A crewman aboard USS Kitty Hawk (CV 63), garbed in flight deck gear, awaits the next aircraft launch. (Photo by JO1 Kerby Harrison)
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Back: All-Navy Sailing at Newport, R.I., this past summer. Both front and back covers by JO1 (SS) Pete Sundberg.

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Heroism and Endurance:

**Downed P-3 Crew Returns to U.S.**  After an experience filled with heroism and endurance as well as sadness, the 10 surviving crew members of a P-3 Orion which ditched in the frigid waters of the North Pacific Ocean returned home to their families at Moffett Field, Calif., on Nov. 4. As a result of crucial propeller failure and multiple fires in the engines, the plane, flying out of Adak, Alaska, was forced to make a landing on the water on Oct. 26. Lieutenant Edward Caylor, the senior surviving crew member, had high praise for the pilot, Lieutenant Commander Jerry Grigsby. "He was a brilliant pilot. Without his expertise... there would be none of us here to talk to you today." LCDR Grigsby was one of two crewmen who were not recovered after the ditching. Three others died during 12 hours at sea on life rafts before the survivors were rescued by a Russian trawler. The position of the downed aircraft was known by rescuers, as the men on the life rafts exchanged signals with Navy, Coast Guard and Air Force planes flying overhead. The Russian ship, which was closest to the scene of the ditching, took the men to a Soviet port for medical attention. The crewmen returned to the U.S. by way of Japan.

**Nominations Open For**

**Master Chief Petty Officer of the Navy**  The man in the Navy's top enlisted job — Master Chief Petty Officer of the Navy Robert J. Walker — is retiring next year and the Navy is looking for a new master chief. When he retires on Oct. 1, Master Chief Walker will be leaving the job he has held since Sept. 26, 1975. The Chief of Naval Personnel has asked commanding officers to nominate master chiefs who have performed outstanding service and have shown extraordinary leadership ability. Nominations must be received by the Chief of Naval Personnel by March 1, 1979. Selection will be based upon preliminary screening by the Senior/Master Chief Petty Officer Selection Board with a final screening by a special selection board. The new Master Chief Petty Officer of the Navy will relieve Master Chief Walker on or about Oct. 1, 1979. Further details and application procedures are contained in BUPERSNOTE 1400 of Nov. 6, 1978. Final selection will be made by the Chief of Naval Operations.

**Retention, Professionalism**

**Among CNO Objectives**  Chief of Naval Operations Admiral Thomas B. Hayward has formulated a list of CNO objectives which reflect the relative priorities he will pursue:
1. Solve the retention problem
2. Improve the use of our resources
3. Upgrade officer and enlisted professionalism
4. Revitalize the one-way concept by upgrading the Naval Reserve
5. Reduce the administrative burden on operating units
6. Capitalize on advanced technology
7. Improve perceptions of the Navy
Details are being forwarded to all flag officers, unit commanders, commanding officers and officers in charge. The OPNAV staff will coordinate with the fleet CINCs to develop plans to accomplish these objectives.
Four Frigates To Be Homeported in Newport

Four Atlantic Fleet Knox-class frigates soon will be homeported in Newport, R.I. USS Connole (FF 1056), USS Miller (FF 1091), USS Valdez (FF 1096) and USS Capodanno (FF 1093) will join four reserve destroyers and two minesweepers now homeported in Newport. In March, the Navy announced it would homeport four destroyers in Newport to provide a support base in the Northeast while improving the dispersal of ships in the Atlantic area. These four ships were selected because they were due for a homeport change after overhaul. The first ship to arrive in Newport will be Capodanno this winter. The three remaining frigates will arrive by the end of August 1979.

BOOST Program

Looking For Applicants

Last year, approximately 85 percent of the Broadened Opportunity for Officer Selection and Training (BOOST) graduates earned Naval Academy appointments, NROTC scholarships or acceptance to other officer programs. But this year, only a few applications have been received for the 115 BOOST seats set aside for active duty men and women. Commanding officers, especially those at recruit training commands and service schools commands, have been asked to seek out potential applicants and encourage qualified personnel to apply for the program. BOOST is a tailored study program designed to improve an individual's academic abilities in order to better compete for appointment to the Naval Academy or selection for an NROTC scholarship. Its purpose is to give the opportunity for service as a naval officer to those men and women who possess the qualities and have the desire to become naval officers, but whose current academic record may not make them competitive. Deadline for receipt of applications for next year's class is Jan. 5. More Information is contained in BUPERSNOTE 1500 of June 14, 1978.

Bronze Hammer Award

Winners Announced

Quality, ingenuity and imagination were three traits which earned four Navy activities the FY 77/78 Bronze Hammer Award recently. The award recognizes those naval activities which have made the greatest progress in improving the quality of Navy life through self-help projects. Winners are selected for their efforts to enhance their living quarters, personnel support, and welfare and recreation facilities. Presented in four categories, the awards are based on total enlisted allowance and the availability of a construction battalion unit (CBU) in the vicinity of the activity. Winners for FY 77/78 include Naval Station, Norfolk, Va.; Naval Security Group Activity, Northwest, Chesapeake, Va.; Naval Communication Area Master Station, WESTPAC, Guam; and Naval Air Station, Fallon, Nev. Runners-up were: Naval Training Center, San Diego, Calif.; Naval Air Station, Alameda, Calif.; Naval Weapons Station, Charleston, S.C.; Naval Air Station, Meridian, Miss.; and Naval Security Group Activity, Winter Harbor, Maine.

Arkansas Launched

The nuclear-powered cruiser Arkansas (CGN 41), fourth ship to be named for that state, was launched recently in ceremonies in Newport News, Va. The ship is powered by two nuclear reactors which will allow it to operate at least 10 years before refueling. Armament includes two multipurpose missile launchers, 5”/54-caliber guns and torpedoes. Additionally, the ship can embark helicopters.
What The New Sea Pay Rates Mean

Personnel on active duty now receiving sea pay will receive at least the same amount as they did under the old rates. Many will receive more if their new rates exceed their old rates, as long as they remain eligible. The new sea pay plan describes the types of ships and the circumstances where sea pay can be paid. Personnel assigned to a category “A” ship or to a unit embarked in that ship, will receive sea pay continuously while they are attached to the ship. Category “A” ships are those most frequently under way. Personnel in category “B” ships, which are normally in home port, will receive the sea pay only when the ship is away from its home port for more than 30 consecutive days. Everyone in the Navy who qualified for the old sea pay rates, even if attached to a category “B” ship which doesn’t qualify for the new rates, can still receive the old rate for three years. Under the new plan, Navy petty officers will be paid according to cumulative years of sea duty. Petty officers with more than three years’ cumulative sea duty will receive the new higher career sea pay rates, except those in category “B” ships. For example, a petty officer with over seven years’ cumulative sea duty will receive $25 per month in fiscal year 1979. A petty officer with over seven years’ cumulative sea duty will receive $35 now and $45 in FY 81. Petty officers with more than 12 years’ cumulative sea duty will receive $55 this fiscal year and $100 per month in FY 82. The program will be phased in over the next four years.

RADM Chambers Visits Remote Duty Stations

Rear Admiral Lawrence Chambers, the Assistant Chief of Naval Personnel for Enlisted Development and Distribution, visited McMurdo Station, Antarctica, recently and interviewed the Navy people of Naval Support Force, Antarctica. He met with members of Detachment ALFA, the crew of volunteers who wintered over at McMurdo, and promised to review specific problems they encountered during the wintering over just completed. Next stop on the admiral’s itinerary was the island of Diego Garcia in the Indian Ocean where he checked into Diego Garcia’s special problems. RADM Chambers will make a brief stop in Subic Bay, R.P., where he and the enlisted detailers who will be in the area at the same time will meet with local naval personnel. He will then fly on to NAVCOMSTA Harold E. Holt, Australia, to meet with personnel stationed at that activity and review their special problems.

COs May Advance Some Enlisted Personnel

Effective immediately, limited numbers of Navy men and women serving on sea duty in paygrades E-3, 4 and 5 may be advanced to the next higher paygrade by their commanding officer without approval from higher authority. The Command Advancement Program (CAP) is designed to reward superior enlisted performance, but will not replace the Navy examination/advancement process. Although candidates do not have to take the Navy-wide advancement exams to be eligible for CAP selection, they must meet all other rating advancement eligibility requirements. Candidates must be serving on sea duty and have been on board for at least six months. Personnel must be attached to one of the following: commissioned ships; aircraft squadrons less training squadrons; staffs or mobile units which embark or deploy; or isolated, mandatory unaccompanied duty overseas which counts as sea duty, such as Diego Garcia. Specific numbers of enlisted personnel authorized for advancement in the various paygrades, as well as further details are contained in NAVOP 135/78.
New PASS System

Working Out Well At Pilot Sites ● Expert service and declining error rates are two of the improvements being reported since the new Military Pay/Personnel Administrative Support System (PASS) went into operation at three pilot sites in the past year. Ultimately, PASS will simplify such routine procedures as check-in and check-out, and ensure greater personnel-pay record accuracy. By centralizing pay and personnel records in one location, PASS will allow one-stop service for pay, personnel and passenger transportation business. In the first phase of the program, pilot PASS offices were established in Washington, D.C.; Norfolk, Va.; and San Diego, Calif. Based on the results and progress in the pilot offices, the decision has been made to implement PASS at shore activities Navywide.

Junior Enlisted

Travel Okayed ● A seaman, even if he has less than two years' service, now is eligible to ship his family and household goods to, from, or between overseas duty assignments at government expense. Effective Oct. 17, 1978, both single and married junior enlisted personnel (E-1 through E-4) can receive travel and transportation for their families in the same manner as more senior personnel when assigned overseas. In the past, junior enlisted Navy people with dependents were assigned to unaccompanied tours when transferred overseas and did not have the option to choose an accompanied tour. This option is now available. Further information on eligibility and procedures is contained in NAVOP 129/78.

Dependents' Scholarship Program

Accepting Applications ● College-age dependent sons and daughters of Navy personnel may be eligible to compete in the 1979 Dependents' Scholarship Program. The competition is open to dependents of both active duty and former members of the Navy. Eligible dependents must be scheduled to attend college in the Fall of 1979. More than 25 scholarship programs are being offered. Scholarships are awarded by the sponsors of the awards on the basis of scholastic merit, character and financial need. The Chief of Naval Personnel accepts the applications for coordination, and provides necessary information to the awarding Navy-oriented group or association. BUPERS does not have any other role in the selection process. Deadline on receipt of applications and school transcripts by BUPERS (Pers 7311) is March 15, 1979. Details are in BUPERS Notice 1755 of Oct. 11, 1978.

New Soviet V/STOL Aircraft

Carrier in Fleet Service ● Minsk, the second operational aircraft carrier to join the Soviet navy, has entered fleet service. Although classified by the Soviet Union as an anti-submarine warfare cruiser, the angled flight deck permits operation of both helicopters and vertical/short takeoff or landing (V/STOL) aircraft, and gives the Soviets a tactical air support capability. At 900 feet, Minsk is just 200 feet shorter than the newly commissioned USS Dwight D. Eisenhower (CVN 69) and displaces approximately 40,000 tons. The ship is steam powered and able to attain speeds in excess of 30 knots. Minsk has neither catapults nor arresting gear. The ship’s armament includes long and short range surface-to-air missiles, rapid fire medium and small caliber gun mounts, anti-submarine rocket launchers, and long range surface-to-surface anti-ship missiles.
When John F. Kennedy was elected president in 1960, he started a trend—for the past 17 years every president has been a Navy man.

Yet, strong ties between the presidency and the Navy existed long before Kennedy took the oath of office. Theodore Roosevelt was appointed Assistant Secretary of the Navy in 1897. He served for a year then resigned to accept a commission as lieutenant colonel when Congress declared war against Spain. Later, as president, Teddy Roosevelt was a frequent passenger in Navy ships and employed the Navy to impress upon the rest of the world the emergence of the U.S. as a world power.
The Great White Fleet with its 16 first line battlewagons traveled on his orders in 1907 over 46,000 miles “showing the flag.”

Another Roosevelt was equally enthusiastic about a strong Navy—Franklin Delano Roosevelt served as Assistant Secretary of the Navy (1913-1920) under Josephus Daniels during the World War I years. His concerns were more people-oriented. For example, he learned that when a ship sank, invariably more men died from drowning than injuries. He ordered that all midshipmen and recruits would learn to swim before they joined the fleet, a ruling that stands to this day.

When the submarine F-4 went down with all hands lost, Roosevelt was worried about the effect the sinking would have on the morale of the fledgling submarine force. To reassure the men, he personally went aboard a submarine and had the skipper take him down for several dives.

When America got into World War I, Roosevelt tried to resign as Assistant SecNav so that he could don a uniform and get into active service. Secretary of the Navy Josephus Daniels was against it but took Roosevelt’s request to President Woodrow Wilson. Roosevelt’s work in the Navy Department had not gone unnoticed. Wilson said, “Tell the young man that his only and best war service is to stay where he is.”

Probably Roosevelt’s most important achievement was pushing through the North Sea Mine Barrage, a project which the British Admiralty declared impossible. The British and French had the Straits of Dover pretty well blocked off with mines, nets and patrols, but long-ranging U-boats were taking the northern route, sinking one out of every four ships leaving the United Kingdom. If this exit of the North Sea could be blocked, the submarine menace would be over.

To block the North Sea would mean stretching a chain of high-explosive mines 250 miles across the exit. Such an undertaking was untried, yet Roosevelt and a group of naval officers felt it would work and lobbied for its adoption. Its success is history.

Throughout the war, Roosevelt dreamed of active duty service. In a letter written by Mrs. Roosevelt during FDR’s first of two official trips to Europe, she told a friend that Franklin had “…obtained a promise that when he was done he would be permitted to return to Europe as a lieutenant commander attached to the naval railway battery of 14-inch guns under Admiral Plunkett.”

Whoever made the promise never kept it. Roosevelt finished out the war in Washington, D.C., doing what he did best.

When Roosevelt became president, he was determined that America would have something to fight with if there was ever another war. When he took office, the Navy had 455 ships. By 1944, our Navy was the world’s largest with 1,108 warships and 60,191 other craft. In 1933, the Navy had 919 serviceable airplanes; by the end of hostilities, we had 34,000. Navy personnel strength went from 96,227 in 1933 to nearly four million during the war: 3,269,670 in the Navy; 474,980 Marines; and 171,726 Coast Guardsmen.

And Roosevelt gave more than just his services to the Navy. All four of his sons served in the Armed Forces, three in the Navy and one in the Marines.

In the spring of 1941, a young man fresh out of Harvard tried to sign up in the military. He was turned down because of a back injury he had received playing football. But John F. Kennedy was determined. After a summer of strenuous exercises, Kennedy passed a Navy physical and was accepted as a seaman in September 1941.

Kennedy’s military duties were routine desk jobs for more than a year. He requested sea duty and, as the war escalated, was assigned to patrol boat train-
ing, receiving a commission as a lieutenant (junior grade). In March 1942, he was given command of his own torpedo patrol boat in the South Pacific—**PT 109**.

One-oh-nine was a gasoline-engine torpedo boat, 80 feet long, with a beam of 21 feet, eight inches. The 38-ton craft had a draft of five feet, a complement of 17, and could make 41 knots.

During a patrol in the early morning darkness of August 2, 1943, **PT 109** was rammed and cut in two by the Japanese destroyer *Amagiri*. Kennedy was at the helm.

Two of the 13 men aboard were killed. Kennedy personally rescued three crew members from the burning water surrounding the wreckage.

The 11 men clung to the debris for a time, calling to their lost shipmates. Then, with Kennedy towing a badly burned crew member, the survivors headed for a nearby island.

They were in the water for 15 hours before reaching land. Over the next few days, Kennedy managed to secure aid and food and finally effected the rescue of his men.

In 1945, Kennedy was presented the Navy and Marine Corps medal.

There was another, lesser known PT boat episode in Kennedy's naval career. He was assigned as a skipper of **PT 59**, an 87-foot craft older than **PT 109** with even scantier accommodations. On November 2, 1943, base communications received a call to help a trapped patrol. The remnants of a Marine company—87 men—were trapped on a river bank, surrounded by Japanese. Their fate depended upon the speed with which the PT boats could reach them.

Only a few hours of daylight remained. **PT 59** was at the dock refueling with only 700 hundred gallons onboard (full capacity was 2,200 gallons). **PT 59** had enough fuel to get to the trapped Marines' position at full speed, but not nearly enough for a round trip. The only other boat was fully fueled, but one craft alone could not, if needed, provide enough space for 87 passengers. It was decided that both boats would go and when Kennedy's boat ran out of fuel after the evacuation, the other PT boat would tow him back to base.

When the PTs reached the area, they found two landing craft (LPCRs) waiting. The plan was that the LCPRs would go in to pick up the trapped patrol, relying on the fire power of the PTs to hold the Japanese back from the shore while the Marines boarded. All seemed to be going well until the second landing craft sprang a leak. As they moved out through an opening in the reef and headed for the safety of the open sea, the LCPR took on more water, flooding the engine housing, and began to sink. Kennedy maneuvered **PT 59** between the foundering craft and the now Japanese-lined shore, and crew members began pulling Marines aboard. With more than 50 passengers, **PT 59** pulled sluggishly away, severely overloaded. Kennedy delivered the Marines safely out of range to another landing craft, off-loading all of them except a badly wounded corporal whom Kennedy intended to rush to a medical facility. But there wasn't enough time—the young corporal died in Kennedy's bunk.

It was the last battle action Kennedy would see. The **PT 109** collision and subsequent hours of swimming had aggravated his old back injury. He had also contracted malaria. Kennedy served briefly as an instructor in a PT boat training program in Miami, Fla., then was discharged from active duty in April 1945 as a lieutenant.

At the time of the Pearl Harbor attack, Kennedy's future vice president, Lyndon B. Johnson, was already serving in Congress. One hour after voting yes to the declaration of war on Japan, the congressman from Texas requested the Navy to call him up for active duty—he had been a member of the reserve for several years, holding the rank of lieutenant commander. The next day he was in uniform, the first member of the House of Representa-
tives to enter active duty in WW II.

His first duty assignment was to the staff of the Chief of the U.S.-New Zealand command in San Francisco. But Johnson's idea of serving his country in time of war wasn't paper shuffling. The congressman, a member of the House Naval Affairs Committee and personal friend and protege of President F.D. Roosevelt, used his influence "...to get where the fighting was."

Roosevelt received countless reports on the status of our fighting forces yet felt he needed personal observations on men, morale, equipment, supplies and communications. Since he couldn't go himself, the president wanted to send someone whose opinion he regarded highly. LCDR Johnson received orders to go on a special mission for the president.

Johnson traveled with Army and Air Force representatives to Australia to meet with General Douglas MacArthur at Headquarters, Commander in Chief, Southwest Pacific Theater. Although they were given the gamut of briefings from operations to intelligence, including a personal visit with MacArthur, LCDR Johnson was dissatisfied. He had been sent to observe the war and that's just what he wanted to do. After the group left headquarters to continue the inspection, the Air Force official was given the opportunity to accompany the 22nd Bomb Group on a mission. Fully realizing the risks involved, Johnson and the Army officer also requested to go.

Their destination was the Japanese air base at Lae and each of the three boarded a different B-26 bomber.

Just as they were entering the target area, the B-26 carrying Johnson developed engine trouble, lost power and fell behind the main group. Pilots of Zeros protecting the Japanese air base immediately singled out the disabled plane. The B-26 pilot took evasive action, seeking the safety of a low-lying cloud. But within seconds, eight Zeros followed him down. By flying low, sometimes as close as 10 feet from the water to keep the Zeros away from the vulnerable underbelly of the B-26, the pilot managed to make it back to home base. The other members of the president's special task force didn't fare as well. The plane carrying the Air Force official was badly hit by flak and Zero fire, damaging the landing gear. After a dramatic belly-landing, the crew walked away unharmed. The B-26 carrying the third member of the team was shot down with a loss of all hands.

Later, General MacArthur asked Johnson why he took such a risk. Johnson replied "...I'm on a mission for the president to learn all I can about this war...and take him back a personal report. I can't do that sitting in headquarters."

A few weeks later, Johnson was stricken with pneumonia. After 12 days in the hospital, he regained enough strength to return to the states—28 pounds lighter—and report to the president. Just before his return, all members of Congress serving in the military were ordered to return to their offices, ending active duty service for Johnson.

Richard M. Nixon left a successful law practice in Whittier, Calif., to take part in the war effort. He went to Washington and a $61-a-week job doing legal work in the Office of Price Administration. After a few months, he decided that, despite his Quaker background, he should help more directly in the war.

He received a Navy commission as a
Presidents

lieutenant (junior grade) in September 1942. The following year, he was sent to the South Pacific and served on Bougainville, Vella Lavella and Green Islands as operations officer for a Navy air transport unit. After 15 months and two battle stars, Nixon returned to shore duty in the U.S., advancing to lieutenant commander by the time the war was over.

Gerald R. Ford, the fourth Navy man to serve as president, joined the Navy on April 20, 1942. The young ensign had compiled quite an athletic record in college and was assigned to the Navy physical training unit headed by Gene Tunney, the former heavyweight boxing champion. He was sent to the University of North Carolina at Chapel Hill where hundreds of aviation cadets were undergoing training in the Navy's V-5 program. It was his job to see that these cadets were in top physical condition before they completed training and joined the fleet.

It was easy shore duty, but Ford soon tired of it and longed to see action. He requested transfer to Norfolk, Va., for gunnery training and then was assigned to the light aircraft carrier USS Monterey (CVL 26). Within months, Monterey steamed south down the Atlantic coast, through the Panama Canal and into the Pacific to join the U.S. Third Fleet.

In the final year of heavy fighting, Monterey participated in almost every major naval engagement of the South Pacific. Monterey also supported landings against the Japanese at the Gilberts, Truk, Tinian-Saipan and Palau, in the Philippines, and against Wake, Formosa, and Okinawa; Ford earned 10 battle stars. But Ford's closest brush with death did not involve the Japanese. A typhoon struck the Third Fleet on Dec. 18, 1944. During the storm, Monterey caught fire. When general quarters sounded, Ford headed for the flight deck. The ship was pitching violently, sometimes rolling as much as 25 to 30 degrees. As he stepped out on the deck, Ford lost his footing and started sliding toward the sea. He managed to get his feet in front of him and just as he was about to go overboard, his heels caught the slight rim surrounding the deck. He rolled over on his stomach and dropped to the catwalk below. He considered himself lucky—Monterey lost five of her crew members to the sea that night.

Ford served 47 months on active duty before returning to Grand Rapids, Mich., with the reserve rank of lieutenant commander and top marks in his service record. Comments in his file included such observations as “...excellent leader. ...resourceful. ...steady...at his best in situations dealing directly with people because he commanded the respect of all. ...”

James Earl (Jimmy) Carter Jr. was a midshipman on a summer cruise when atomic bombs were dropped on Hiroshima and Nagasaki. It was his introduction to the power of the atom bomb.

Jimmy Carter, the first Naval Academy graduate to be elected president of the U.S., stood 59th (of 820 midshipmen) in the Class of '47. After the Academy, Carter served aboard experimental radar and gunnery ships operating out of Norfolk, Va. He completed
the required two years of surface ship duty, then volunteered for submarines.

His first submarine was USS Pomfret (SS 391). He was aboard her when—like Ford—he nearly lost his life in a storm.

Batteries needed to be recharged periodically. Pomfret had to be on the surface so the diesel engines could get air. One night during a storm while batteries were recharging, Carter was on watch on the bridge, only 15 feet above the ocean's surface.

Suddenly, he found himself swimming, his grasp wrenched from a handrail by a giant wave. He was completely separated from the submarine. When the wave receded, he landed on top of the 5-inch gun mount located some 30 feet aft of his watch station. Had the current been broadside instead of fore and aft, Carter could have been lost at sea.

During that storm, Pomfret's radio transmitting equipment was drowned out—they could receive but not transmit. When Pomfret failed to file her daily position report, she was reported overdue and possibly missing. The submarine headed for port to make repairs but still it was disconcerting to receive a message that said, "To all ships in the Pacific, be on the lookout for floating debris left by submarine USS Pomfret, believed to have been sunk approximately 700 miles south of Midway Island."

After serving aboard Pomfret for two years, Carter was promoted to lieutenant (junior grade) in 1949 and attached to the Superintendent of Shipbuilding at Groton, Conn., as prospective engineering officer for the K-I, first of a new class of submarines. Carter was aboard her when she was commissioned as USS Barracuda (SSK-1) in November 1951.

Within a year, he had become her executive officer.

In April 1952, Carter became qualified for submarine command and was picked up as a lieutenant. When the Navy contracted to build prototype atomic-powered submarines, Carter applied for what he felt was "...the finest Navy billet available to any officer of my rank—the development of the first atomic submarines." He was ordered to Schenectady, N.Y., as senior officer of the USS Seawolf (SSN 575). He worked directly for Admiral Hyman Rickover (then captain), who Carter later said "...had a profound effect on my life—perhaps more than anyone except my parents."

Carter undertook instruction to become an engineering officer for a nuclear power plant and also assisted in setting up a nuclear propulsion training program for enlisted men. But, in 1953, after his father died, he resigned from the Navy to run the family's business.

"My job was the best and most promising in the Navy, and the work was challenging and worthwhile," he later wrote. "The contact with ADM Rickover alone made it worthwhile. But after some tortuous days, I decided to resign from the Navy and come home to Plains."

His resignation became effective Oct. 9, 1953, after over seven years of service. He was appointed a lieutenant in the Naval Reserve and placed on inactive duty. On Dec. 18, 1961, he transferred, at his own request, to the Retired Reserve without pay or allowances.

President Kennedy once described his years in the Navy as "...a time of maturing. " Each of the Navy presidents, no matter what age, would probably agree. During this time, many of the concepts and philosophies that resulted in their later being elected president were formed or reinforced. After they served the Navy, these men combined their military and civilian education and experiences to serve the Nation.

Midshipman James (Jimmy) E. Carter Jr.
Folis Jones
A guy who's been there

STORY BY JO1 JERRY ATCHISON
PHOTOS BY JO1(SS) PETE
SUNDBERG

Some people can say the word “retirement” and sigh at the same time. The old fishing hole on a lazy summer day and lots and lots of blissful peace and quiet is the picture painted by that single word.

When Folis Jones retired from the Navy as a Senior Chief Machinist’s Mate a few years ago, he, too, had made plans for retirement—but the fishing hole wasn’t part of those plans.

This ninth grade dropout went back to school, earned bachelor’s and master’s degrees in clinical psychology, got a job counseling youthful offenders of the Norfolk area juvenile courts and—oh yeah—became a champion race car driver in his spare time.

This man who calls himself “a dirty old submarine sailor” is a probation officer for kids in trouble, drives a 145-mph-plus formula “B” race car to checkered flags and serves as his own best example of how important he believes education to be. He also believes that the Navy helped make him that way.

* * *

The two miles of Summit Point Raceway irregularly curve and dip around the foothills of West Virginia’s Appalachian mountains. On various weekends from spring to fall, cud-chewing cows give up their country quiet to hundreds of roaring sports cars in search of the fastest way around the track. Sports cars—from little “pinging” Hondas to throaty super-charged Corvettes—set up a roar that, when combined with the voices of a few thousand racing addicts, can only be described as shattering. Folis Jones is usually somewhere in the middle of it all.

A woman waves toward an area resembling a shopping center parking lot at Christmastime: “He’s down there somewhere in the pits,” she says.

Finding Folis appears a hopeless task among the rows of cars in various stages of assembly. But mechanics and drivers are quick to interrupt their work to point the way and offer unsolicited comments.

“He’s over in the corner next to the woods,” one mechanic indicates with a spark plug wrench. “Tell him my suspension’s going to take the race away from him this time.”

“That’s his camper right there,” says a driver clad in flame retardant suit and brandishing a quart of root beer. “Tell him I said ‘Good luck and thanks for the gearbox part.’”

Two long-haul family campers, one of them bearing Folis Jones Racing Chesapeake, Va., on the side, bracket a bright yellow car so low it appears to be melting into the ground. A half-dozen people with very serious expressions move over and around the car. After quick introductions the source of those expressions comes out: facing an entire weekend of races (that Folis, by the way, is accustomed to winning) the low-slung yellow car is just not running right. Something’s wrong, and time to fix it is running out.

Folis, his wife, son and friends who form his pit crew, interrupt talk of gear ratios and fuel lines to cordially greet visitors while continuing to focus on the troublesome little car.

The visitors, who’ve not graduated beyond changing the oil in the family...
Below: Folis swears that he couldn't win unless his lucky mutt, Two-Spot, accompanied him to every race. Right: Folis is as interested in helping troubled juveniles as he is in winning races. Below: Wife Evelyn wishes Folis luck.
Folis Jones

car, shy away when invited to roll up their sleeves and pitch in. Instead, they decide to talk that evening after car “fixin' and racin’” have ended for the day.

Back in the pits that evening, the noise dies as the sun sets. People who've appeared tied to their sports cars since they pulled into the pits now begin to drift among camp sites. It's obvious weekend sports car racing brings together a lot of friends who may be separated by hundreds of miles during the week but show up at the same race tracks on the weekends.

The Folis Jones site is no exception. Without asking, one knows the ailing car is fixed and ready for the coming races. A relaxed group of people still sit around the car, but now they virtually ignore it.

Nothing more can be done, the car is fixed, perfect weather is forecast for the weekend and the group is surrounded by friendly people who share their enjoyment in sports car racing.

Sitting across from Folis Jones you conclude that if ever a man were to be put together by committee, he would be the result. The parts fit... but then they don’t. A tense, sinewy body clashes with a wide-open smile topped with laugh-crinkled eyes. His backwoods, molasses accent voices down-home country humor and sophisticated learning with equal ease. He is at once handshake and clout on the head, dirty laborer and fastidious professional all wrapped into a short package who’s anxious to get on with it.

He talks of the long trip from being a trouble-making tough kid who dropped out of ninth grade to the success he is today. And he makes sure the listener understands that the U.S. Navy was the bridge between the two for him.

He met Navy people who pushed him and learned Navy jobs that made him think. For example:

“After I got kicked out of school, I bummed around a bit, delivered for a drugstore for a year and then went into the Navy,” he says. “Like most kids I didn’t really know what I wanted to do but I’d seen a lot of John Wayne movies, thought it was a neat idea and volun-
Far left: Like squires preparing their knight for battle, Folis' pit crew ensures everything is in order for the race. Left: Racing is more than maneuvering a powerful machine to a checkered flag. There are many hours of preparation involved. Below: Taking the checkered flag is Folis' style of racing.
teered for the submarine force.

"After about five years in the Navy I didn't even have a GED (General Education Development—high school equivalency certificate). One night this commander I worked for said, 'Folis, you've got some college don't you?' When I told him I was a ninth grade dropout he made me go take the GED test and that sort of started things.

"He used to go to the races with me and one night we were sitting around talking just like we are now and he says, 'If you don't go to college, I think it's going to be a waste. You've got the potential, use it.'"

Folis knew he had the potential but he was just too busy having fun as a sub sailor to do anything about it. He was too busy, that is, until shortly before he retired.

"Just before I got out I went over to Virginia Wesleyan college in Norfolk and talked to the registrar. I wasn't too sure about all this but I thought I'd check it out.

"After I told the registrar about being a dropout and just having a high school GED, he says to me, 'Folis, tell you what, if you want to go to college at the age of 37, if you have faith in us, we'll have faith in you.'

"And you know, it was just fantastic! I did my four years in three and was graduated with honors and then went on to graduate school in psychology at Radford College in Virginia."

Folis' push into education served him well. But, so, too, did some of the lessons he learned as a submarine sailor. One of the first lessons a sub sailor learns—attention to the smallest detail can be the difference between life and death—came back to haunt him after he left the Navy.

"I crashed my race car last year," Folis says matter-of-factly. "I was doing about 100 mph when I hit a barrier. I thought I'd demolished the car and the people watching thought I'd broke my neck. Neither was true but the right front suspension had broken. And it broke because I hadn't checked it like I should. It was entirely my fault and I remembered that lesson well."

Folis went on to talk of the camaraderie found among submariners and how much of that same sense of belonging brought him into racing.

It's a camaraderie found between him and his pit crew: "The real beauty is working very hard with a group of people who share your love for cars. Being personally involved with a car and not just watching the race makes all the difference in the world. So when I take the car out on the track, it's not my car but our car because you can't work on a crew and not have a personal investment in it."

It's also the camaraderie found among racers: "I come back week after week mainly because of the fantastic people involved in sports car racing. These people made the first and most lasting impression. Competitors will lend you any part they've got so you can race. They'll help you any way they can—and that's a mighty big attraction for me."

Coming back to the pit crew Folis has put together, you learn he's not severed his ties with the Navy but has recruited a bunch of skilled Navy mechanics and machinists who love to work on cars. These sailors plus his wife Evelyn ("She's the gear box expert.") and 16-year-old son Chip ("He's got the alignment down pat.") form the nucleus of the pit crew that wins the races.

Folis entry into the world of sports car racing came in 1958 when an "old English guy I knew down in Memphis invited me along to the races one weekend. 'I knew my way around street automobiles but sports car racing to me was something exotic that only rich people did.'"
So a skeptical Folis went to the races that weekend and worked with the pit crew. "We worked real hard that weekend and when it was all over my friend comes to me and says, 'I like the way you worked and fit in with everybody. Why don't you go with us again.'"

Folis went again...and again. He'd been bitten by the racing bug but didn't aspire to be a driver. He was happy working with the pit crew and seeing "our" car, driven by someone else, go out and win races.

"But one weekend we were up in Tennessee and this guy asked me if I'd like to take his car out for five laps. 'Take it nice and easy,' he says. When I came in he says to me, 'Folis, you've got a natural flair for racing. You turned some real respectable laps even though you weren't pushing it.'"

His first race car came by way of a girl friend who'd blown the engine on her MG. "I jokingly told her we'd make a race car out of it," he says. "The next day she brought the title over and said, 'Do it,' so I did."

In short order he went from MGs to "six or seven Formula V cars," to a high-powered Formula Ford he built from the ground up. He learned that if he did the work himself, tapped the expertise of his Navy and racing friends, and counted his pennies, racing was a sport he could afford.

He also credits his family with making racing an affordable hobby. "Both my wife and I work so we get by. In addition, she's been very supportive. For example, she told me the other day we're going to have to plunk down $180 for a part the car needs. But she wasn't complaining—she's into racing as much as I am."

But racing is not his whole life and Folis grows more animated as he talks of "his kids" who are in trouble in Norfolk.

"I'm really lucky," he says. "I did my Master's thesis on adolescent detention homes. That education, coupled with my 20 years in the Navy, means I'm able to draw from both worlds in working with the courts in a big Navy town.

Folis is an optimistic fellow and that optimism seems justified. It's also a trait he tries to instill in the troubled young-sters he works with as a probation officer of the Chesapeake (Va.) Juvenile and Domestic Relations Court. He knows "his kids" can lick their problems with home, the school and court because he's done the same.

"For a lot of kids, the trouble is not with them but with their families. They get kicked out on the street when they're seven years old and have to fend for themselves.

"I'm sensitive to that because although I came out of a good home, I had no father around to be with or work with and that's what some of these kids need.

"So when I'd get in trouble in school, people would always talk down to me. They wouldn't try to get down to the kids' level and work with them. In my case it was simply a matter of nobody ever having sat down with me and asking, 'Folis, what's the matter?'"

Because of that, Folis says he did a lot of growing up in the Navy. And a lot of that growing up was done because, finally, someone did want to know "What's the matter?"

Folis also talks of counseling sailors these days in what little spare time is left to him.

"I used to sit on the boat and listen to fellows say, 'We was in college one time but I got tired and left.'

"I know a lot of them never went back to college. So Wesleyan College asked me to go and talk to some of these sailors and get them to return to college. Maybe I can be some kind of model: the guy who came in with a ninth grade education and graduated with honors.

"In turn, maybe some of these sailors will say, 'If they can take a greasy submarine sailor like him and do that maybe there's hope for all of us.'" he said.

Folis leans back in his lawn chair and tries to cover a yawn with a broad smile. It's late and the next days are to be filled with as much racing activity as this day has seen. Referring to his work again and then sensing he's perhaps gotten too serious, Folis points into the darkness toward the race track and says, "Aw, what the heck. I'm having a great time. I just want to go out and play like everyone else."

That weekend, Folis went on to "play" his way to a checkered flag and the championship. Not bad for "a greasy sub sailor."
Foreign Military Training

It's a two-way street

Back in 1854, when Commodore Perry's coal-burning ships first sailed into Japanese waters, the local residents thought an entire fleet of ships had caught fire.

But 11 years later, the novelty of ships that moved without sails had worn off. Japan had her first steam warship and the United States was sharing her military technology and expertise with friends around the world.

Today, the 20th century version of America's military developments continues that tradition of helping the country receiving U.S. military technology—the most advanced in the world—is going to reap some obvious rewards. But what many don't realize is that very real benefits accrue to the United States as well.

Take one aspect of the International Security Assistance Program—Foreign Military Sales (FMS). This is a program where Uncle Sam replies to requests for sale of sophisticated weapons systems, technologies and training from countries friendly to the U.S. (consistent, of course, with America's own needs to pay not only for the equipment, but for the training of their people and all administrative costs.

Countries purchasing military technology also help fund such initial costs as those for research and development, procurement and logistic support.

The sale of military equipment to our friends and allies is primarily advantageous from a broad, military point of view. It increases the capabilities of nations friendly to the U.S. and thus strengthens the overall defense posture of the free world.

Foreign Military Sales also provides what military planners call "commonality"—shared military technology that allows the U.S. to work more closely with friendly armed forces in conducting operations at sea and ashore.

The sale of U.S.-designed and manufactured military technology to foreign countries, incidentally, makes a large contribution to America's balance of payments situation. In fact, the U.S. Navy's FMS program alone has averaged more than $2 billion annually in sales since 1973.

All of these benefits from FMS look nice on paper and work even better in practice. But what of the U.S. Navy's participation in the program, or "What's in it for the Navy?"

The Navy certainly shares with her sister services the previously mentioned benefits. But for some Navy men and women, there is an added benefit of working with and teaching foreign sailors who come to the United States to learn the technology of systems their countries have bought from the U.S.

The result is a challenging and rewarding program that enables visiting military students to gain greater knowledge.
of the American people and their democratic system of government while learning some of the most advanced technologies in use today.

When foreign sailors complete their training in the United States, they take not only newly learned technical skills back to their respective navies, but a personal and candid view of life in the United States as well—all courtesy of the U.S. Navy.

Before examining the rewards of helping people learn about life in the U.S., though, one must consider the main reason for bringing these sailors to the U.S.: training.

U.S. Navy sailors spend a lot of time in Navy and company-related schools. It makes sense because they are members of the most technologically advanced Navy in the world. We all know why we attend these schools, but
what about that fellow classmate in the uniform of Canada, or Norway or a score of other countries? Who is he, what’s he doing here and why?

We’ve already explained that FMS is one reason students from other navies attend U.S. Navy schools. What type of sailor, though, is this other classmate?

A bit of insight comes to those who understand that no matter where this classmate comes from, his homeland directs that training in the United States, wherever possible, be granted only to the most capable learner.

This is so (with a few exceptions that are explained later) for two reasons. First is the fact that foreign governments, as previously noted, pay for all aspects of their sailor’s training. For many, this expense is much more than would be spent for training the average sailor at home. The second reason, though, makes this expense more palatable. The U.S.-trained sailor is often expected not only to operate and maintain the equipment once he returns home, but also to teach and pass on those same intricate technical procedures.

Because of this, the U.S. Navy sailor might be surprised to learn that his foreign classmate:
• Was carefully screened by his parent service and was assigned on the basis of experience, maturity and demonstrated aptitude to learn the information being taught.
• Was required to either demonstrate fluency in the English language or to successfully complete an English language course (also paid for by his government) before being enrolled in a U.S. Navy training program.
• May also be expected to complete—one right after the other—various basic and advanced courses that a U.S. Navy petty officer would normally attend over a five- to 15-year period. For the U.S. Navy petty officer, formal schools are interspersed with several sea or shore duty tours to allow the individual to use his technical skills as each was learned—getting field experience to complement school instruction and gaining additional knowledge before attending the advanced courses. Since the world’s navies are pursuing a course of technological catch-up with the U.S. Navy, they do not share the luxury of time: time to teach, reinforce that teaching through experience and then furnish advanced skills. Along with all the other pressures, academic heat is applied to those who must learn more, learn it faster and learn it in a new language.

However, some foreign sailors who come to U.S. Navy training activities are untried and untested. Indeed, they may have never even seen a ship. Saudi Arabia, for example, has contracted with the U.S. Navy to provide boot camp training for its recruits. And Iran is sending entire crews to the U.S.—from seaman recruit to captain—to learn to operate their recently purchased DD-993-class destroyers, their version of the Spruance—class DDs.

The training they receive is developed and administered by the Chief of Naval Education and Training, the Chief of Naval Technical Training, and the Fleet Commanders in cooperation with the requesting country and the Security Assistance Division (OP-63) of the Office of the Chief of Naval Operations.

While attending U.S. Navy schools, foreign students are assisted by both
U.S. Navy and homeland liaison people either physically present on base or readily available to help from their major command locations. These liaison people help the foreign sailor get settled into his temporary home while answering basic questions that range from “Where’s my next class?” to “Why do Americans drive on the wrong side of the road?”

While integrating the foreign student into existing U.S. Navy training programs is the most economical and efficient method of training, unique training or security requirements may sometimes mean developing separate foreign training courses. These, too, are developed and administered in the same manner with the foreign government’s review and approval.

Foreign students are not subject to the Uniform Code of Military Justice (UCMJ) since each country has its own set of professional and ethical standards by which they must abide. They are still accountable for their behavior and performance while undergoing training in the United States. To this end, mutually agreeable policies are worked out with each participating country so as to ensure the best interests of both the U.S. and the students.

Uniform standards vary. These, too, are studied so as to set foreign student standards that neither conflict with, nor reflect unfavorably upon, either country’s ideas of proper uniform appearance.

Conduct and uniforms notwithstanding, foreign countries would be hard-pressed to duplicate the level of sophisticated training provided at U.S. Navy schools by U.S. Navy instructors.

And it would be impossible to duplicate the people, places and, even beliefs, that make up life in America to which these foreign sailors have been exposed.

Indeed, throughout the United States, the Navy is making sure foreign trainees get a chance at that intangible benefit of FMS: an active appreciation of American people and their ideals. This is in addition, of course, to their military training.

Foreign trainees—actually the future leaders and shapers of their respective navies—are absorbing intimate insights of a country and its Navy that they may some day fight alongside of as allies—or mutually support.

Each U.S. Navy command sets up its own information program for foreign students depending upon the number of students and the countries represented. Each program is governed by the desire to see the foreign sailor receive a warm reception in the United States and the hospitality—and help—Americans pride themselves in rendering.

These information programs may include such things as acclimatization courses, field trips, special lectures and seminars, cultural and sports events, representational functions, or any combination of events. For many foreign sailors, though, the real rewards come from the friendships they develop in the States and the memories they take back to their homelands.

As everyone knows, friendships and memories are intangible benefits. These can't be measured, weighed or categorized by cost-effectiveness. They're grouped right up there with happiness and all those other things money can't buy.

That's why it is a benefit of Foreign Military Sales that defies measurement while perhaps making the strongest case for the importance of such programs. Call it putting the cherry on the FMS sundae if you will, but don't expect “lifetime friendships and memories” to show up on the bookkeeper's ledger. More likely it will be found in the “Thank yous” voiced in a score of different languages (accented, yes) from U.S.-trained foreign sailors around the world.
Dr. Nathaniel Bowditch
Salem's Arithmetic Sailor
BY JO1 DAN WHEELER

No 19th century seaman walked the dusty road to port and signed on a square-rigger without bringing three essentials: a sharp knife, a pair of woolen socks for rounding the Horn, and his Bowditch tucked safely in his seabag. The knife could lose its edge, the socks would wear out, but The New American Practical Navigator—his Bowditch—would never fail. It could guide him to the far-flung reaches of the earth and bring him home again from across trackless oceans.

Within its covers was a lifetime of sea sense written in concise prose. It addressed every subject of interest to the mariner from tides to trigonometry. The Bowditch covered square-rigger maneuvers and commands for their accomplishment. It contained sections on astronomy, geometry, decimals and fractions. Starting with simple arithmetic, the "seaman's bible" guided readers patiently into the calculus of navigation with numerous excursions into geography, mensuration and surveying. When a sailor read his Bowditch, he was sitting at the feet of the master.

The Early Years

Nathaniel Bowditch was born March 26, 1773, in Salem, Mass., the son of a poor cooper (barrel maker) and the fourth of seven children. He had little formal education—a few months in the Danver, Mass., "dame school," three years under the tutelage of Mr. Watson of Salem, and two months of bookkeeping instruction from Mr. Walsh.

When Bowditch was 10, his mother died leaving his father Habakkuk with seven mouths to feed and not enough time nor money to accomplish the task. Some of the children were farmed out to relatives, but Nathaniel was apprenticed to "Ropes and Hodges, Chandlers," who paid little but provided room and board. Working 12 hours or more daily left Bowditch little time for normal pleasures of youth, yet he managed to pursue what he enjoyed most. It was said that Bowditch "spent every spare moment... in some corner of the chandlery studying."

Libraries were rare, even in homes of the wealthy, and reading was not considered a skill necessary for the

This portrait of Dr. Nathaniel Bowditch by Marcia Oakes Woodbury shows the "arithmetic sailor" in his later years. (Photo courtesy of Essex Institute, Salem, Mass.)
majority. Salem, however, had bought a well-stocked library from Beverly, Mass., privateers who had "liberated" it from an English vessel sailing the Irish Sea. Placed at Bowditch's disposal by its custodian, Salem's Philosophical Library (considered second only to the one in Philadelphia) became the teenager's schoolroom. Rising before dawn Bowditch went to Judge Roper's home and studied and copied articles and books which interested him. In the evenings, he returned for a few hours more.

By the time he was 14, Bowditch had developed a serious interest in navigation and astronomy and was already a scholar in both. His interests, however, weren't limited to scientific and technical subjects. He was conversant on Shakespeare and the Bible and had read the four volumes of Chamber's Encyclopedia from cover to cover. Having a remarkably retentive memory (except for names and faces), Bowditch often astounded friends with his wide range of knowledge and made no effort to conceal the extent of his scholarship—a trait which was to alienate acquaintances all his life.

Probably the greatest stride in Bowditch's education came when Reverend William Bentley lent him a Latin-language copy of Sir Isaac Newton's *Principia Mathematica*, the contents of which challenged the greatest mathematical minds of the day. At first, Bowditch tried to understand the book by toying with the various formulas. Failing at this, he began to teach himself Latin so he could read Newton's notes. Four years later, Bowditch not only had read *Principia Mathematica*, but also had found and corrected an error in it!

Realizing, then, that the key to unlocking the world's secrets lay, at least in part, in understanding the world's languages, Bowditch began teaching himself other tongues. He purchased a New Testament in the language he desired to learn and a dictionary of the language or dialect if it were available (many weren't). So armed, Bowditch translated the scriptures, paying close attention to vocabulary and syntax (but none to
pronunciation; in fact, it wasn't until years later that he realized that each language has its own unique pronunciation key). By the time his translation was completed, he knew the written language.

It has been said that Bowditch taught himself at least 50 languages and dialects in this manner. At his death, more than 50 foreign and 100 English language dictionaries were found in his library—silent testimony to his love of languages and his insistence on using the most exact words to convey his thoughts.

As a diversion, Bowditch learned to play the flute and, for a short time, performed in a small musical group. He gave it up, however, as a "frivolous waste of time." Time was extremely important to the young scholar; obviously so, since all Bowditch learned about the sciences and math, he learned in his spare time away from the job.

**Bowditch Goes To Sea**

Ropes and Hodges went out of business in 1792, and Bowditch went to work for Samuel C. Ward, another chandler. By then, he had thoroughly versed himself in navigation and astronomy through 10 years' intensive study. Late in the summer of 1794—his apprenticeships completed—Bowditch signed on as captain's clerk on a Salem merchantman owned by Elias Hasket Derby and commanded by Captain Henry Prince, a master of some renown and an old family friend.

Though Bowditch, a frail youth with a family history of TB, was hardly considered seaman material, Prince was eager to learn more about the youth's controversial theories on navigation. Bowditch—never one to keep his thoughts to himself—outspokenly believed mariners could navigate precisely by placing their faith in the unvarying stars. By so doing, Bowditch said, masters could guide their ships to or from any land bounded by the sea; moreover, they could fix their exact position at any time under way.

Seasoned mariners scoffed at this heresy. They had seen barnacled wrecks hard aground, placed there by arithmetic sailors who had put their faith in paper and pencil instead of the look of the ocean, the feel of the wind and their seaman's eye. To trust anything but practical experience, to their minds, was a sure passage to Davy Jones's locker.

Celestial navigation was not a new concept. What was new was Bowditch's contention that one could fix a position on the open sea by relying solely on formulas, tables and charts. No chronometer in use at that time was reliable enough for use at sea.

Any mariner with good instruments and a cursory knowledge of math could determine his ship's position north or south of the equator. No mariner had found a foolproof way to determine longitude, his position east or west of the prime meridian at Greenwich, England. Being able to fix an exact position at sea would shorten voyages by months, even years.

In the winter of 1795, en route to the East Indies, Bowditch made a concise, but significant, entry in his personal log: "...Thursday, thought of method of making lunar observations."

By means of three consecutive observations of the moon and a fixed star (the sun), Bowditch was able to calculate the angular distance between them. From that calculation, he determined the Greenwich time from the *Nautical Almanac*, a work published annually by the Commissioners of Longitude in London. Then, using computed Greenwich time, he was able to fix the ship's exact position.

For the first time, an accurate method of fixing longitude had been devised. Before Bowditch turned his vast mathematical genius to navigation, there was no certain way of knowing what lay beyond the horizon. He had placed the world in the able hands of men who heeded the call of deep water.

(Around 1800, an accurate chronometer was invented, but its price placed it out of the reach of virtually all mariners. Bowitch's method of fixing longitude is no longer used since modern chronometers do the job quicker and are today aided by all manner of electronic gear. Still, his
discovery was of enormous importance to the world's 19th century navigators.

John Hamilton Moore, an English chart seller, hydrographer and navigation teacher, had compiled a navigation text which was used by mariners during the late 1700s. Though no volume could be error-free, Moore's The Practical Navigator was considered generally reliable.

During Bowditch's second voyage—this time as supercargo, again under the command of Captain Prince—he kept meticulous records of celestial observations and fixes and compared them to Moore's computations. To Bowditch's astonishment, Moore's calculations were frequently inaccurate, with some errors so serious that a mariner could easily find himself as many as 23 miles off course—a dangerous deviation, especially near jutting coasts.

News of Bowditch's discovery of Moore's errors was widespread and came to the attention of Edmund Blunt of Newburyport, Mass. Blunt had published an American edition of The Practical Navigator previously and intended to publish a second edition in 1798. When he heard of the errors, he asked for a conference with Bowditch. Bowditch agreed to make some corrections for the second edition and to write a thoroughly corrected version on an upcoming voyage.

**Moore's 8,000 Mistakes**

During Bowditch's third voyage, however, he discovered that The Practical Navigator contained so many errors—more than 8,000—that a revision was impractical. Every table had to be recomputed and the book entirely rewritten. Bowditch proposed to Blunt that a new volume be written from scratch and that it be entitled The New American Practical Navigator, by Nathaniel Bowditch. Blunt agreed.

Bowditch began his fourth voyage, again as supercargo, under Captain Prince on July 23, 1799, this time en route to Manila. Bowditch divided his time between charting his vessel's (the Astrea) course and reworking Moore's tables. During the voyage, it occurred to Bowditch that all of his computations, charts and tables would be worthless to mariners unless each would be able to understand and use them.

To this end, Bowditch began holding school call under way and refined his writing technique by refining his teaching techniques. He chalked diagrams on the holystoned decks of Astrea until every sailor from cabin boy to captain could use his tables and a sextant precisely. He refined his instruments to the point that the most uneducated seamen could take accurate fixes after a few hours' instruction.

Drawing on teaching techniques he saw to be effective, Bowditch put down in precise and simple language the methods he had devised for taking bearings, calculating distances, speeds and other data vital to mariners. In short, he began to compile a bible for seamen which included everything men knew about ships and the sea up to that time.

Astrea reached Manila in the record time of six months, 23 days. It was conceded that there "was more knowledge of navigation on board that ship than there was on all the vessels that ever floated in Manila Bay."

Captain Prince said that each one of his men could take a lunar sighting and work up a position "as well as Sir Isaac Newton himself, were he alive." Astrea was back to Salem 14 months after getting under way, having completed a voyage which usually took three or more years using conventional navigational methods.

For two years following his fourth voyage, Bowditch remained on shore writing his book. Distraught by Moore's grievous errors and the damage they had done to the scientific image and determined that his book would be error free, Bowditch calculated every figure in his tables three times.

**The Seaman's Bible**

The first edition of The New American Practical Navigator, published in June 1802, contained 593 pages (small compared to the 1977 edition published by the U.S. Hydrographic Office and containing 2,100 pages). It was not an overnight success. Though it was immediately recognized by scholars as a landmark work and Harvard University awarded Bowditch a master's degree and later a doctorate, The New American Practical Navigator was ignored by the community for which it had been written—mariners. They regarded it as yet another hodgepodge of scholarly mumbo jumbo written by an arithmetic sailor with no sea sense.

Realizing no immediate profit from his work and having a family to support, Bowditch either bought into or was given a share of the merchant ship Putnam. Sailing for the fifth and last time, Captain Bowditch set out in Putnam for a trading mission to Sumatra's Pepper Islands.

Returning Putnam to New England on Christmas Eve, 1803, Bowditch found himself in a blinding northeaster, typical of the weather he had encountered for much of his voyage up the American coast. No observations had been possible for two or three days but, according to one contemporary

This telescope, once owned by Bowditch, was made in England around 1770. The mahogany tube measures 25-3/4 inches closed and 32-3/4 inches fully extended. (Photo courtesy of The Peabody Museum)
account, “the old man drove along as if it were noonday.” A single break in the storm afforded the opportunity to take a lunar sighting and Bowditch docked his ship without a thump.

Putnam’s trading mission had been successful, but more than that, Bowditch had proved the worth of *The New American Practical Navigator*. From then on, the “Bowditch method” of navigation—precise and by the stars—was widely taught and continues to be taught to this day. To a large extent, Bowditch made possible the great age of American shipping by teaching seafarers how to find their way.

In recognition of his accomplishments, Harvard University, the University of Virginia and the U.S. Military Academy at West Point offered Bowditch professorships in mathematics. Each of these he refused because he was shy about talking in front of assemblies. He consented, however, to teach individuals he deemed promising.

In 1818, Bowditch was chosen a member of the Royal Society of London and Edinburgh and was enrolled on the list of the Royal Irish Academy. He was made an associate of the Astronomical Society of London, the Academies of Berlin and Palermo, and, at the time of his death, he was being chosen a member of the National Institute of France.

In 1824, Bowditch left Salem and moved to Boston where he headed two large insurance companies, one marine and the other life. In 1838, Bowditch became seriously ill and was confined to his home where he spent his remaining days.

On March 16, 1838—the day Dr. Nathaniel Bowditch died—ships of live oak with masts of Georgia pine flew their flags at half-mast. Cadets at the United States Naval School in Philadelphia wore badges of mourning and mariners everywhere lamented the passing of a good and trusted shipmate.

Salem’s “irascible little arithmetic sailor” was eulogized by the Boston Marine Society in these words: “As an astronomer, a mathematician, and a navigator himself, a friend and benefactor has he been to the navigator and the seaman and few can so justly appreciate the excellence and utility of his labors, as the members of this society... His intuitive mind sought and amassed knowledge to impart it to the world in more easy forms... As long as ships shall sail, the needle points to the north, and the stars go through their wonted courses in the heavens, the name of Doctor Bowditch will be revered.”
Ivan Rogov, newest of the Soviet navy's amphibious warfare ships, recently was seen operating in the Baltic Sea. Believed to be the first of several such ships, it is the largest amphibious ship ever built by the Soviet Union.

The new ship, comparable to a U.S. Navy amphibious transport dock (LPD), has bow doors, a stern gate affixed to what is believed to be a floodable well deck, and a helicopter storage and landing area above the well deck. Ivan Rogov is believed capable of carrying conventional landing craft or about three air-cushioned personnel landing craft. Each one of these air-cushioned craft can hold about a platoon of naval infantry and make rapid landings at speeds in excess of 45 miles-per-hour. Naval infantry, the Soviet navy's version of our Marine Corps, is a small mechanized force equipped with tracked and wheeled amphibious vehicles, including tanks and armored personnel carriers.

The size of Ivan Rogov, with its increased assault lift capacity, gives it a far greater capability for long range amphibious operations than other Soviet amphibious ships.

The construction of the ship indicates the continuation of the trend in the Soviet navy to grow from a coastal defense force to a first class blue water navy. The new ship is expected to remain in the Atlantic area. However, as additional ships are built, it is likely that some will be assigned to the Pacific fleet.

Continued production of the Ivan Rogov class, along with other Soviet naval developments, will significantly increase future Soviet amphibious capabilities.
Weekend Drills Vary

From the East Coast to the mid-Pacific, the Naval Reserve is maintaining preparedness, making sure it will be ready if called.

Naval reservists in Maryland are discovering their weekly drills do not always mean classrooms with training lectures, charts and graphs, at least not for the members of the Military Sealift Command Headquarters Unit Detachment 206. Led by Captain Donald Lynne, the reservists recently toured the Bethlehem Steel Corporation’s shipbuilding facility at Sparrows Point, Md., and the Dundalk Marine Terminal in Baltimore, Md., for their drill weekend.

The visits exposed the members to modern shipbuilding techniques and methods of handling containerized cargo. In the event of a national emergency, the reservists may have to use similar facilities throughout the country.

Meanwhile, sailors visiting the barber shop at Hawaii’s Pacific Fleet Missile Range Facility (PMRF) at Barking Sands, Kauai, looking for a shave and a haircut were in for a surprise.

Under the familiar red and white striped barber pole, Navy personnel and their dependents were attended by personnel who were more interested in teeth than in hair.

It was the first time naval reservists in dental specialties gave examinations, dental hygiene seminars, fluoride treatments, and the like in a barber shop, a practice practically unheard of since the days when tonsorial technicians worked the boomtowns of the old West.

Members of Naval Reserve Company, Headquarters 119, from Long Beach, Calif., three dental officers and four enlisted technicians visited Hawaii for two weeks of active duty. They trained at Pearl Harbor Naval Base, Naval Air Station Barbers Point and PMRF Barking Sands.

Far out in the Pacific, four NRF units, USS Hammer (DD 718), USS Higbee (DD 806), USS Paul Revere (LPA 248)—all units of Destroyer Squadron 37—and one unit from Destroyer Squadron 27, USS Carpenter (DD 825), were participating in an intensive Third Fleet training exercise. Called Comptuex 2-78, the exercise was designed to enhance overall unit training and readiness. It involved 13 ships and 4,500 personnel, 600 of whom were naval reservists.

Comptuex 2-78 was the first opportunity in four years for NRF units to participate in mid-Pacific training.

High Lift

Many people look at a Navy helicopter and that’s all they see—a helicopter and nothing more. However, when Navy designers and engineers examine a “whirlybird,” they see thousands of intricate component parts, any of which might be a candidate for improvement.

That was the consensus in the late 1960s when Navy designers took a closer look at helicopter rotor blades and decided they could design better
ones. The result of subsequent research was the circulation control (CC) rotor, developed during the course of 10 years' study, and testing at the David W. Taylor Naval Ship R&D Center in Carderock, Md.

The CC rotor is mechanically driven and has relatively thick, hingeless blades with rounded, trailing edges. Low pressure air is pumped into the blades and ejected from a thin slot on the upper surface of the trailing edges. Due to an aerodynamic phenomenon, the air remains attached to the rounded edges until it reaches the lower surfaces, thus creating high lift.

The new rotor is a simpler, lighter and smaller substitute for rotors now in use. Though easier to maintain and less complex, it offers increased flight performance. Attached to a Navy H-2 twin-engine helicopter during recent wind tunnel tests, the rotor operated at speeds of up to 150 knots and demonstrated excellent control capability. The first actual flight demonstration is tentatively scheduled for next February to test its performance.

‘Express’ Re-up

With a few last minute hand raising ceremonies and careful calculations, the combat stores ship USS White Plains (AFS 4) hoisted her Bravo Zulu flags proclaiming to the fleet a 75 percent first term reenlistment rate for her petty officers.

White Plains, known as the ‘Orient Express,’ also topped the 83 percent mark for the reenlistment rate for second term petty officers and 90 percent mark for career petty officers.

The final percentages were tallied after the reenlistment of three Plainsmen on the final day of fiscal year 78.

White Plains, the Navy’s only forward deployed combat stores ship, operates from Yokosuka, Japan, under the command of Captain Robert S. Owens.

Have a Yen to Read?

Looking for something to read? From pamphlets on how to install and use tire chains to books on the American Revolution, the U.S. Government Printing Office probably can satisfy your reading desires.

With over 25,000 titles in stock, the Superintendent of Documents has grouped the publications into related subject bibliographies. They are listed in two free guides which are yours for the asking.


It Was in the Cards

USS *Tattnall* (DDG 19) recently pulled into the small seaport of Zeebrugge in Belgium and stepped into a surprise arranged by their Belgian Exchange Officer, First Lieutenant Sylveer De Beuker.

It began with a bus waiting on the pier to whisk the ship's basketball and soccer teams to prearranged matches against local teams. Along the way, *Tattnall* sailors were treated to a scenic tour of the Belgian countryside. The bus stopped—apparently for a rest break—in the small city of Turnhout.

But Turnhout, it seems, is also the hometown of De Beuker. That's when the fun began. Local residents gave the sailors a warm welcome and a tour of Turnhout's attractions. First stop was at the city's cultural center which included a library, auditorium, museum, pub (with free beer) and a serenading band dressed in traditional 18th century garb of the country.

Next, the group toured a museum which was once the largest playing card factory in Europe. That tour included a look at one of the largest manually operated printing presses still in existence. The factory, the first of its kind, is credited with developing the first playing card and was instrumental in spreading card games throughout the world.

After the tour, *Tattnall's* basketball and soccer teams faced their respective local teams on the playing fields.

The U.S. Navy men, ahem, lost both matches. But facing a full evening of still more festivities, few seemed to care. That night, crewmen were treated to the new (a disco dance) and the old (a Belgian folk dance).

Thanks to Belgian Exchange Officer De Beuker and the people of Turnhout, the officers and men of *Tattnall* experienced a memorable port visit they'll not likely duplicate in the future.

Long-Distance Chess

Larry Rydel doesn't speak a foreign language, yet he communicates regularly with people from around the world. How? Through the internationally understood game of chess and, oh yes, a reliable postman.

Rydel, a Chief Hospital Corpsman assigned to the Presidio of Monterey's Medical Clinic, has been playing chess with foreign opponents for 16 years. But, instead of just using the conventional chessboard of 64 one-inch squares and 32 medieval pieces, Rydel relies on simple post cards and the world's postal systems to conduct his international battles of will and strategy.

Today he has 72 matches in progress with opponents from Japan, France, the Soviet Union, Canada, West Germany, East Germany, Rumania, Portugal, Bulgaria, Switzerland, Italy, Sweden, Denmark, Czechoslovakia, South Africa, Yugoslavia, Finland and England. In addition, he is engaged in 35 more games with fellow Americans from 25 states.

His opponents are amateurs and masters. One competitor is a professor of art at the University of Moscow. Another is a baron in West Germany. Closer to home, Rydel is playing an astronomer from the Smithsonian Institution; he also plays a prisoner at the Florida State Penitentiary.

Playing postal chess is as simple as sending a letter. Participants note their move on a standard post card using the English descriptive notation method. For example, P-K4 represents a pawn moving to a position three squares in front of the king.

"It's chess without the board," explains Rydel, although he adds that
most postal players do use the standard chess set to better visualize the game situation.

The time required for a move in postal chess, like the length of the contest itself, varies with the intensity and experience of competitors. According to Rydel, some moves are immediate while others take hours of careful deliberation. His average game lasts between 15 and 18 months, although he’s had a brief six-week encounter as well as a three-year marathon.

In addition to playing long distance, Rydel plays at the Monterey Chess Center. Last April, he was one of three local chess players to draw with Florin Cheorghiu, visiting grand master from Rumania.

The only bad part of playing postal chess is the price of stamps says Rydel. Fortunately, however, his monthly postage bill—about $25—is offset somewhat by a budding stamp collection. —SSGT Randall Moore, USAF

**Bolstering Bolster**

From “day one” in basic training, Navy people are taught to be team players. Even so, it’s not often that an entire team is deserving of individual praise. Such was the case, however, on board the rescue and salvage ship USS *Bolster* (ARS 38) when all 15 sailors who took the recent Navywide advancement exams were promoted in a joint ceremony.

“The *Bolster’s* 100 percent success rate shows that the ship not only has a good training program and good morale,” said Commander James H. Ansley, Commodore of Service Squadron Five, “but also is indicative of a crew that cares for their shipmates.”

CDR Ansley also said that when a man makes rate, it’s the result of not only the man’s effort, but also of the efforts of his shipmates who teach him along the way.

“When a man advances in rate,” CDR Ansley said, “his responsibilities increase to the Navy, and to the shipmates who follow him—he has a responsibility to help and to teach his juniors so they may also advance.”
There are a number of reasons why American sailors and Marines might "hit the beach" in Athens, Greece. But for the 83 who landed in Athens October 6, there was only one reason—"to run in the footsteps of Phidippides."

Phidippides was the Athenian warrior who, in 490 B.C., ran the 26.2 miles from the battlefields of Marathon to the Acropolis in Athens to tell the people of the great victory over the Persians.

Nearly 2,400 years later, the run was added to the first modern Olympics of 1896, thus planting the seed for marathons around the world.

Athens hosts two marathons yearly. The first, held each spring, is open only to world-class runners with qualifying times under 2 hours 30 minutes. The second, run in the fall, is called "the popular race" and is open to runners around the world.

More than 1,000 male and female runners of all ages come from all over the world to make this annual "popular race."

This year, U.S. Navy people and Marines who ran in the race represented several shore stations including Naples, Italy; Rota, Spain; Sigonella, Sicily and the United Kingdom. Sixth Fleet runners were from the USS Albany, flagship of Commander Sixth Fleet, and the aircraft carrier USS Forrestal.

The Naval Communication Station, Nea Makri, Greece, again provided all the logistical support for the military runners. Special Services Director Ed White (a former Oakland Raider) acted as liaison between the various commands sponsoring runners and the race committee.

Lieutenant Paul M. Nichols, 39, from the Naval Communication Station in Rota was the first military runner to cross the finish line. His time of 2:43 placed him 7th overall. After finishing, Nichols said, "The older I get, the faster I get."

Electronics Technician Second Class Kevin J. Setnes, 24, of the Naval Communication Area Master Station Mediterranean in Naples was the second military runner to finish.

Captain T.C. Andersen, 53, Supply Officer at the Naval Support Activity Naples said, "It was a long, hard run. I'm very pleased just to have finished the race."

Radioman Third Class Lory J. Wegmueller, 21, of Headquarters Allied Forces Southern Europe in Naples was the only enlisted woman to run. She had a time of 4:12:28. She said, "I ran the race non-stop this year and beat a couple of people who have beaten me in the past."

Captain Robert L. Smidt, 47, of Fleet Air Mediterranean in Naples summed up his feelings, "I'm glad I made it all the way. But, most of all, I enjoyed running and meeting with all the different nationalities as we went along."

Perhaps the thoughts of ET2 Setnes encompass the feelings of most marathon runners. After running 20 miles he said, "I've told myself the same thing at the same point in every marathon...this will be my last one." But the pain and agony are soon forgotten after the race. There always seems to be the faint sound of footsteps and the magic of Athens to lure the runners back for one more effort.
The 18 sailors came to compete in a sport steeped in tradition. A sport that, with strange terms and concepts, seems mystical and even romantic; it’s called yacht racing.

Six crews, three from each coast, pitted their skills against each other in the last All-Navy Sailing Championship. Hosted in September by the Coast Guard Academy at New London, Conn., the three-man crews earned their positions earlier in the year by winning sailing regattas in their respective areas.

The tournament began with a crews’ meeting. Lieutenant Scott Smith, race committee chairman, briefed them on rules—conducted under the United States Yacht Racing Union—schedules, and course signals. Skippers then drew lots for their boats—30-foot Shields-class—gathered up their ditty bags, and got under way for a triangular-shaped Olympic course off Fisher’s Island in Long Island Sound.

An air horn sounded and a white flag went up from the race committee boat warning crews of the impending start. Then, the crews seemed to become confused as they sailed off in different directions—all away from the starting line. To the casual observer, the race took on an air of mass confusion; an experienced sailor, however, knew it was just a matter of tactics. The jockeying for good positions behind the starting line is actually when many a race is either won or lost.

Five minutes after the white flag was raised, another warning signal was sounded and a blue flag hoisted. Finally, another blast was sounded, a red flag appeared—the race began.

Unlike other sports, sailing is a quiet one—minus the hawking of vendors and the noise of spectators. There is only the gentle snapping of wind-filled sails and urgent orders from skippers to crews. Gracefulness inherent in sailing tends to belie the underlying excitement.

As the craft silently skim through the water, the skippers and crews are responsible for more than just steering their craft and tacking. There are many mental exercises taking place. Each crew member must know the rules of the road as they relate to the course being run; they must always be aware of the time elapsed from the start of the three-hour race; and they have to recognize not just the wind but the type of wind blowing and minute changes in wind direction. They also must be constantly aware of the set and speed of currents along the course.
Six races were conducted during the three-day championship, and, although the craft were evenly matched, the crews traded boats after every race to ensure fairness to all. Changes in boats didn’t seem to affect the outcome—Captain Chris Withers, a national yacht-racing contender from Newport, R.I., and his crew won five of the six races to take the championship. The results were:

Winners: CAPT Chris Withers (skipper), Naval War College, Newport, R.I.; LT Stephen Parfet, OCS, Newport, R.I.; LT Tom Fowler, SWOSCOM, Newport, R.I.

Second: LTJG Tom Atkinson (skipper); QM3 Joseph Smith and MMFA Steve Morse. All crewmen are attached to USS Knox (FF 1052), homeported in Yokosuka, Japan.

Third: QM2 Rick Mongule (skipper), USCG cutter Blackhawk at San Francisco; QM3 Ted Kellogg, USCG, Pt. Ledge, San Francisco; QM3 Steve Hamilton, USCG Recruiting Station, Alameda, Calif.

Fourth: LT Michael Waters (skipper); OS3 Dan Maddox and ENS Brent McGee. All are attached to USS Preble (DDG 46) out of Pearl Harbor, Hawaii.

Fifth: TDC Robert Ober (skipper), Naval Station, Annapolis; NES Rudy Costanzo, USNA, Annapolis, and DP1 Fred Imhoff, Naval Security Group Headquarters, Washington, D.C.

Sixth: PHC Keith Reynolds (skipper), PH3 Robert Hamilton and PHAN Dennis Driscoll. All are attached to Fleet Audio Visual Command, NAS, Norfolk.
MARGIE VOSE

A Long, Hard
BY PH2 DAVID LONGSTREATH

In the early morning hours of April 1, 1978, Margie Vose fell asleep at the wheel of her subcompact automobile; it veered off the four-lane highway, grazed a tree and ended up a total wreck. Suffering massive head injuries and broken bones, Margie Vose was rushed to Norfolk General Hospital.

Margie's parents remember vividly the news brought to them by Norfolk General doctors: "If your daughter lives, she probably will be severely handicapped."

The 18-year-old daughter of retired Navy Captain William F. Vose, Margie Vose was later transferred to the intensive care unit of the Naval Regional Medical Center, Portsmouth, Va. It was 10 weeks before the physical therapists were able to start Margie's rehabilitation process.

Staffed full-time by five, college trained physical therapists and eight Navy-trained physical therapy technicians, the Physical Therapy Branch is designed to treat any condition involving rehabilitation of the body.

"We treat patients suffering burns, broken bones, strains, sprains, arthritis and various other medical-surgical problems," says Navy Captain J.M. Beckwith, head of the branch. "Many of our patients have been involved in motorcycle or automobile accidents similar to Margie's."

In Margie's case, however, it was more than rehabilitating broken bones. According to doctors at NRMC, the accident had resulted in multiple injuries and brain stem damage.

Although alert at all times, Margie had lost the ability to control or move most of her limbs. Basically, she would have to learn how to move again.

The unit's first contact with Margie came through Hospital Corpsman Third Class Robyn Collum, a physical therapy technician.

"When I first met Margie," HM3 Collum said, "she was still under intensive care. A tracheotomy (an opening in the throat to aid in breathing) had been performed and she was on a respirator. Because she couldn't be moved, therapy at first was very simple—she would grip my hand.

"After reading her medical history, I had my doubts, but Margie has a strong will."

When a patient has experienced a massive trauma, usually the result of a serious accident, the recovery usually is long and often incomplete. Many are faced with the possibility of a permanent handicap.

According to NRMC physical therapist Lieutenant (junior grade) Michael Tamburello, many patients suffer severe depression and frustration once they begin therapy. This was true in Margie's case but with a difference.

"She has an exceptional determination to return to a normal life," Tamburello said.

"We provide the therapeutic exercises to stimulate and strengthen muscles but the key element in treating any patient is motivation. Margie knew it was going to be a long, hard struggle back to a normal life. She accepted it. Every time she reported for therapy, she was prepared to work," Tamburello added.

CAPT Beckwith noted that physical therapy has a way of strengthening patients mentally as well.

"Many gain confidence by seeing other patients in similar therapy. They judge their progress against others and often realize their problem is not as bad as it seems."

There were times when Margie could not complete an exercise. Still, she never gave up.

The purpose of physical therapy is to help a patient become self-sufficient once again. "Most people take for granted the little things, such as being able to dress oneself. For Margie, just learning again how to roll over by herself was a great accomplishment. It meant she could ease pressure on different parts of her body without calling a nurse or corpsman," Collum said.

Reflecting, Collum said, "When Margie first began regular visits to physical therapy, she was incapable of even the simplest tasks. She had been told by doctors she would probably never walk again.

"Margie didn't accept this and set out to prove everyone wrong. Her last day in therapy here she walked a few steps with the aid of a leg brace and the parallel bars. She was so happy she cried."

Two months after beginning therapy at NRMC Portsmouth, Margie Vose was wheeled into the physical therapy unit to say goodbye to those who had worked closely with her. The following
On her way out Margie made a promise to the PT staff, “I’ll be back, only next time I’ll walk in.”

Editor’s note—After her discharge from the Naval Regional Medical Center on July 25, Margie Vose was transferred to a state operated physical therapy clinic in Fishersville, Va. She has regained use of both hands and can use a wheel chair.

According to her father, Margie is making excellent progress and is well on her way to recovery.

Above: Through the long and often painful rehabilitation process, Margie Vose’s determination shines through.

Left: Margie learns to walk again with help from LTJG M.T. Tamburello and HM3 Robyn Collum.
"PEARL"

STORY BY JO2 B. PEASE
PHOTOS BY JO2 J. BRYANT

Pearl Harbor has been attacked again—this time with the help of the U.S. Navy. Warner Brothers' cameras recorded the action as part of a "made for television" movie entitled "Pearl." A fictionalized story that centers on what happened to seven people on Dec. 7, 1941, "Pearl" features stars Angie Dickinson, Robert Wagner, Dennis Weaver, LeslieAnn Warren and Greg Henry.

During the filming of the attack scenes, hectic Hollywood interrupted daily routine aboard the frigate USS Badger (FF 1071) while crew members got into the act by working as extras. Fame has its price, though. To get that clean-shaven, scrubbed look of the 1941 sailor, beards, mustaches, and the long locks of the 1970s fell before the barber's clippers.

In addition to the 40 extras (who were in a leave status during the filming), the Navy also provided ferry services to Ford Island for film crews and for a ship to attack. The target ship, ex-USS Vance (DER 387), was towed from Pearl Harbor's Inactive Ship Facility to the location site and was given a fresh coat of paint on her "camera" side. It was ironic that Vance, a destroyer escort commissioned in 1943, was ending her Navy career in a re-enactment of the battle that provided the impetus for her construction.

Several years ago the award-winning movie "Tora! Tora! Tora!" was filmed at Pearl Harbor. Civilian employee Chuck Leahey, 14th Naval District Special Services director, has survived all three "attacks"—the real one, "Tora!" and now "Pearl." He was a fireman aboard the destroyer tender USS Dohbin (AD 3) in 1941. Later, from the point of view of having been there, he enjoyed "Tora! Tora! Tora!" and now looks forward to seeing "Pearl" on TV. "Nothing could match the intensity of the original," he said, "but I'm not too crazy about the idea of a sequel."
The benefits inherent in a Navy career are not always evident to those who look only at base pay. To appreciate the full value of Navy life, a person must consider the entire range of many benefits—medical care, aid for education, and commissary privileges, to name a few. All must be taken into account.

To keep Navy members informed, All Hands will discuss these and other benefits in a lengthy series of articles beginning with this first one on survivor benefits.

The explanation of the Survivor Benefit Plan is followed by a table briefly outlining the range of survivor benefits established for active-duty members and retirees. Since space limitations restrict more detailed descriptions, it is important that the member directly contact the sources listed for more information.

Also included is a form which you can use in planning your family's future, estimating total survivor benefits, and for maintaining an account of where you and your family stand financially.

Survivor Benefits Plan

Sometimes, the hardest things to talk about in life are also the most important. Take the subject of death. Most of us would just as soon jaywalk if it meant getting out of a discussion on that subject.

But when a sailor retires from the Navy, he may be snug in the knowledge a monthly check will arrive in the mails like clockwork for the rest of his life. It sort of takes the edge off though when the retiree realizes the checks and his life stop almost simultaneously. What about his family? How will the bills get paid? What about the children's education? An avalanche of questions pour forth with the realization that one's family may be financially secure now, but what about later?

For many military retirees, the answers to these and other money questions can be found—at least in part—in the Survivor Benefit Plan for the uniformed services.

Basically, the Survivor Benefit Plan (SBP) provides an income to the deceased retiree's beneficiaries. This monthly income is equal to 55 percent of the full amount of the member's retired pay or 55 percent of any selected amount of retired pay over $300 per month. In addition, this monthly amount is periodically adjusted for cost-of-living increases.

So if a chief petty officer, for example, receives $700 a month in retirement/retainer pay, the SBP monthly payment to his beneficiaries after his death would be $385. (Base Amount X 55 percent = annuity).

Suppose that same chief petty officer, before his retirement with pay, elected a lesser amount than maximum coverage, say $300 (the minimum amount which may be designated under SBP). Then the SBP monthly payment to his beneficiaries after his death would be $165.

Keep in mind the above figures represent gross amounts. That is, annuities paid under SBP are subject to federal income taxes.

Military retirees will automatically be enrolled in the Survivor Benefit Plan at the maximum coverage level at the time of their retirement or transfer to the Fleet Reserve, unless they request coverage less than the maximum, or decline participation in the program.

Under SBP, four types of coverage are available at varying costs: spouse only coverage; spouse and children coverage; children only coverage; and insurable interest coverage.

**Spouse Only Coverage**

As its name says, this is coverage paid to the retiree's spouse only. It is important to keep in mind that an election to cover spouse only, once effective, is irrevocable, although the cost of coverage will not take place in any month when there is not an eligible spouse beneficiary.

Also, if coverage for spouse is declined at time of retirement, coverage for that spouse, or any subsequent spouse, cannot be provided at any later time.

If there is no eligible spouse at time of
retirement, coverage for a spouse acquired after retirement may be provided. Such an election must be submitted within one year of the marriage and the spouse must be married to the retired military member for a minimum of one year immediately before the retiree's death (or if a surviving child is born of the marriage) in order to be an eligible recipient of SBP annuities.

The cost of this spouse only coverage is 2½ percent of the first $300 of the base amount plus 10 percent of any amount over $300. See the accompanying chart for more detail.

So far, SPB is a pretty simple plan to understand. You pay money in return for a guaranteed income for designated beneficiaries after your death. However, there are a couple of things that tend to complicate the picture just a bit (but not lessen the coverage paid to those beneficiaries). The main item to understand is a notion called, Dependency and Indemnity Compensation/Social Security offset.

**DIC/Social Security Offset**

Surviving spouses may be eligible for Dependency and Indemnity Compensation (DIC) payments from the Veterans Administration and/or Social Security Benefits after the retiree dies. These benefits may offset or reduce the amount of SBP payments being made to the spouse under varying circumstances. First, we look at how DIC works in relation to SBP:

Suppose Senior Chief Jones was wounded during the war in Vietnam. After retirement, Senior Chief Jones (who has enrolled in the Survivor Benefit Plan) dies as a result of complications developing from that wound. Since his was a service-connected death, his widow, any unmarried children under age 18 (as well as certain handi-
capped children), children between the ages of 18 and 23 if attending a VA approved school, and certain dependent parents are eligible for Veterans Administration DIC.

DIC is a monthly benefit based on the member's grade or rate. It is exempt from federal income taxation and may be received simultaneously with full Social Security benefits.

So Senior Chief Jones' widow applies for and is granted DIC in the amount of $200 (an arbitrary figure). This $200 is deducted from the SBP benefits she receives each month so there is no change in her monthly annuity (although that tax-free $200 will result in less overall tax on her annuity). That's DIC offset.

(For more information about Veterans Administration Dependency and Indemnity Compensation as well as facts on other VA programs, see the pamphlet Federal Benefits for Veterans and Dependents available from the Veterans Administration.)

There are times also when SBP annuities will be reduced by that portion of Social Security benefits that came out of the retiree's active duty earnings. The offset applies only when the widow(er) has one dependent child or, if there are no dependent children, when the widow(er) is 62 years of age or older. In all cases, however, the combined payments from SBP and Social Security are guaranteed to equal or exceed 55 percent of the retiree's retired pay or the lesser designated base amount.

As can be seen from our discussion of DIC/Social Security offset, the word "offset" may be a bit misleading in that the total amount of money the spouse receives each month is never reduced, and often increased, as a result of DIC or Social Security benefits. It's just that the money may come from a different federal source under different circumstances.

**Spouse and Children Coverage**

With this type of SBP coverage, the monthly annuity is paid to the surviving spouse. If the spouse is not eligible (due to death or remarriage) the annuity is
The cost of this coverage is based upon the cost of "Spouse Only" coverage plus an actuarial charge based on the age of retiree, spouse and youngest child.

Under this coverage, no DIC or Social Security offset will be made when SBP payments are made only to children.

Children Only Coverage

The cost of this type of coverage is an actuarial charge based on the age of the retiree and the age of the youngest child. Since actuarial charges fluctuate, they will be computed by the Navy Finance Center before an SBP coverage is elected so that the precise cost will be known.

Insurable Interest Coverage

The final type of SBP coverage, Insurable Interest Coverage, may be provided to guarantee monthly SBP benefits to any person who has a reasonable and lawful financial expectation from the continued life of the retiree. This is legal talk for someone, other than spouse or children, who is financially dependent on the retiree. It may be a brother, sister, parent or nondependent child. If the insurable interest person is other than those (such as a business partner) proof of financial benefit is required by the Navy Finance Center.

If there is no spouse or eligible children at the time of retirement, coverage for a person with an insurable interest may be elected.

The cost of this coverage is figured as follows: 10 percent of full retired pay plus five percent of full retired pay for each five years the designated beneficiary is younger than the retiree, the total cost of such coverage not to exceed 40 percent of full retired pay. (See the accompanying example.)

Under normal circumstances, the cost of coverage under SBP increases over the range of the four types of coverage provided. Thus, "Spouse Only" coverage is cheapest while "Insurable Interest Coverage" is the most expensive.
A quick look at supplemental benefits

In addition to the survivor's benefits listed in the table on the following pages, there are other benefits for surviving dependents of deceased active duty members and retirees. Among these are:

- **Civil Service Employment Preference.** Certain Civil Service preference benefits are granted to unremarried widows in connection with examinations, ratings, appointment and reinstatements if they wish to apply for a Civil Service position. Call or write any civil service employment office for details.

- **Fraternal Organization Benefits.** Check with the nearest affiliate of any fraternal or professional organization to which the deceased belonged to learn of any insurance, burial, or other benefits which may be payable.

- **GI Bill Loans.** Unremarried widower(s) of deceased military personnel may be eligible for GI Bill home loans when death is due to service-connected causes. Contact the Veterans Administration for further details.

- **Mortgage Insurance.** The mortgage insurance provided free as part of GI Bill loans and FHA in-service loans does not pay off the mortgage upon the death of the homeowner. Those guarantees apply solely to the private lender who made the home loan; the obligation to repay the loan falls to the deceased's estate and spouse (property held as tenants by the entirety). Only if the spouse defaults may the government pay the lender to the extent of the guarantee—but the government is then obligated to recover its loss from the family. In the case of FHA mortgage insurance, the government will continue to pay the insurance premium for two years after the death of a member, or until the widower remarries or sells the property.

- **Officers and Enlisted Messes.** If facilities permit, commanding officers are authorized to extend the privileges of Commissioned Officers' messes Open, Senior Chief Petty Officers' messes Open, Chief Petty Officers' messes Open and First and Second Class Petty Officers' messes Open to unremarried widow(er)s or retired members of appropriate grades or rates. Such authorization may be extended to their dependents. Contact the appropriate naval activity for more information.

- **Service Academy Appointments.** Each year a limited number of appointments to the major service academies are reserved for the sons and daughters of military members who died of war injuries. Inquiries should be sent directed to: The Registrar, United States Military Academy, West Point, New York 10996; Director of Admissions United States Air Force Academy, Colorado 80840; or the Office of Candidate Guidance, U.S. Naval Academy, Annapolis, Maryland 21402.

- **State Benefits.** Many states provide benefits for survivors of veterans such as educational assistance, civil service preference, tax and license fee exemptions, employment assistance and bonuses. Most of the states maintain veterans' agencies (usually titled State Veterans Commissions) which supervise the veterans, and survivors' benefits. The member's survivors should contact the veterans' agency in the state in which they intend to reside or the state from which the retired member last claimed residence. Any nationally recognized veterans organization will also assist in providing information about survivor benefits.

- **Tax Relief.** The income of a member who dies of wounds, disease or injury sustained in a combat zone is exempt from federal income taxation for the year in which the death occurred. Any tax liability outstanding against the member at the time of death will be canceled or reduced. Refunds can be made if tax on such income has already been paid. The federal estate tax is not applicable in the settlement of estates of such combat veterans.
# Table of survivor benefits for naval personnel

<table>
<thead>
<tr>
<th>BENEFIT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARREARS OF PAY</td>
<td>Unpaid pay and allowances due member at time of death.</td>
</tr>
<tr>
<td>DEATH GRATUITY</td>
<td>Designed to help defray immediate expenses, the death gratuity is six times the active duty member’s monthly basic pay to a maximum $3,000 payable to beneficiaries usually within 24 hours of death.</td>
</tr>
<tr>
<td>BURIAL EXPENSE ALLOWANCE</td>
<td>Social Security: $255 lump-sum death payment to widow(er) of Social Security “covered” member.</td>
</tr>
<tr>
<td></td>
<td>Veterans Administration: $300 basic burial allowance plus $150 plot/interment allowance if burial is not in a national cemetery. Service-connected deaths may receive up to $1,100.</td>
</tr>
<tr>
<td>EDUCATIONAL BENEFITS</td>
<td>Various scholarships are available from Navy-affiliated organizations.</td>
</tr>
<tr>
<td>Navy Scholarships</td>
<td>Educational assistance loans and grants are available to survivors of Navy members.</td>
</tr>
<tr>
<td>Navy Relief Society Educational Fund</td>
<td>Widower(s) and children of members who died of service-connected causes may be eligible for up to 45 months of VA educational assistance. Educational loans are also available for those needing educational financial assistance.</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>Unremarried widow(er)s, dependent children to age 21 (23 if attending full-time institution of higher learning) &amp; parents/parents-in-law determined to be dependent are entitled to an ID card and appropriate privileges if deceased member had retired from military service.</td>
</tr>
<tr>
<td>UNIFORMED SERVICES ID &amp; PRIVILEGE CARD</td>
<td>Unremarried widow(er)s, dependent children to age 21 (23 if attending full-time institution of higher learning) &amp; parents/parents-in-law determined to be dependent are entitled to an ID card and appropriate privileges if deceased member had retired from military service.</td>
</tr>
<tr>
<td>(DD FORM 1173)</td>
<td>Unremarried widow(er)s, dependent children to age 21 (23 if attending full-time institution of higher learning) &amp; parents/parents-in-law determined to be dependent are entitled to an ID card and appropriate privileges if deceased member had retired from military service.</td>
</tr>
<tr>
<td>EXCHANGE, COMMISSARY &amp; THEATER PRIVILEGES</td>
<td>Sponsorship passes to unremarried widow(er) of retired military member until such time as widow(er) remarries and becomes the dependent of another person. Surviving children are entitled to exchange &amp; theater privileges if dependent on widow(er) for over ½ of their support to age 21 (23 if attending full-time institution of higher learning).</td>
</tr>
<tr>
<td>HEADSTONES &amp; GRAVE MARKERS</td>
<td>When burial is in a national cemetery, a headstone or grave marker is provided without cost or application. Markers for private cemeteries will be shipped free, but applicant is responsible for transportation to the private cemetery &amp; cost of placement at the grave.</td>
</tr>
<tr>
<td>HOUSEHOLD GOODS STORAGE/MOVE-MENT &amp; RELOCATION OF DEPENDENTS</td>
<td>Dependents who were eligible to relocate at government expense &amp; for household goods movement before the member's death are permitted one year to relocate &amp; move household goods to any selected location at government expense &amp; storage in transit up to six months.</td>
</tr>
<tr>
<td>LIFE INSURANCE</td>
<td>USGLI was issued in 1919 and discontinued in 1961. NSLI took up where USGLI left off but has also been discontinued.</td>
</tr>
<tr>
<td>NSLI/USGLI</td>
<td>Automatic coverage ($20,000) unless member elects lower amount or no coverage. A member is covered under this active duty SGLI insurance for 120 days following discharge (non-disability death) or for one year in the case of service-connected death.</td>
</tr>
<tr>
<td>VGLI</td>
<td>Veterans Group Life Insurance is available—within 5 years of discharge—for those desiring to convert their SGLI coverage.</td>
</tr>
<tr>
<td>Commercial Insurance</td>
<td>Depends upon the amounts and type of life insurance purchased by the member.</td>
</tr>
<tr>
<td>MEDICAL CARE</td>
<td>Dependents of retirees who are eligible for medical care under the Uniformed Services Health Benefit Program or for the Civilian Health &amp; Medical Program of the Uniformed Services (CHAMPUS) remain eligible for such care after the member's death.</td>
</tr>
<tr>
<td>NAVY MUTUAL AID ASSOCIATION</td>
<td>A membership organization which provides death benefits currently of $18,000; assists beneficiaries in filing claims for government benefits &amp; provides follow-up service as needed.</td>
</tr>
<tr>
<td>NAVY RELIEF SOCIETY ASSISTANCE</td>
<td>Provides temporary financial assistance (either a loan, gratuity, or combination of the two) to dependents of deceased Navy members plus counseling and referral services and other assistance.</td>
</tr>
<tr>
<td>RETIRED SERVICEMAN’S FAMILY PROTECTION PLAN</td>
<td>Provides annuities to beneficiaries of deceased military members who participated in the program and retired before September 21, 1972.</td>
</tr>
<tr>
<td>(RSFPP)</td>
<td>Provides annuities to beneficiaries of deceased military members who participated in the program and retired before September 21, 1972.</td>
</tr>
<tr>
<td>SURVIVOR BENEFIT PLAN (SBP)</td>
<td>SSBl payments are separate from &amp; in addition to any RSFPP or monthly VA compensation (but not SBP payments). SBP provides—depending upon eligibility—(a) monthly benefits to surviving widow(er) &amp; dependent children, (b) MEDICARE coverage, and, (c) lump sum death benefits (see Burial Expense Allowance entry).</td>
</tr>
<tr>
<td>SOCIAL SECURITY BENEFITS (SSB)</td>
<td>Payable for service-connected death only. DIC is a monthly benefit determined on the basis of member's grade or rate and authorized for widow(er)s, unmarried children under age 18 (as well as certain helpless children), children 18-23 if attending a VA-approved school and certain dependent parents of members who died in service or who died following discharge from a service-connected disability.</td>
</tr>
<tr>
<td>VETERANS ADMINISTRATION DEPENDENCY AND INDEMNITY</td>
<td>Payable to widow(er) &amp; children of a member whose death was not service connected providing their income does not exceed certain limitations and their net worth is within reasonable limits as determined by the VA.</td>
</tr>
<tr>
<td>INDEMNITY COMPENSATION (DIC)</td>
<td>Payable to widow(er) &amp; children of a member whose death was not service connected providing their income does not exceed certain limitations and their net worth is within reasonable limits as determined by the VA.</td>
</tr>
<tr>
<td>VETERANS SURVIVORS PENSION</td>
<td>Payable to widow(er) &amp; children of a member whose death was not service connected providing their income does not exceed certain limitations and their net worth is within reasonable limits as determined by the VA.</td>
</tr>
</tbody>
</table>
active-duty members and retirees

WHERE TO APPLY

Commanding Officer, Navy Finance Center, Anthony J. Celebrezze Federal Bldg., Cleveland, Ohio 44199.

Payment of local disbursing office is automatic upon notification of death and with Navy Finance Center approval.

Your local office of the Social Security Administration.

Regional office of the Veterans Administration. (Each state has at least one VA regional office.)

Chief of Naval Personnel (Pers 7311), Navy Dept., Washington, D.C. 20370.

Headquarters, Navy Relief Society, 801 N. Randolph St., Room 1228, Arlington, Va. 22203.

Regional office of the Veterans Administration.

For determination of dependency of parent or parent-in-law: Navy Family Allowance Activity, Cleveland, Ohio 44199. For renewal or replacement of ID cards: the nearest Naval Activity authorized to issue ID cards or the Chief of Naval Personnel, (Pers 7312), Navy Dept., Washington, D.C. 20370.

See above information on Uniformed Services Identification & Privilege Card (DD 1173).

Director, Headstone Service (42A), Veterans Administration Central Office, 810 Vermont Ave., N.W., Washington, D.C. 20420.

The installation Transportation Officer (ITO) at your local military activity will provide HHG assistance. The local military activity will also assist in the transportation of dependents.

Veterans Administration Center Department of Veterans Affairs, P.O. Box 8079, Philadelphia, Pa. 19101 (if residing East of the Mississippi River) or Veterans Administration Center, Federal Bldg., Fort Snelling, St. Paul, Minn. 55111.


Office of Serviceman's Group Life Insurance, 212 Washington St., Newark, N.J. 07102.

Local office of the insurance company with which the member is insured.

Since changes may occur because of local service capabilities, consult your local Navy activity for entitlement information as well as for information on CHAMPUS.


Headquarters, Navy Relief Society, 801 N. Randolph St., Room 1228, Arlington, Va. 22203.

Commanding Officer, Navy Finance Center, (Code XM), Anthony J. Celebrezze Federal Bldg., Cleveland, Ohio 44199.

Commanding Officer, Navy Finance Center, (Code 303), Anthony J. Celebrezze Federal Bldg., Cleveland, Ohio 44199.

Contact local office of the Social Security Administration immediately following member's death because claims may not be honored after an extended lapse of time.

Your local VA regional office.

DECEMBER 1978
Financial planning for your survivors

What financial shape would your family be in if you died tomorrow? Suppose you got hit by a car on the way home from the ship. After the trauma of your death and funeral were past, would your family at least find comfort in the fact you’d left them financially secure? Or would your death mark only the beginning of their troubles? The following form may help you answer these questions. Referring to the explanation of rights and benefits in the accompanying table of benefits, you can get a working idea of the amount and types of assistance your family would receive upon your death. This amount, plus your personal assets, will give you an idea of the resources your family may draw upon after you’re gone. How much they will have to draw and when can be figured in the part on Personal Obligations. Subtracting this amount from your total worth will not only tell if you will leave a financially secure family behind when you die, but may also show where and what types of additional financial security you may want.

<table>
<thead>
<tr>
<th>SURVIVOR BENEFIT</th>
<th>IMMEDIATE OR ONE-TIME PAYMENT</th>
<th>MONTHLY PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrears of Pay</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Death Gratuity</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Social Security Burial Expense</td>
<td>$255</td>
<td>n/a</td>
</tr>
<tr>
<td>Social Security Burial Expense Allowance</td>
<td>$300 basic allowance + $150 plot allowance</td>
<td>n/a</td>
</tr>
<tr>
<td>Veterans Administration Burial Expense</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Life Insurance: NSLI/USGLI</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Life Insurance: SGLI</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Life Insurance: VGLI</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Commercial Life Insurance</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Navy Mutual Aid Association</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Retired Serviceman’s Family Protection Plan</td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Survivor Benefit Plan</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Social Security Benefits</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Dependency &amp; Indemnity Compensation</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Veterans Survivors Pension</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>TOTAL BENEFITS</td>
<td></td>
<td>n/a</td>
</tr>
</tbody>
</table>

NOTES:

1Service-connected death may receive up to $1,100.
2Amount and method of payment (one-time payment or monthly) dependent upon the amount and type of coverage elected by member.
3Applicable only to those members who retired prior to 21 September 1972 and elected this coverage.
4Applicable only to those members who retired or became eligible for retirement after 21 September 1972 and elected this coverage.
5Monthly annuity dependent upon member’s service-connected disability, grade or rate.
### PERSONAL ASSETS

<table>
<thead>
<tr>
<th>IMMEDIATE OR ONE-TIME PAYMENT</th>
<th>MONTHLY PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings¹</td>
<td></td>
</tr>
<tr>
<td>Stocks/Bonds/Investments¹</td>
<td></td>
</tr>
<tr>
<td>Personal Property (house, car, boat &amp; all high-value items)²</td>
<td></td>
</tr>
<tr>
<td>All other assets/income</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td></td>
</tr>
</tbody>
</table>

### PERSONAL OBLIGATIONS

<table>
<thead>
<tr>
<th>IMMEDIATE OR ONE-TIME PAYMENT</th>
<th>MONTHLY PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent/Mortgage³</td>
<td></td>
</tr>
<tr>
<td>Utilities (gas, electricity, water, sewerage, telephone, etc.)</td>
<td>n/a</td>
</tr>
<tr>
<td>Food &amp; Clothing</td>
<td>n/a</td>
</tr>
<tr>
<td>Transportation (car expenses, bus fare, etc.)</td>
<td>n/a</td>
</tr>
<tr>
<td>Credit cards/time payments⁴</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous expenses</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL OBLIGATIONS</strong></td>
<td></td>
</tr>
</tbody>
</table>

### NOTES:

1. You may either figure the total amount available as a one-time payment or compute the interest/dividends you earn each month as a monthly payment.
2. Immediate cash would be available from the sale of high-value items. You may also receive monthly rental fees from a home or other appropriate items.
3. Certain types of mortgage insurance provide for payment of the remaining amount due on homes upon the death of the member. This would represent a single one-time payment. Other types of mortgage insurance guarantee the amount of the mortgage but do not release surviving members of their responsibility for repaying the mortgage upon member’s death.
4. Many credit agreements provide for a monthly interest charge with no penalty for early payment. Other credit agreements may include a set finance charge—for which no credit is given for early payment—and/or an early payment penalty fee.

### IMMEDIATE OR ONE-TIME PAYMENT

<table>
<thead>
<tr>
<th>TOTAL SURVIVOR BENEFITS: plus</th>
<th>MONTHLY PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL PERSONAL ASSETS:</strong> equals</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL WORTH</strong> minus</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL PERSONAL OBLIGATIONS</strong> equals</td>
<td></td>
</tr>
<tr>
<td><strong>FAMILY SECURITY OR INSECURITY AFTER THE BREADWINNER DIES</strong></td>
<td></td>
</tr>
</tbody>
</table>

**DECEMBER 1978**
Mail Buoy

Flag Etiquette

Sir: I disagree with the answer given in picture No. 1 of the July 1978 Stern Shots. I have been taught that when the flag is on the dais or platform, it is placed to the speaker's right (answer B). When it is on the floor of the auditorium, it is placed to the audience's right (answer D). —Del H. Sass

Accordingly, a scientific poll was conducted by the Navy Personnel Research and Development Center which sampled the opinions of over 8,000 enlisted men at various stateside and overseas locations. The results showed that more than 80 percent of the respondents favored the bell-bottom style uniform. In addition, the unofficial poll conducted by a commercial publication received over 80,000 opinions and closely paralleled the findings of the official Navy survey. Therefore, in July 1977 the Chief of Naval Operations approved the return of the traditional jumper style uniforms for sailors in the first four paygrades (E1-E4). The implementation of the July decision includes both a one-year evaluation of new material for the jumper style uniforms and the elimination of the double breasted coat issue beginning Oct. 1, 1978. Other E1-E4 personnel assigned to sea duty were permitted to voluntarily purchase the jumper style uniform in May 1978. Personnel assigned to shore installations and reservists were authorized to purchase the new uniform in August. The recruit issue of jumper style uniforms in October 1980 is planned.

Reservist Points

Sir: Is there any way a reservist can make up an unsatisfactory year? —J.L. Gutierrez, USNR.

The requirements for obtaining a satisfactory year for retirement pay purposes are contained in the Bureau of Naval Personnel Manual (BUPERSMAN), Article 380520 and Title 10 United States Code. By an "unsatisfactory" year it is assumed you did not earn the required 50 points in your "anniversary" year to make that year qualifying for retirement. Retirement points earned in one year may not be credited to any other year. In order to make up an unsatisfactory year, a reservist must perform an additional year for qualifying service.—Ed.

Monster Subs

Sir: In reference to your article, "Midget Sub's Endless Journey" (August All Hands), and the photo caption for the "Japanese fleet-type subs..." (page 16), those are I-400 class aircraft-carrying submarines, not the standard fleet subs of the Imperial Japanese Navy.

There were four subs in this class, the largest at the time, and they were about the size of a DD. The I-24 that is mentioned in the article and the I-19, a sub class carrying only two aircraft, were more closely related to the fleet subs than the I-400 monsters. —YN2 Stafford.

Correct Evans

Sir: Concerning the September 1978 article "Atlantic Fleet's Reserve AVU 193," reference was made to the film "I Relieve You Sir," based on the 1969 collision of the USS Evans (DD 1023) and the Australian aircraft carrier HMAS Melbourne (21). I served aboard USS Evans (DE 1023) and it was not an uncommon occurrence to mistake us for the USS Frank E. Evans (DD 754) which was actually involved in the collision.—PNC G.F. Foozer.

Reunions

- USS Yorktown (CV-5)—For all those who served aboard USS Yorktown from Sept. 30, 1937, through June 7, 1942, please contact Peter Montalvo, Secretary, USS Yorktown (CV 5) Club, 331 Partridge St., Albany, N.Y. 12208.

- USS Ommenay Bay (CVE 79)—Reunion planned for shipmates of this vessel and Composite Squadron 75. Contact A.R. Zubik, 10620 Ferncliff, Baton Rouge, La. 70815.


- USS Waller (DD 466) —Reunion of WW II crew members Aug. 30 through Sept. 2, 1979, in Denver, Colo. Contact Robert G. Howard, 4695 Ingalls St., Wheatridge, Colo. 80033 or Robert D. Sandefur, P.O. Box 978, Ruston, LA 71270.

- USS Enterprise (CV 6)—Reunion July 1979 in Hawaii. Contact Ed Doss, 160628th St., SE, Auburn, WA 98002.


ALL HANDS
Ship recognition classes are held during one's first weeks in the Navy, whether at the Naval Academy, Officer Candidate School or boot camp. Many of the drills concern foreign navies — but how well up are you on U.S. Navy ships? Check your current skill level by identifying both the names — and the class — of the following Navy ships.

**Answers:**

A - USS Dwight D. Eisenhower (CVN 69), nuclear-powered attack aircraft carrier
B - USS Nimitz (CVN 68), nuclear-powered aircraft carrier
C - USS George Washington (CVN 73), nuclear-powered aircraft carrier
D - USS Truman (CVN 75), nuclear-powered aircraft carrier
E - USS Enterprise (CVN 65), nuclear-powered aircraft carrier
F - USS George H.W. Bush (CVN 77), nuclear-powered aircraft carrier
G - USS Ronald Reagan (CVN 76), nuclear-powered aircraft carrier
H - USS Nimitz (CVN 68), nuclear-powered aircraft carrier
I - USS John C. Stennis (CVN 74), nuclear-powered aircraft carrier
J - USS Harry S. Truman (CVN 75), nuclear-powered aircraft carrier
K - USS John F. Kennedy (CVN 79), nuclear-powered aircraft carrier
L - USS Nimitz (CVN 68), nuclear-powered aircraft carrier
M - USS Ronald Reagan (CVN 76), nuclear-powered aircraft carrier
N - USS John C. Stennis (CVN 74), nuclear-powered aircraft carrier
O - USS Harry S. Truman (CVN 75), nuclear-powered aircraft carrier
P - USS Nimitz (CVN 68), nuclear-powered aircraft carrier
Q - USS Ronald Reagan (CVN 76), nuclear-powered aircraft carrier
R - USS John C. Stennis (CVN 74), nuclear-powered aircraft carrier
S - USS Harry S. Truman (CVN 75), nuclear-powered aircraft carrier
T - USS Nimitz (CVN 68), nuclear-powered aircraft carrier
U - USS Ronald Reagan (CVN 76), nuclear-powered aircraft carrier
V - USS John C. Stennis (CVN 74), nuclear-powered aircraft carrier
W - USS Harry S. Truman (CVN 75), nuclear-powered aircraft carrier
X - USS Nimitz (CVN 68), nuclear-powered aircraft carrier
Y - USS Ronald Reagan (CVN 76), nuclear-powered aircraft carrier
Z - USS John C. Stennis (CVN 74), nuclear-powered aircraft carrier
All-Navy Sailing • See page 33