navy offers are great, but one question sticks in the back of your mind: “How can I pay for these programs if I’m on active duty?”

Talking about higher education naturally means talking about higher costs. The Navy knows getting an education is an expensive proposition, yet Navy people can have financial aid available for the asking.

The Navy pays up to 75 percent of the tuition costs for both active duty officers and enlisted people who take accredited courses during their free time. Students using tuition assistance (TA) pay the remaining 25 percent of their tuition plus instructional fees and cost of books.

Eligible enlisted people using TA must pass the course and that course must be a part of a degree requirement. Officers using TA must have two years of active duty left on their current tour or serve an additional two years.
College/Career Options for Commissions

With the cost of living spiraling higher and higher, it's become more difficult to pay for a college education. However, the Navy can guarantee you the education you might not otherwise be able to afford. The Navy will pay for your education and then give you a commission if you are willing to give your time and talents in the naval service. Trading three to five years of active duty time in the Navy for a college education may be the best deal you'll ever get.

If you enlisted in the Navy after graduating from college, you might be eligible to attend Officer Candidate School (OCS). For information on college programs leading to commissions and career options, see "Paths to a Commission" in the July issue of All Hands.

Postgraduate Schools and Service Colleges

Progressing up the rungs of responsibility means more training and education for everyone, but especially for the naval officer. On a rotation basis, a postgraduate selection board reviews officer records annually. If a selected officer is not available for assignment to a postgraduate course, that officer's name can be kept on the assignment list for three years. Depending upon their academic backgrounds and professional performance, officers may be selected to attend postgraduate studies at the Naval Postgraduate School (NPS), Monterey, Calif., or a civilian institution.

Currently, approximately 1,000 officers from all services attend NPS, studying such curricula as aero and marine engineering; electronics; avionics; electronic warfare; command, control and communications; antisubmarine warfare; operational research and systems analysis; national security affairs; computer science; etc. Approximately another 125 officers attend civilian institutions and study such curricula as naval architecture and ship construction, civil engineering, supply systems management and law.

The Office for Continuing Education at NPS directs officer postgraduate work covering self-study courses in specific technical and management areas. It also provides educational counseling.

Monterey is the center for special aviation safety courses offered at the Aviation Safety School and foreign language training at the Defense Language Institute.

War College

At the next progression in the officer professional development education system, selected lieutenant commanders, commanders, and a few junior captains are afforded the opportunity to attend junior and senior curricula at the Naval War College, Armed Forces Staff College, the National Defense University, and other services' and foreign war colleges. These curricula are taught at the graduate level and include courses in strategy, tactics and management. These programs vary in length and scope. Officers attending either the postgraduate or service college program...
## SELF-EDUCATION PROGRAMS

**NCFA Certificate/Degree Program**
- Fulfills up to 75% of degree requirements by non-traditional means, including Navy training.
- Participating institutions waive residency requirements.
- Must be serving on active duty.
- None but must complete course successfully.

**PACE**
- Offers both academic and vocational college credits to 10 or more shipboard sailors. Navy pays tuition; student pays books and registration fees.
- Must be serving on active duty aboard seagoing ship.
- None but must complete course successfully.

**DANTES**
- Offers college credits in two phases: by examination and/or independent studies.
- Must be serving on active duty.
- None but must complete course successfully.

## VOCATIONAL SCHOOL PROGRAMS

**Selective Training and Reenlistment (STAR) Program**
- Gives enlisted people guaranteed assignment to Class “A” or “C” school with automatic advancement to PO2 upon successful completion of “C” school.
- Open to PO3, PO2, and E-3 meeting professional growth criteria.
- Agree to enlist or reenlist for 6 years.
- Meet obligated service for entry into guaranteed school.

**Selective Conversion and Reenlistment (SCORE) Program**
- Guarantees assignment to “A” school with automatic conversion upon graduation. Also grants automatic advancement to PO2 upon successful completion of “C” school.
- Open to male and female PO1, PO2, PO3, and identified strikers meeting professional growth criteria.
- Agree to extend for conversion of rating and enlist/reenlist for 6 years after conversion.
- Active duty obligation varies with length of school.

**Class “A” School**
- Teaches the basic skills of a rating. Successful completion and graduation leads to striker identification or PO3.
- Open to enlisted men and women in paygrades E-2 and E-3 meeting school entrance requirements.
- Attendance at “C” school carries minimum 4-year active duty obligation.

**Class “C” School**
- Offers advanced technical training and may increase promotional chances under STAR and SCORE programs.
- Open to male and female PO3 through CPO with 12 months on board present duty station.
- Submit request at least 3 months before reenlistment.

## Eligibility Requirements

**Must be serving on active duty.**

**Must be serving on active duty aboard seagoing ship.**

**Must be serving on active duty.**

**Open to PO3, PO2, and E-3 meeting professional growth criteria.**

**Open to male and female PO1, PO2, PO3, and identified strikers meeting professional growth criteria.**

**Open to enlisted men and women in paygrades E-2 and E-3 meeting school entrance requirements.**

**Open to enlisted men and women in paygrades E-2 and E-3 meeting school entrance requirements.**

**Open to enlisted men and women in paygrades E-2 and E-3 meeting school entrance requirements.**

**Submit request at least 3 months before reenlistment.**

**Agree to enlist or reenlist for 6 years.**

**Agree to extend for conversion of rating and enlist/reenlist for 6 years after conversion.**

**Agree to enlist or reenlist for 6 years.**

**Submit request at least 3 months before reenlistment.**

## Obligated Service Time

**None but must complete course successfully.**

**None but must complete course successfully.**

**None but must complete course successfully.**

**Agree to enlist or reenlist for 6 years.**

**Agree to extend for conversion of rating and enlist/reenlist for 6 years after conversion.**

**Attendance at “C” school carries minimum 4-year active duty obligation.**

will have first been screened and reviewed by a selection board.

For guidance and a list of the requirements, officers should check with their ESOs or the Office of Continuing Education at NPS. OPNAVINST 1211.6E and the current OPNAVNOTE 1520s provide additional information on the Navy’s postgraduate education programs.

### ⭐⭐⭐

Opportunities for education and training in the Navy are almost endless and the programs cover a broad spectrum of career fields.

The Navy provides the programs but without people, these programs lose their meaning. You now know what programs are available; it’s up to you to choose the one best suited to your needs. Take that first step into a new future by seeing your career counselor, ESO, or NCFA adviser. ⚡
Mail Buoy

Comment on EEO

SIR: Regarding the article on Captain Joan Bynum.

It was an excellent article, and I enjoyed it very much. I am aware that the Navy has an enviable Equal Opportunity Program.

I was disappointed, though, in what I feel was misplaced emphasis. I fear you have inadvertently fostered discrimination by publishing an article on the first black female captain. The fact that she was set apart from other women just because she is female is a betrayal to the ideals of the Equal Opportunity Program. Being selected as a captain is a signal accomplishment in anyone's life. She certainly deserves the co-captain is a signal accomplishment in average. Her selection as captain would have been based solely on her qualifications. One could infer otherwise from the article.-ET2 B.R. Ruff

PH2 Not Advanced

SIR: In the March issue, a statement made in the article "Quals for Advancement" (pg. 28) is not true: "If an individual meets all requirements, performs satisfactorily on the job and is recommended by the commanding officer for advancement, he or she will have no difficulty becoming one of the thousands of Navy people who sew on new chevrons this year."

When going up for advancement in a rate like mine there are so few billets for the next highest paygrade that they rate only the top one percent of the people taking the exam. If you are an average sailor, it is hard to get in that top one percent. When you keep hitting 44 to 46 percentile on the test and need 60 to 65 standard score to make rate, the statement on page 28 cannot be correct.—PH2 Ed Lamica.

• We contacted a statistician at the Naval Education and Training Program Development Center for more specific information about your rating. He said that it was tough to advance in your field because Navy requirements for photographers have diminished in recent years, but "there are several other ratings with equal or greater manpower problems." He also pointed out that performance marks, time in service, time in rate, awards, and high quality points are also considered. In fact, those items account for 70 percent of the total final multiple for candidates competing for the first class photographer's crow.

During cycle 80 (the September 1978 exam), those who made PHI scored in the upper half of all who took the exam. However, there were some who scored high but were not advanced because the other factors lowered their final multiples.—ED.

Preconceived Notion

SIR: While it may be true that USS Agerholm (DD 826) was the last Fram (Fleet Rehabilitation and Modernization) destroyer assigned to the Naval Reserve Force (NRF) to be decommissioned, it is not true that Agerholm was the last Fram destroyer on the active ships list. In fact, all NRF destroyers are in commission and on the active ships list.

The many preconceived notions about NRF ships, such as the one implied in this article, are of great detriment to the NRF program and are damaging to the morale of U.S. Navy sailors who sail them.—LCDR Alan E. Schmoker, USN

• Difficulty seems to arise whenever we use words such as “first” or “last.” Such is the case here. We certainly did not mean to imply that the ships in the Naval Reserve are not on the Navy’s active list.—ED.

A Boost to Morale

SIR: Regarding the article on BTs in the May All Hands, being a BT myself, it was finally nice to see something written about us that was not derogatory or misinforming. I am sure that this article will do wonders to boost the morale and spirits of every “Snipe” out there in the fleet. JOI Atchison should be commended for a job well done. Thanks for the great job you are doing for our morale and keeping us all informed of what is happening.—BT1 Eric W. Bush.

Reunions

• USS Nautilus (SSN 571)—Reunion and decommisioning ceremony, Sept. 29-30, 1979, Vallejo, Calif. Contact John J. Krawczyk, 7620 Claybeck Ave., Burbank, Calif. 91505.


• USS Savannah (CL 42)—10th reunion Sept 7-9, 1979, in Lauderdale by the Sea Fla. Contact LT M.C. Flauders, 417 W. Vista Court, Mobile, Ala. 36609.

• Seabees—69th Naval Construction Battalion reunion Oct. 5-7, 1979, in Long Island, N.Y. Contact Edward Kondracke, 176 Ohio St., Hicksville, N.Y. 11801.

• USS Balch (DD 363)/USS Porterfield (DD 682)—Reunion Sept. 16-21, 1979, in Carson City, Nev. Contact Frank Longin, 7449 Salerno St., San Diego, Calif. 92111.

• USS Osterhaus (DE 164)—Reunion Oct. 6-7, 1979, in Jennings, La. Contact Raymond Farris, 9021 Ohio Place, Highland, Ind. 46322.
Today's missiles are a far cry from the weapons of old. But, putting things in context, yesterday's sailors—in slow moving, wooden ships—paid dearly in life and limb. This was especially true when ships matched broadside for broadside at close quarters. Try naming the ammunition shown below:

1. Bar Shot
2. Chain Shot
3. Grape Shot
4. Crossbar Shot
5. Canister
6. Langrage

Answers: 1-C; 2-D; 3-B; 4-A; 5-F; 6-E.