

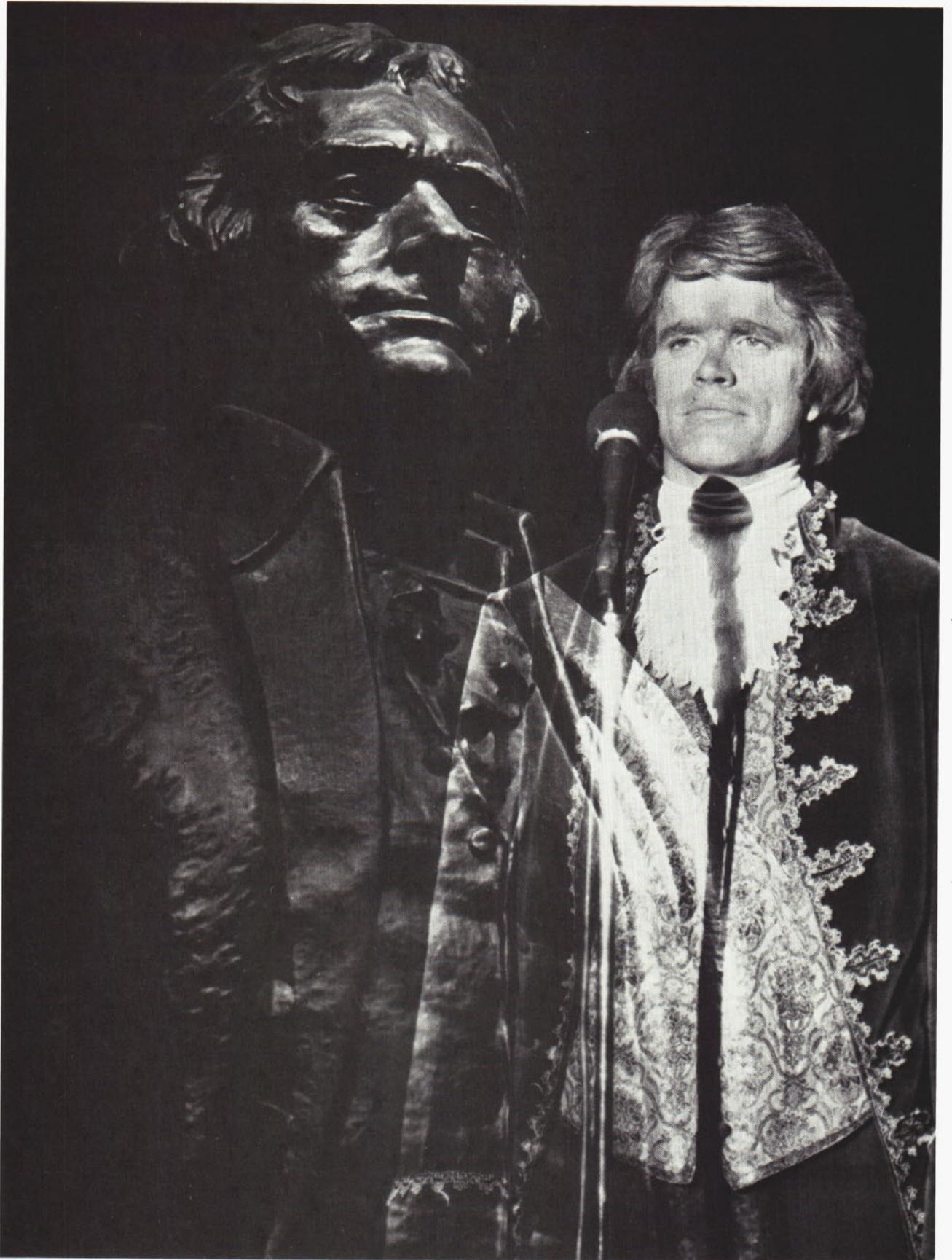
ALL HANDS

SEPTEMBER 1981



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Helos in the Navy
Fleet Turnover in Rota



Under the watchful eye of Thomas Jefferson, Robert Coles, fifth-generation great-grandson of Jefferson, recites his ancestor's "Testament to Education." The reading was in conjunction with the United States Navy Band's summer concert series performed at the foot of the Jefferson Memorial. Photo by PH2 Robert K. Hamilton.



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A *Sea King* (SH-3) during carrier flight operations as illustrated by DM2 Eugene Clark.

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Man on the



Bridge



Commanding Officer. Captain. Skipper. Old Man. The Boss. Sweet Old Bob.

His names are legion. As a member of his crew, you have formed your own opinion: Regular guy. Fair person. Works well under pressure. Poor listener. Only pays attention to officers. A real SOB.

Whatever your judgment, the Man on the Bridge is one person you are not: He's the one who's held accountable for the ship and its entire crew. That fact makes a big difference. It makes his job lonesome and his decisions critical.

Especially during combat, when the stakes are highest, a bad decision could destroy the ship and everyone aboard in less than an instant. If that should happen, he still will be held accountable.

He can't blame his mistakes on others or take charge only on the good days. The Man on the Bridge is the one who must always respond to the challenge of command.

Aboard the destroyer USS *Arthur W. Radford* (DD 968), Commander Will King is the Man on the Bridge at 6 a.m. As the rising red dawn separates the grayness of sea from the grayness of sky, he sits in his chair with a cup of coffee and reads the morning message traffic. *Radford* is returning to Norfolk, Va., after visiting countries in South America and in West Africa. King has scanned the last message and glances at the horizon, rose-colored by now.

Sometimes, during these quiet moments on the bridge before the plan of the day really unfolds, King thinks about his wife and three daughters. Yes, he misses them and is anxious to go home again. But his duty is at sea

Commander Will King on the bridge of USS Arthur W. Radford (DD 968).

Man on the Bridge

aboard this ship. And as far as the Navy's concerned, there's nowhere else he'd rather be. "That doesn't mean I wouldn't want to command a larger ship or a squadron, but when I'm on the bridge at sunrise, it's like nothing else in the entire world."

King has seen ocean sunrises as an officer and enlisted man for more than 18 years. Soon, he will be promoted to captain, achieving one more goal in a naval career he considers to have been full of luck. Being the skipper of *Radford* is his latest stroke of good fortune. Being in charge of *anything* that floats, he believes, is fantastic.

Later that same morning, King is still on the bridge. His gun crews are

ready to test fire both of the ship's 5-inch guns. The CO and XO go over a pre-firing checkoff list: Pass bore plug gauge, check firing cutouts, check gas ejection air, ensure radio antennas on fantail lowered, etc.

Over his shoulder, King asks the OOD for an update on the position of a contact about 14 miles off the port bow. He's not satisfied with the answer he gets and tells him to check again.

For King, command means more than just leading. "It means to manage in an effective way. Our business is to be prepared to conduct combat operations, so the command always has to be ready. To command means to ensure that we're ready and able to conduct combat operations at all times."

That's a tall order. To carry it out, King has to be well-acquainted with the capabilities of his ship, other U.S. ships, allied vessels and potential ene-

mies. One very important aspect of command is making the right *tactical* decisions, using a ship's capabilities to their fullest when necessary. And to figure out precisely when "necessary" is, King has to be well-informed all the time. A tactical decision made in ignorance may well be his last.

Radford's announcing system barks general quarters. The message has been hackneyed by low-budget war films with excessive footage of victories at sea. Yet the effect it has on the crew is still the same. General quarters means combat potential.

Combat is what *Radford* is all about. Combat is what the Man on the Bridge is all about.

"Captain, request batteries released."

"Have we notified the *Conyngham* on channel 16?"

"Yes, sir, we have." Five rounds of

Helo takeoff: One of King's personal maxims is to be on the bridge during flight operations.



single fire will be followed by five rounds of rapid fire from MT 51, then aft from MT 52.

"Batteries released," and the CO blinks along with everyone else on board as the forward turret fires; it's a sound that always comes as a violent surprise to the senses, no matter how often you've heard it.

The captain watches distant, dark bursts of smoke dot the sky. "We were just steaming down a river in the southern part of Vietnam the first time I came under fire. I was scared to death." At the time, King was a lieutenant and skipper of a patrol boat—one of hundreds that plied those waterways.

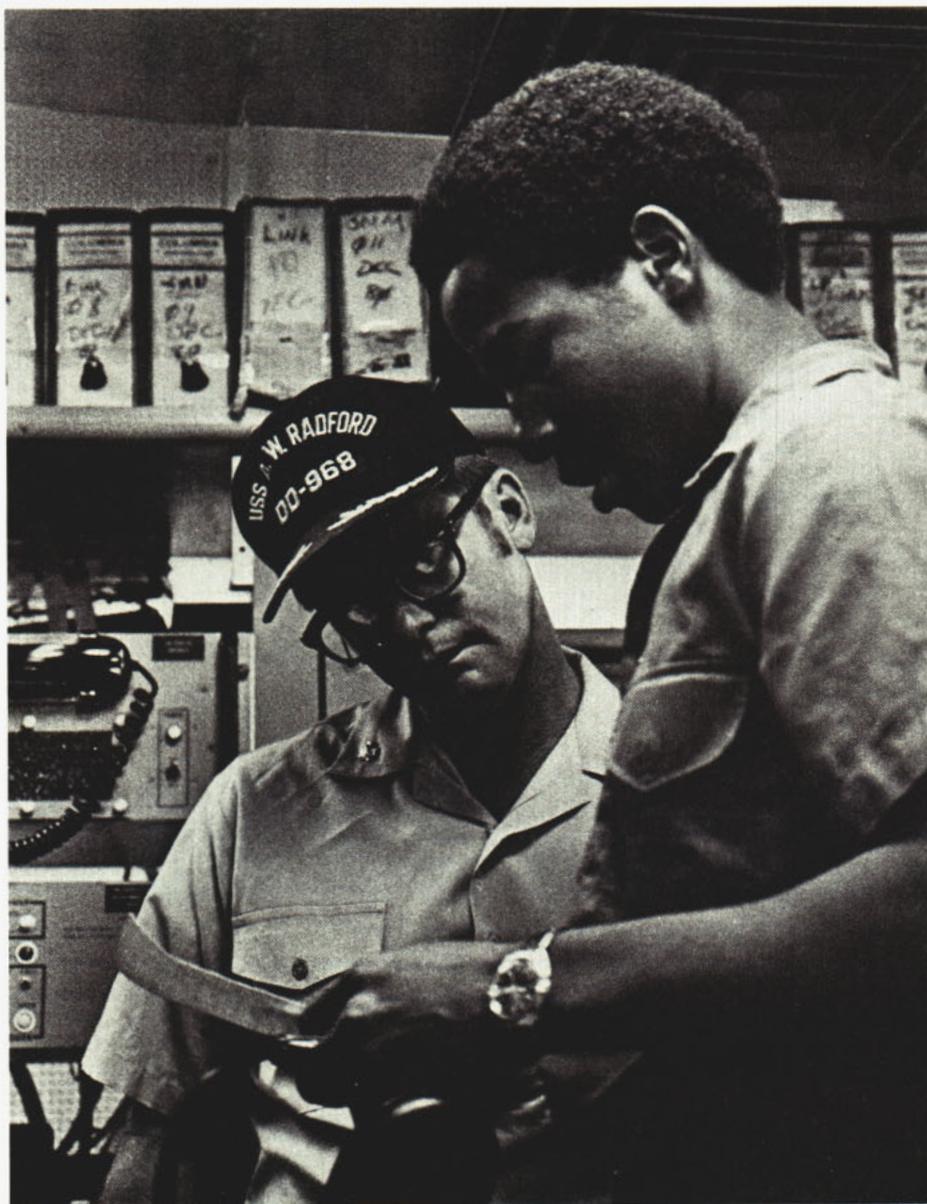
"There were some B-40 rocket launchers set up in the roots of some trees along the riverbank; one of my gunners alertly spotted them and called out a warning. We increased speed, because to back up at that point would probably have put us at a dead stop right in the line of fire. The rockets were fired, but they all missed. And of course we returned fire—it all happened very quickly."

During Vietnam, King didn't think much about whether he would make it through the war; he just thought about an enemy on the riverbanks—and thought about doing his job as well as he possibly could.

After the gunnery exercise, the captain leaves the bridge and heads for his sea cabin. While *Radford* is under way, he's almost always in one of three places: bridge, sea cabin or combat information center.

In his cabin, he meets briefly with the XO. They talk about personnel transfers and how they will affect the operational capabilities of the destroyer. At the same time, King jots a quick note to himself on a yellow legal pad: "Don't forget A Division quarters tomorrow."

The executive officer runs the routine of the ship, and King likes it that way. "When I was XO, that's the way it worked," he says and is out the door and back in the passageway, en route to a zone inspection. It's an administrative concern that he wouldn't think



twice about under battle conditions.

A teletype barks in the corner of a workspace on the 0-2 level as the skipper begins inspection. Air conditioners hum—they always do. Sailors stand at attention and watch their CO crane his head around the equipment for which they are responsible.

Zone inspections. Are they just a ritual? Perhaps in part, but they are also much more; they are another facet of that huge beast named accountability. They almost always succeed in finding out who hasn't been doing his job and for how long.

And they always make seamen fresh out of boot camp hope to high heaven

Zone inspection: Along with the ritual goes the understanding that everyone on board is accountable for some part of the ship's operation.

that the Old Man doesn't single them out to answer a question. Any question.

"Whose is this?" King chuckles. He pulls a body-building magazine out from behind a desk. The cover features a massively-built, leopardskin-clad muscleman hoisting a large ivory tusk into the air. The headline reads: "Juggernaut reveals Secret of How he out-pulled Two Elephants!" And lived to tell about it, no less.

Everyone in the compartment shifts

Man on the Bridge

weight from one foot to the other and pretends he never saw the magazine before in his life. Someone goofed, but it's a piece of gear adrift the skipper will probably laugh about later.

King looks over the preventive maintenance schedule for a piece of equipment. "Now explain to me just exactly what you did," he asks a seaman standing nearby. The E3 at parade rest looks the skipper in the eye and tells him exactly what type of preventive maintenance he just performed.

"OK," says King, "show me what you did on this piece over here." And the sailor does. "All right, sounds like you did a good job. I'd say that the current state of preservation is excellent. Next compartment."

Check the red and white lights in the passageway, squirt the scuttlebutt, look at the overhead pipes for any trace of condensation. Negative.

Fan Room No. 02-247-2: water all over the deck. That's unsatisfactory in anyone's book. And the sailors in charge of that fan room are responsible for its condition, even though nothing can be done about the problem until *Radford* goes into overhaul. Hmmm, it's that accountability animal again.

Stuck onto a filing cabinet in another workspace is a sign: "Think *Radford*." The skipper gets on top of the cabinet and inspects the overhead. "This is the cleanest zerk fitting I've ever seen in my life. . . But I can't say the same for the cable leading to it."

He sweeps his hand across the cable and a line of greasy residue falls to the deck. Someone starts to make an excuse as King jumps back down. He smiles at the E5 and raises both hands into the air. "Tell that to the judge." Zone inspection ends.

King isn't sure what the crew thinks about him; he hopes they consider him to be a fair leader and effective commanding officer. One thing he does is to make sure the crew knows his policy on violations so that penalties will come as no surprise.

Basically, King doesn't like what any other CO doesn't: disobedience, disrespect, negligence and the like. He's pretty tough on drug abuse and possession. "Ask anyone on board what I think about illegal drugs, and he'll tell you that I come down hard on violators."

A sampling of the crew verified that statement as a fact of life aboard the destroyer. Some crewmen find several of King's policies distasteful—evidence that they *do* know what to expect if they break the rules. But most of them agree that King is a fair skipper—an

officer who carefully listens when his men speak. They like that characteristic.

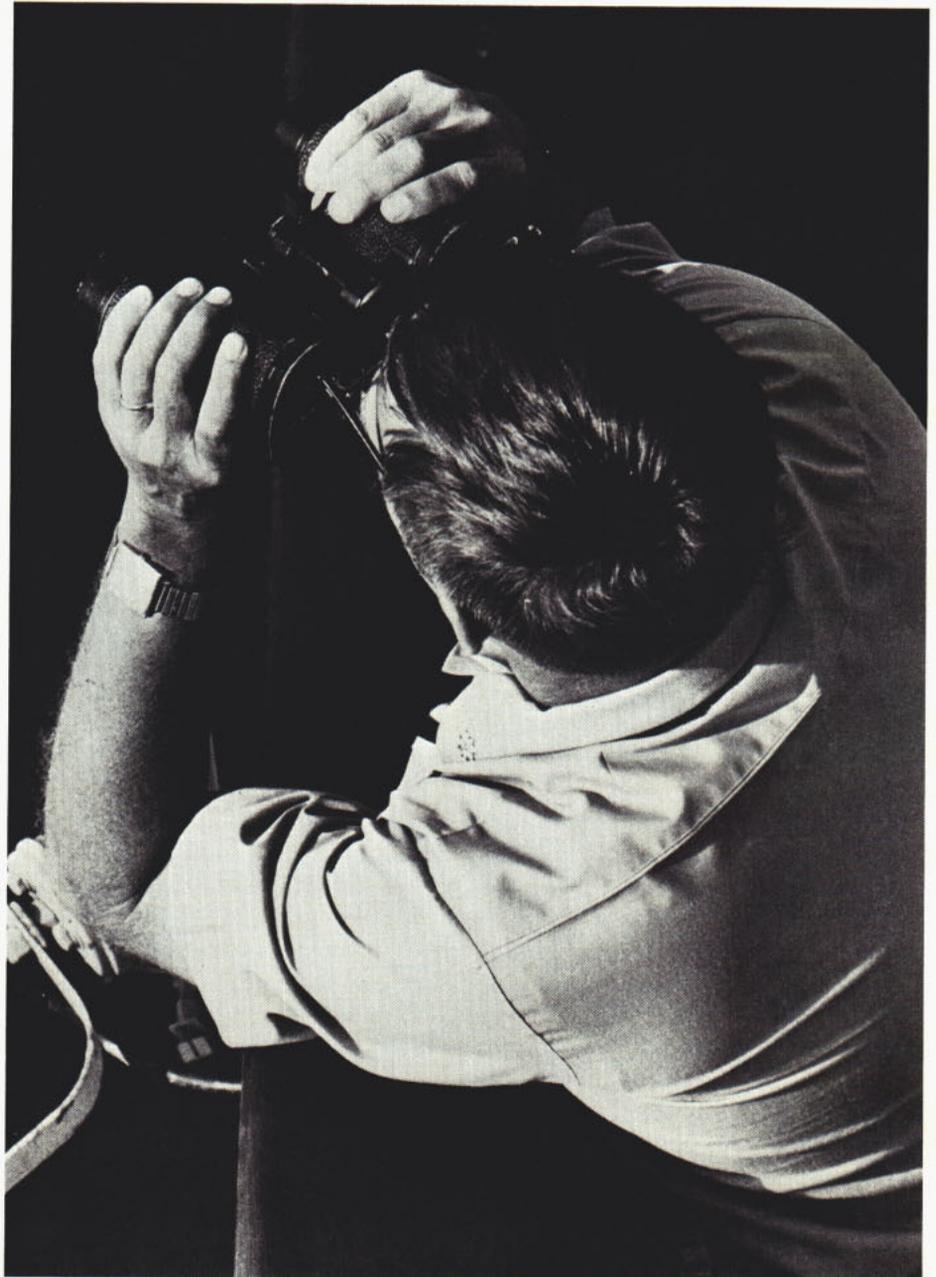
On his way to a post-inspection critique in the wardroom, King is stopped by an ensign in a flightsuit. "Excuse me, captain. Request permission to delay flight quarters for 40 minutes."

"Why?"

"We can't find a screwdriver, sir."

"It takes 40 minutes to find a screwdriver?"

"That's what's been requested, sir. Uh, captain, it's a very *small* screwdriver."



Through the binoculars: To make proper tactical decisions, the skipper has to be well-informed.

That quip produces a grin on the skipper's face. "You'd better go and find it, then." He goes up a ladder. Flight quarters will be late today; someone has misplaced a screwdriver and no one wants to see it end up in the helicopter's jet intake.

As he moves toward the wardroom, King talks a bit about his career:

"I know a lot of officers who grew up with the constant thought, 'I want to be in the Navy, I want to be in the Navy. . . .' Their desires lay in that direction since childhood. I came into the Navy almost by accident, and I never made the Navy a career by design—it just turned out to be that way.

"Once I got to sea, I really started to enjoy it. One of the first things I did as an ensign aboard a minesweeper was to get the ship under way. I did that with moderate success—didn't bump into anything, and on top of that it was downright *fun*.

"Later, I was XO of a ship for six months when I was only a lieutenant junior grade. I learned a lot in a very short period of time. Probably learned bigger hunks of things each day during that time than I have since.

"And I'm sure the big reason I've stayed in the service is the fact that I've always been lucky enough to work with outstanding commanding officers. Sometimes, I still use them as role models. I'll be in a situation and think, 'Let's see, what would good ol' so-and-so do in a case like this?'"

King pushes through the wardroom door long enough to glimpse a roomful of division officers and department heads when flight quarters is sounded.

Someone found the screwdriver.

The skipper immediately reverses direction and scurries off to the bridge. His officers aren't at all surprised. They've seen him do this before. The captain has several personal standing orders. One of them is to be on the bridge during flight quarters. It's the best place for a commanding officer to be if something goes wrong.

The destroyer's SH-2 *Seasprite* helicopter—nicknamed "Green Chicken"—takes off without mishap. Flight quarters lasts through lunch into late

afternoon, but that doesn't faze King. He eats neither breakfast nor lunch.

Not long after the Green Chicken's engines shut down on the flight deck, the crew knocks off ship's work at the end of the day and heads aft for a barbecue on the fantail. Soon, sailors are sitting in a circle underneath the AS-ROC launcher, munching on hot dogs and potato chips. War and peace. The sun edges nearer to the ocean, promising a beautiful close to another day at sea.

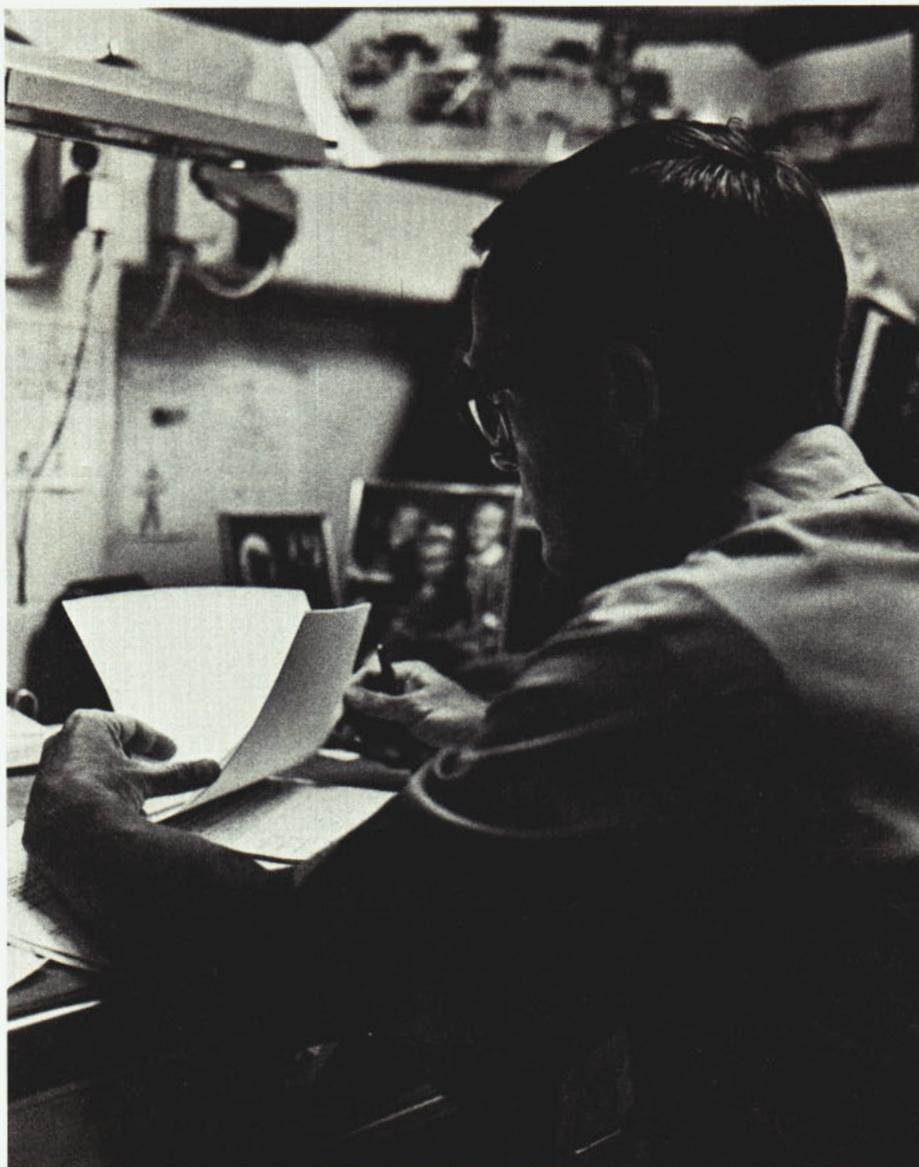
Meanwhile, CO King has another meeting to attend. This one is a lot more important than the post-inspection critique. This one concerns the destroyer's coming overhaul period.

A smaller, more essential group of King's officers is assembled in the wardroom as the skipper takes his seat. "All right, do we start at the top, or do we start at the bottom?"

He's answered with about eight different degrees of levity that create a brief brouhaha. Plaques decorate the bulkheads, along with several nautical items: harpoon, ship's wheel and ship's bell mounted against wood paneling. A few feet away, the Atlantic swirls beneath *Radford's* hull.

King's XO concentrates on the

Solitude: When he's not on the bridge or in the combat information center, the CO is in his sea cabin—where paperwork usually waits.



Man on the Bridge

computer printout of the ship's projected overhaul schedule. Each department head has a duplicate. The problem being thrown around is semantical in nature: What do we call the officer in charge of this overhaul?

A junior officer jokes, "Why don't we just decide who the person is and then let him choose his own title?" The skipper offers a more tenable suggestion, and his officers, as if with one hand, make a notation on the printouts. This is called following orders.

The engineering officer speaks up. "So my suggestion is to divide up the responsibility between this..."

King is a commanding officer who relies heavily on his subordinates. He sees no good reason why he should try to take care of *Radford* all by himself. He even keeps his changes to prepared correspondence to a minimum.

While his staff officers hash out several issues involving the overhaul, King listens and adds his own comments. His way of communicating is calm and

methodical. No beating around the bush, yet no antagonism or condescension either. Controlled voice without tension. Listening to a junior officer talk about habitability, King holds his ball cap loosely; embroidered on its back, in golden thread, are the letters "CO."

"As long as one of my officers does his job correctly, then the best decision I can make is to stay quiet. Leave him alone. He's well-trained and knows what he's doing. I'm there for him to turn to, but I'm inclined to rely on the expertise of my officers for almost every aspect of commanding this ship."

He stretches and addresses the others. "OK, I think we've got the job descriptions settled. Now let's go back and decide who's going to be what."

"Sir, the one job we haven't settled on yet..."

"We haven't settled on any of them. These are only recommendations."

Thirty minutes of recommendations later, the meeting ends. It's only one of

many that will be held to decide *Radford's* fate in dry dock. The printouts have been heavily edited and don't appear quite so uniform anymore. The captain looks a bit weary as he thanks the group and slips out of the wardroom.

Back to the sea cabin, but not for rest. Not yet. There's paperwork on his desk just dying to be looked at—can't be put off. Without paperwork, the ship wouldn't be worth the metal it was made of. King settles down at his desk.

The room's decor gives clues about the captain's personal interests. On the desk is an assortment of family photos. A copy of *Newsweek* lies open on a table. Also a book: "228 Tennis Tips." Another magazine announces on its cover, "Special Issue—Brazil Today."

Above the couch are stacks of cassette tapes. The Ray Conniff Album, Anne Murray's Greatest Hits,

Conference: This ship's captain has a command philosophy; if somebody knows the job and does it well, then let him be.



Neil Diamond, Beethoven.

The salts of old had to make do with sea chanties—monaurel ones at that.

While King looks over a draft of a message to be sent out next morning, there's a knock at his door. A yeoman enters and places a stack of paper in the skipper's box. He quietly leaves.

King is one commanding officer who doesn't subscribe to an "open door" policy. That isn't because he doesn't like talking to people—he does. But he has watched the chain of command operate for 18 years and feels it's still the best way to get things done. Anyone can see him, but the request must be via the chain of command. "This has the advantage of letting everyone in the chain know clearly that an individual is experiencing a problem. And it lets that problem be solved, in most cases, before it reaches me."

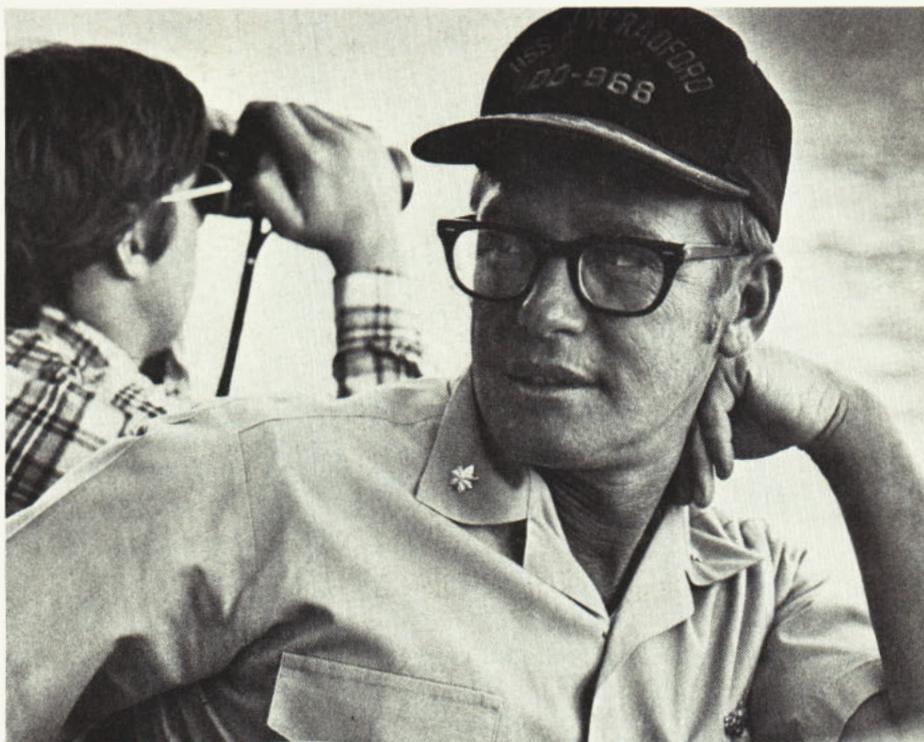
He doesn't think an open door coexists with an effective chain of command. Still, King admits there are times when something indeed goes wrong with the chain, and he must take corrective action.

"The majority of people who come to see me are simply frustrated. No one's been able to help them, and they're not in a position to help themselves. So I try to listen very carefully and help them organize their own thoughts. Together, we spell out possible solutions."

One course of action the captain never recommends is violation of the Uniform Code of Military Justice. Unfortunately, it's an alternative that crew members choose from time to time. When this happens, King is the one who must award non-judicial punishment.

It's a time when he doesn't like being Man on the Bridge.

"There's nothing uplifting about a captain's mast—it's downright disappointing. You know, I've got such an outstanding crew that, on those rare occasions when a fellow just flagrantly breaks the rules and has to show up at captain's mast, it ruins my whole day. Ask my exec or department heads. They know enough not to come around me before captain's mast or several



hours afterwards. They know I'll be in foul humor."

But a commanding officer can't turn over the unpleasant parts of his job to someone else. He can't say, "Call me when it's over so I can be in charge again." Unlike many other positions cloaked in vague responsibilities and ambiguous authority, a CO is a CO is a CO. You either are or you aren't; there's no loophole or gray area in which to hide.

Disappointments at captain's mast aren't enough to make King want to quit his job—it's just too rewarding. For instance, one outstanding benefit is being able to watch the professional development of his officers and crew as they become more responsible and mature individuals.

"Particularly the younger enlisted people," King says, "the ones who come aboard right out of high school. They stumble around in the dark for a while, then all of a sudden they take charge and take off like a rocket. Really start changing. If I'm responsible for that change of attitude in any way through my exercise of command, it's one of the most fulfilling aspects of this job.

"Another major aspect is being on a

Dependents' cruise: "When I'm on the bridge at sunrise, it's like nothing else in the entire world."

ship at sea and watching it perform the way it was intended—especially in a hot and heavy wartime environment. Every ship has a personality, and to feel it as a vital, living thing is a tremendously exciting experience."

Observing two vital elements working together—ship and crew—as they were meant: That is the excitement of command. The responsibility is always there, but so is the pleasure of seeing it all fall into place.

The skipper finishes his paperwork just as the clock hits 2300. King puts down his pencil and watches as it slowly rolls across the desk. The seas have picked up a bit since dusk.

Later, on the bridge, the helmsman steers *Radford* as the OOD looks on. If necessary, King would be back on the bridge in seconds. But for the moment, everything is routine and there is no need to disturb him.

Early in the morning, the skipper will be on the bridge to read message traffic and watch the sun rise.

He will continue the constant challenge of command.

—Story and photos by JOI P.M. Callaghan

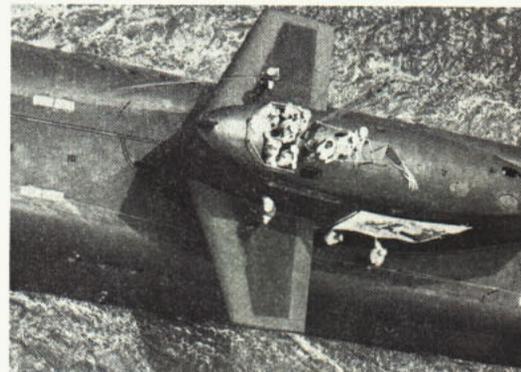
SSBN Force Marks 2,000th Patrol

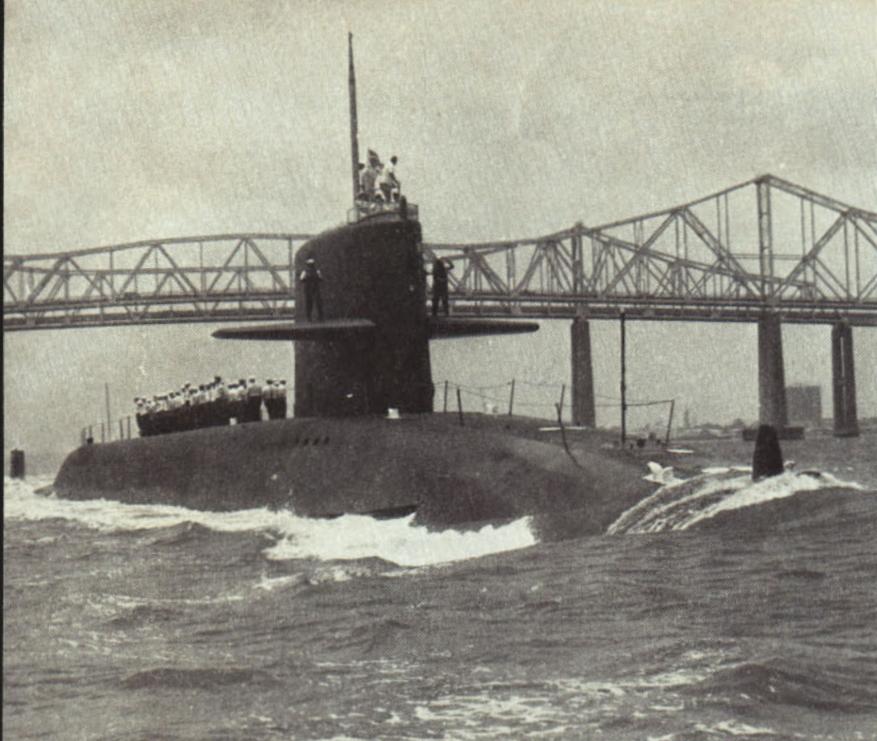
As USS *James K. Polk's* (SSBN 645) black, streamlined hull sliced through the Charleston, S.C., waters making way for Wharf Alpha, more than 1,000 onlookers joyfully voiced their welcome. After 60 days at sea, *Polk's* 49th patrol was over. Home once again. And, homecomings always create fanfare.

But it wasn't just another deployment completed by the Gold Crew, or just another homecoming. *Polk* was

winding up the 2,000th patrol made by the fleet ballistic missile submarine force since its inception in 1960 when USS *George Washington* (SSBN 598) departed on its first patrol.

The returning 425-foot vessel represented the nation's original 41 ballistic missile submarines, which have chalked up more than 100,000 days or more than 275 years of undersea patrolling since *Washington* was launched.



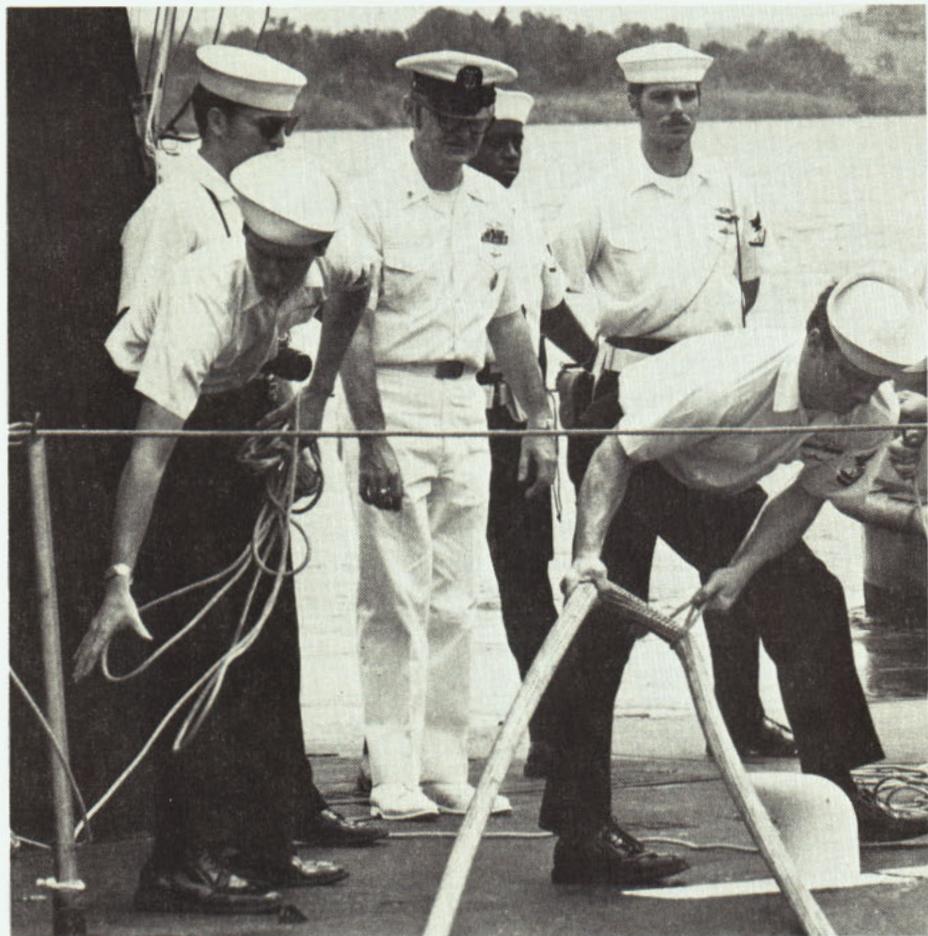


And, while *Polk* was making headlines across the country, its homecoming was also calling attention to the advances in the Navy's submarine force—notably the second sea trial of the largest submarine constructed to date, the 18,500-ton USS *Ohio* (SSBN 726).

Ohio's first sea tests were successful and highlighted the continued improvement in the sea-based leg of the nuclear triad, a three-part deployment plan which includes land, sea and air-launched nuclear weapons.

Trident-class Ohio will carry 24 C-4 *Trident* missiles. *Polk* originally carried 16 *Polaris* missiles but is now armed with *Tridents*. The majority of FBMs have been converted to carry either *Poseidon* or *Trident* missiles.

Though the United States' submarine construction program is on the increase, the Navy needs 20 to 30 percent more submariners to provide a better balance between time at sea and



ashore, according to Vice Admiral Steven A. White, Commander Atlantic Fleet Submarine Force.

—Story by JO2 J.D. Leipold
—Photos by PH2 Johnny S. Adkins
and PH2 Deanna L. Quillin

Proud crew members of USS James K. Polk (SSBN 645) bring their submarine home to Charleston, S.C., from its 49th patrol, marking it as the 2,000th deterrent patrol by fleet ballistic missile submarines.

Rota Serves the Fleet

Nestled in the Bay of Cadiz is a land of oranges, olives, horses and sherry; it's known to U.S. sailors as Rota. Its whitewashed walls, red tile roofs and narrow streets lined with palms and pines are typical of the region of Spain called Andalucia. It's a region which provides a relaxing and pleasant lifestyle for Navy men and women assigned to the U.S. Naval Station Rota and its tenant commands.

Andalucia provides some of the best liberty the Navy has to offer for the 8,000 U.S. military people, Department of Defense civilians and their dependents who live at Rota. Rich in history, the region claims architectural remains reminiscent of the Romans and Moors. The area offers entertainment ranging from lively, colorful flamenco dancing to impressive religious ceremonies and city fairs called "ferias."

Within a few hours drive of the naval station are cities and villages whose names alone conjure up the legends and the spirit of Andalucia. Towns such as Seville, Puerto de Santa Maria, Cordoba, Jerez de la Frontera, Granada and Arcos lend their names to history.

A Spanish navy installation under the command of a Spanish rear admiral, the naval station at Rota covers more than 6,000 acres just outside the city's walled perimeter. The town itself dates back 2,000 years to the days of

the Phoenicians. A small agricultural and fishing village, Rota's old quarter harmonizes with newly developed high-rise apartments and mile-long stretches of beaches.

Orientation to Rota and to Spain is relatively easy through the help of such activities as the sponsor program and the Overseas Diplomacy Orientation Training course. Hosted by Commander, U.S. Naval Activities Spain and taught by the Human Resources Management Detachment, ODOT gives newcomers a taste of what life

will be like in their new home. They visit local cathedrals, lunch "Spanish style" in a local restaurant and visit with Rota's mayor. A trip to the mercado or public market clearly shows the best way to buy fresh fruit, vegetables, meat and seafood on the economy.

The ODOT instructors, with assistance from department and tenant command representatives, ensure that students know where to find base services such as the housing office, the chapel, security and the Personnel Support Detachment.

Living off base on the economy offers a variety of lifestyles. There are apartments within walking distance of Rota's many beaches, chalets with flower-strewn balconies, and homes complete with fireplaces and courtyards. Telephones are rare, off-base TV is in Spanish and heating with butane gas heaters is common, but many people still prefer to remain "on the economy."

For those who choose on-base housing, more than 800 units with two, three and four bedrooms are available. "Old Base" homes are one story units of Spanish-style brick and masonry construction with covered carports between duplex units. In comparison,



A tug guides USS Truett (FF 1095) to a pier.



In Rota's picturesque harbor, sailors still have to paint the decks. But it's not "all work and no play" when they also can enjoy the sights and sounds of a Spanish fiesta.



Duty in Spain

"USA" housing consists of two-story prefabricated units with community parking lots.

The newly renovated unaccompanied personnel housing for officers and enlisted consists of about 170 units for officers and 1,350 for enlisted members. The on-base Navy Lodge, completed in 1980, has 22 rooms with kitchenettes available to newcomers and transients.

Naval Station Rota boasts on-base recreation nearly as varied and interesting as the landscape beyond its gates. More than 50 command-sponsored organizations offer a variety of activities for Rota people and their families. You can learn to lasso a calf or ride a cantankerous bronc with the Rota Rodeo Association, or shoot partridge with the Rod and Gun Club, a joint U.S. and Spanish organization. If your taste leans to the nautical, put to sea in a sailing sloop from Special Services—or maybe you prefer skiing in the Sierra Nevada mountains with the Rota Ski Club. More adventurous types may take to the sky with the Rota Flying Club.

Lured by the "roar of the grease-paint," Rota Little Theatre spices up the station's leisure life with the best in dinner theater productions. Out on the track the more athletic types will find camaraderie in the Rota Runners Club, whose members make good use of the year-round fair weather. Speech-makers and novices alike hone their speaking skills with the Rota Toastmasters.

Film buffs can choose between movies ranging from dramas or science fiction to westerns and comedies. There are about 20 showings weekly at three base clubs, the station theater and an outdoor drive-in theater.

American television is limited but the base's radio station, Navy Broadcasting Service Detachment 13, keeps people informed 24 hours a day with the latest in news, music, entertainment and command information.

The hat one wears at Rota can vary from military cover to "cap and gown." Five widely-known and accredited universities offer a wide varie-

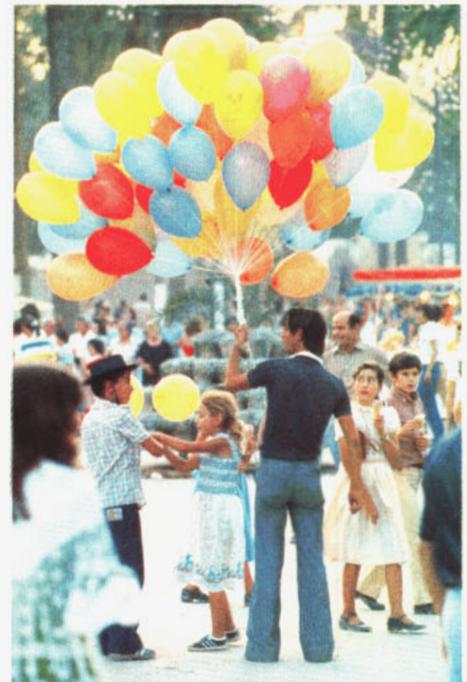


An American style rodeo—and colorful balloons—can be found at many a fair, but in Rota the flavor is definitely Spanish.

ty of courses with degrees in subjects from business or the arts to real estate and data processing. A local college also offers courses in such specialties as flamenco dancing, Spanish cooking and basic language training for those who wish to learn a bit more about the culture.

A full curriculum similar to that offered in schools in the United States is available for dependents at the David Glasgow Farragut elementary and high schools. An on-base child enrichment program and child care center, both sponsored by Special Services, are provided for youngsters under school age.

During peak spring and summer months, resorts on the coastline of southern Spain swell to five and six times their normal populations as wave after wave of sun-hungry tourists descend from Germany, Belgium, the Scandinavian countries and northern Spain. A nightly atmosphere of tapa-hopping and flamenco dancing prevails throughout the summer. Tapa-hopping is a popular form of off-duty entertainment; a Spanish version of hors



d' oeuvres, tapas are served at nearly every Spanish restaurant and cafe. The choices are varied and delicious and may consist of gambas ajillo (garlic shrimp), calamares (fried squid), pimientos (fried green peppers), a dish of Spanish olives and, of course, a glass of Spanish sherry.

Located about 18 miles from Rota is the world-renowned sherry-producing



Familiar sights in Spain: Cordoba's adobe structures glistening in the sun, a 2,000-year-old Roman aqueduct and a bullfight in southern Andalusia.



Duty in Spain

city of Jerez de la Frontera which is rich with vineyards as far as the eye can see. The "stomping of the grapes" really does occur during the annual September "Vendemia" festival. Rituals of this festival include the blessing of the first grapes of the harvest.

A 15-minute ride to nearby Puerto de Santa Maria will satisfy the seafood lover. Row upon row of sidewalk cafes offer fresh seafood and shellfish ready to peel and devour.

Farther beyond Rota's perimeters lie three more of the region's fascinating cities: Seville, Granada and Arcos de la Frontera. Seville, a tourist city, has commercial interests and great festivals which attract people from all over Spain. Granada, in the midst of the

snow-covered Sierra Nevada mountains, offers good ski slopes. It is well known for the Alhambra, a historical fortress, palace and city, all in one. Perched on top of a rock spike, Arcos de la Frontera has a spectacular view of

olive groves and the river Guadalete.

This and much more is Andalucia, Rota and the U.S. naval station. A place where the quality of life abounds, it's a beautiful place to live and a great place to work.



The Alhambra, famous ancient palace of the Moorish kings, overlooks Granada. It may be one of the sights these visiting chaplains will take in when they set out to tour Andalucia.



Last Stop for Fuel

It takes flour, brown sugar, butter, cinnamon and fresh apples to make an apple turnover. But it takes much more to put together a fleet turnover. The Navy men and women at U.S. Naval Station Rota, Spain, are turnover experts; they handle eight or nine major fleet evolutions each year.

A fleet turnover is the passing of responsibility, supplies and information from one battle group or destroyer or amphibious squadron to another. When a task force on deployment in the Mediterranean is ready to head home, their last stop before the trans-Atlantic run will probably be Rota.

While in Spain, these "out-choppers" will link up with the in-bound task force—called "in-choppers"—and transfer accumulated knowledge (and sea stories) as well as supplies, weapons and spare parts. The evolution, normally compressed into a 24- to 36-hour period, can involve as many as 16 to 20 ships. But it is the thousands of hours of preparation and hard work by Rota people that make the transition work.

The people of Rota are professionals all the way. Captain Render Crayton, Commander U.S. Naval Activities Spain and commanding officer of the station, is proud of the work his people do year-round. But he is especially pleased with their accomplishments during fleet turnovers. "These men and women realize the importance of



Port personnel are a study in teamwork.

Duty in Spain

their work and their commitment to support the fleet, and they take it seriously. In turn the fleet appreciates their efforts and their professionalism.

"During these critical turnovers," he added, "the men and women at Rota do an exceptional job, often under very difficult circumstances. They work long, hard hours and have

every reason to be proud of the jobs they do."

When a fleet turnover is scheduled, Naval Station Rota and its tenant commands gear up. Planning starts about three months before the turnover and almost all departments take part. Supplies must be ordered, aircraft and ground transfer equipment readied and

facilities prepared for the ships and their crews. Advance teams from the "in-choppers" and "out-choppers" arrive at Rota several days before the task forces to help with planning.

Turnover begins when the first ship arrives. The port services department, the first department to greet the incoming ships, coordinates all ship and small craft movements and berthing. During a typical turnover involving 16 ships, about 35 tug-assisted ship movements can be the norm. In addition to guiding each ship in and out of port, the port services department must often rearrange berthing at the piers to allow for easier delivery of supplies, ammunition and fuel, and to fulfill particular ship requirements.

The efforts of the public works department are in evidence almost before a ship is berthed. Cranes position brows and load and off-load supplies. Phone, water and power lines are hooked up from pierside and huge dumpsters stand ready. Public works vehicles are provided for fleet units and on-base transportation is arranged for ships' crews.

The supply department plays one of the biggest roles in a fleet turnover. By the time ships arrive, the department has tons of supplies on hand for the "in-choppers." During a typical turnover the department will move 15,000 dozen eggs, 20,000 pounds of bread, 34,000 gallons of milk and 95,000 pounds of fresh fruits and vegetables. In some cases, this material moves to ships, courtesy of the air operations department. Helicopters from the naval station and from visiting ships haul supplies from pierside to ships or from ship to ship. During an average turnover, the naval station's three H-46 helicopters move 128,000 pounds of material per day.

Meanwhile, the fuel department transfers supplies of its own. Fueling the "in-choppers" and the "out-choppers" involves the transfer of as



Left: Fleet Marines take on the job of steam cleaning the fire hoses. Right: USS Saipan (LHA 2) prepares to dock.

much as 4 million gallons of fuel. An amphibious turnover requires more than 40 continuous hours of pumping fuel with many people taking only short breaks before returning to the pumps.

Transportation requirements for fleet personnel and the coordination for ferrying air freight from other bases in the Mediterranean area is the responsibility of the air terminal department. Special Services arranges tours and activities for visiting sailors and readies athletic equipment and playing fields for the huge influx of people. And the weapons department is usually very much in evidence overseeing the transfer of ammunition and acting as a temporary storage facility. Everybody pitches in.

Rota's central messes department assures that base clubs are ready to provide food, drink and entertainment for the visitors while the security de-

partment briefs incoming ships on local laws and provides shore patrol support. The Navy Exchange stocks up popular items and extends its operating hours to accommodate the visiting ships, while the disbursing office changes thousands of dollars into pesetas, the local currency, for shopping sprees in the Spanish community.

Many of the tenant commands are also part of a successful turnover. The Naval Communications Station provides message center service and information on communications procedures, and the Naval Oceanography Command Center briefs newcomers on the Mediterranean's sometimes capricious weather, seas and acoustic conditions. The calibration lab assists with equipment maintenance and on-the-job training while the Naval Legal Service Office detachment, naval hospital and dental clinic provide services of a different nature.

During this complex evolution, the population of the base swells from about 8,000 American military and civilian people to as many as 20,000.

The mission of the naval station at Rota is to provide service to the fleet. During a fleet turnover, most people on the base contribute to the accomplishment of that mission, and it is during these evolutions that the dedication of Rota people to fleet units is most clearly evident. Workloads jump to a peak, and work days are extended.

Fleet support becomes an obsession during turnovers. The entire base does its best to prepare "in-choppers" for their deployment and give the "out-choppers" the assistance they need to get home safely. The pride and professionalism of men and women at Rota shows in their service to the fleet.

—Photos by PHC Pat Wilkerson,
PH1 Ronald M. Wolf
and PH2 Jeffrey Willhelm.



An Ancient Tradition



As the words, "We commend the soul of our brother departed, and we commit his body to the deep," were read, onlookers must surely have thought of the abiding respect many people carry for the sea during their lifetimes.

Five times those words were repeated as the ashes of a retired Navy chief commissaryman and those of four others—former dependents—were committed during ceremonies conducted aboard the Naval Reserve Force ammunition ship USS *Pyro* (AE 24) early this summer.

A chill swept across the deck. An unseasonable wind made the small group of men standing at attention shiver as the lone bugler played taps.

While most Navy men and women are familiar with the rites of burial at sea, chances are that few have experienced this ritualistic ceremony. Descended from burials conducted at sea in the early days of Greece and Rome and later by the British navy, the ancient tradition of burial at sea is a mortal's final tribute to the awesomeness of the ocean.

Herman Melville recounted the dig-

nity of such a burial in the early 1800s in "White Jacket"—an account of his experiences aboard the USS *United States*. And, while the years have brought some regimentation to the ceremony, the dignity Melville wrote of was as overwhelming aboard *Pyro* as it must have been aboard Melville's USS *United States*.

Words can hardly convey the solemnity of the phrase, "Bury the dead," carried over a ship's announcing system at sea.

—Text and photos by JO1 Lon Cabot



Bearings

Nitromen at Work

Crew members from the ammunition ship USS *Nitro* (AE 23) recently volunteered for a community relations project which involved refurbishing a home for the elderly in Cartagena, Spain. When the call for assistance went out, more than 70 *Nitromen*—one quarter of the crew—responded for work on the three-day project.

Work began with the chipping and preservation of an old anchor and chain on display outside the home.



But it was not all work and no play while *Nitro* was in Cartagena. What started out as a little physical activity to get ready for the annual all hands fitness exam turned out to be a lot more.

Crew members plunged into athletic programs that included jogging, bicycling, scuba diving, and basketball and volleyball tournaments, complete with media coverage by the ship's newspaper and TV station. When a shortage of athletic gear was discovered, ingenious crewmen created a volleyball net from orange shotline and constructed a basketball goal and backboard.

Senior Enlisted Academy Opens

The Naval Education and Training Center, Newport, R.I., continues to grow with the addition of an eighth school this fall: the Senior Enlisted Academy.

Under the direction of Commander George A. Easley, the school is expected to have an annual enrollment of more than 200.

In response to one of the CNO's special objectives of 1981 to provide greater leadership training, the school's goal will be to train senior and master chief petty officers to assume greater managerial responsibility. The curriculum will include leadership and management, national and security affairs and interpersonal communication.

"We are going to be educating the elite senior and master chief petty officers," said Easley. "These men will leave the academy ready to take on greater leadership and management roles in the Navy."

Past professional performance and potential will be among the criteria for selection to the school. Senior chief petty officers must have less than 22 years of service and master chief petty officers less than 24 years of service, and they must be in the top 10 percent of their rating, Navywide, to apply. They also must have at least 18 months of obligated service following graduation.

The first two classes, convening Sept. 14, 1981, and Jan. 11, 1982, will be small pilot courses. A full class of 50-60 students will begin in March with the proven curriculum.

Initially, the students will attend classes in Sims Hall and be berthed in Edwards Hall on the NETC campus. A \$3.9 million project has been approved for fiscal year 1983 to construct a permanent facility for the school.

Most of the instructional staff at the SEA will be graduates of the Army

Sergeant Major Academy or the Senior Air Force Academy. Staff, as well as students, will be hand-picked for their leadership and management capabilities, as well as their instructional skills.



CNO Visits Med

During a recent two-day visit to USS *Forrestal* (CV 69) and nine other Sixth Fleet ships operating in the eastern Mediterranean, Chief of Naval Operations Admiral Thomas B. Hayward addressed thousands of Navymen, spoke personally with many of them, conducted question-answer sessions on many of the ships and re-enlisted 10 *Forrestal* crewmen.

Undeterred by the lack of an open landing deck on guided missile cruiser USS *Wainwright* (CG 28), the admiral used a helicopter hoist to get down to the deck. —Photo by JOSN Billie Wilson

The Patch Man

Most sailors are satisfied to collect one or two patches of their military units. Electronics Technician First Class Joseph L. Meredith, assigned to the Naval Support Activity Detachment, Gaeta, Italy, has gone a bit further. He owns a collection of some 10,000 different patches with a value of well over \$30,000.

Meredith's collection consists of patches of all sizes and shapes. Although his collection covers many different areas and countries, his special interest is World War I and II Army patches. Some patches have as many as 20 or more variations, ranging from color differences to changes in the names of units, and Meredith usually collects several different varieties for the same patch.

"A patch collection of military insignias is really a historical view of the military. One can see a unit's history just from the patches and changes in them that have taken place over the years," said Meredith.

"I started collecting patches in 1960,



when my mother gave me a box of some 30 or 40 she had saved from World War II. One of those patches really caught my eye, and I just started collecting them from there."

That patch was of the Alaskan Defense Command. According to Meredith, it is rare and sought by many collectors. "The reason for this is that the unit was in existence only for about six

ET1 Joseph L. Meredith leafs through one of his many books that he has filled with patches.

months before the name changed," he said.

What is the future for his collection? Meredith answered, "Getting more patches."

—Story and photo by PH1 Douglas Tesner

Milwaukee Thanks Brooklyn



The crew of USS *Milwaukee* (AOR 2) found a unique and lasting way to thank the people of Brooklyn, N.Y., during their ship's recent 10-month overhaul there. The sailors cleaned up a section of that borough's Prospect

Park, site of large playing fields and a national landmark close by downtown Brooklyn.

In November 1980, *Milwaukee* started a Dial-a-Sailor program to locate Brooklyn families who would invite a *Milwaukee* sailor for a holiday meal. The program captured the attention of citizens and media alike and was a rousing success. Sailors had to be "borrowed" from other ships in the shipyard (the old Brooklyn Navy Yard) to fill the invitations from the community. Even then, some invitations went unfilled.

In appreciation for the hospitality shown during their long yard period, *Milwaukee* sailors said "Thank you Brooklyn" by lending a hand to improve a section of Prospect Park.

Double Benefit

Navy recreation programs and services available to all Navy people got a big boost recently in the form of a check for \$1,051,520 presented to the Navy Central Recreation Fund. Commander, Naval Supply Systems Command, Rear Admiral E.A. Grinstead (SC), presented the check to Captain R.E. Morgan (SC), director of Naval Military Personnel Command recreation services division. This was the net profit from sales aboard 342 ships stores for the period October 1980 to January 1981.

By patronizing ships stores, fleet sailors earn a double benefit. They spend less money than they would pay on the outside, and they get back all the profits through the many recreation services offered by the Navy.

Bearings

Combat Rehearsal

Adventure in the Navy usually has to do with ships at sea, but Naval Mobile Construction Battalion 4 recently had a Navy adventure on land, complete with foxholes and M16 rifles.

About 350 Seabees of NMCB 4, deployed at Naval Station Rota, Spain, underwent a week of military training to increase individual combat skills and maintain a high state of readiness.

Since their inception in 1942, Seabees have defended what they have built. The eight active construction battalions left in the Navy conduct military training annually—both in the field and in the classroom.

During a five-day period, NMCB 4 held lectures on first aid, communication procedures, hand grenades, pyrotechnics and camouflage. Protective measures against nuclear, biological and chemical warfare were covered, along with the Military Code of Conduct, prisoner of war handling and a very realistic mines and booby trap course.

The third and fourth days of training were given over to defensive tactics, escape and evasion, and patrol and am-

bush techniques. The Seabees got in some firing practice with the M16 rifle, M60 machine gun, .45 pistol and M203 grenade launcher.

On the last day, NMCB 4 dug foxholes along the perimeter of a piece of ground they'd be defending that evening during a simulated battle.

The "fighting" officially began at 7:30 p.m. with Marines and selected members of the battalion's training department acting as aggressors. Live rounds were not fired, but an onlooker couldn't have known the difference, judging by the racket made over a period of four hours by all the shooting.

Fighting and foxholes were followed by hot showers and warm beds back in the Seabees' camp of Silver City.

For Seabees, such military training is a twice-yearly occurrence—once during home port and once during deployment. The emphasis on military preparedness never lets up. Captain G.D. Luzum, commanding officer of the battalion, said, "The European area reminds us of how especially critical it becomes for military units to stay prepared. Geography and the political state in and around the conti-



nent don't allow for leisurely decision-making, last-minute preparation or postponement of training until the need becomes urgent."

That's why field exercises like the one in Rota are so important; they play a key role in keeping the Seabees in a high state of combat readiness.

—By JO3 Jeff Wooddell

Mullinnix Men Honored

Massachusetts Governor Edward J. King (seated) honored three crewmen from the Navy destroyer USS *Mullinnix* (DD 944) for their assistance last February in evacuating a burning East Boston apartment and for helping the fire department quell the blaze. From left to right: Joseph Sanchez, a local businessman, Engineman First Class Daniel Sanders, Chief Boatswain's Mate Danny Qualls, Operations Specialist First Class Thomas James and Brigadier General John White. Sanders, Qualls and James received the Governor's Executive Citation, letters of commendation from the mayor of Boston, and citations from the American Legion and Air Force Association.



Holy Land Visit

The USS *Hermitage* (LSD 34) visited a port not often seen by U.S. sailors on a Mediterranean deployment—Haifa, Israel. It was a visit most will never forget.

More than half the crew of 400 sailors and embarked Marines participated in tours to nearby Holy Land sites. The opportunity to see Nazareth, the Sea of Galilee, Jerusalem, as well as Tel Aviv, and also artifacts and relics dating back to biblical times, was an unforgettable experience.

The sailors and Marines journeyed through the mountains of Carmel, where Haifa is located, to Nazareth and the famous Church of the Annunciation. They then journeyed to Tiber-

ious and on to the Sea of Galilee, where the *Hermitage* sightseers swam in historic waters.

While in Bethlehem, the sailortourists visited the Church of the Nativity—believed by many to be the site of Christ's birth.

The Wailing Wall and the Church of the Holy Sepulchre were two highlights of their visit to Jerusalem. Tours of the Citadel, Mount Moriah, the Mount of Olives and the Garden and Church of Gethsemane and shopping in the central marketplace were included in the Jerusalem visit.

Tours are available in almost every port Sixth Fleet ships visit. But for the *Hermitage* sailors, the visit to the Holy Land was a special one.

—By JO3 Lamar B. Baker

Best Messes

Selection as the Secretary of the Navy's Best Mess is the highest honor Navy clubs can achieve. The award, established in 1974, recognizes managers and employees of Navy clubs who demonstrate outstanding service to their patrons as well as professionalism within their field.

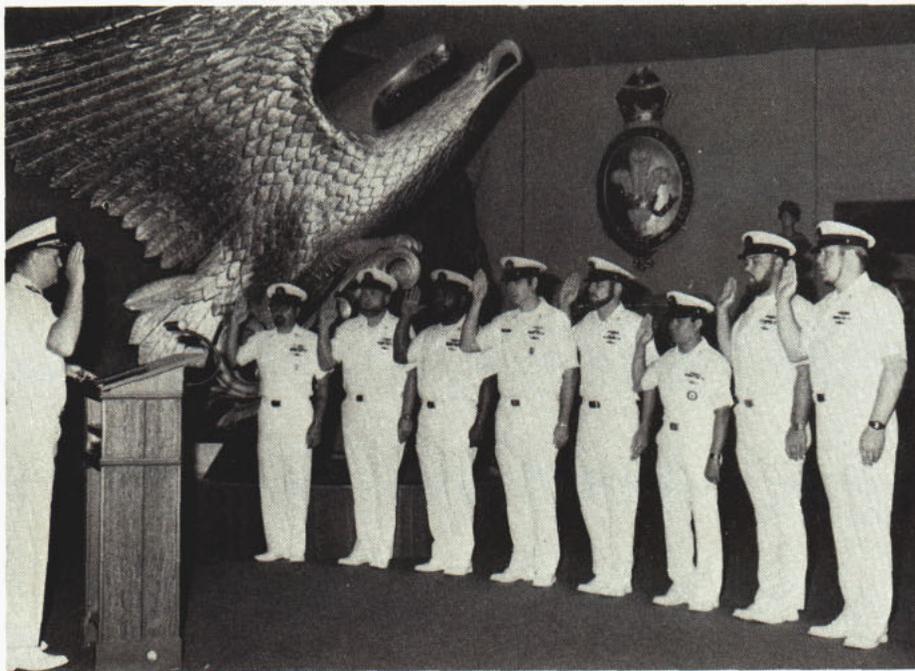
This year's winners were selected following an on-site evaluation by awards committee members of 17 nominated clubs. The Naval Station San Diego took top honors for the



SK3 Jennings from USS McKee (AS41) dishes up his salad, the beginning of a delicious lunch at San Diego's enlisted mess. Photo by PH2 Michael S. Darden.

large enlisted mess category for the fourth time. Naval Education and Training Center Newport, R.I., was a third-time winner of the chief petty officers' mess category.

Other winners were Naval Amphibious Base Coronado, Calif., Commissioned Officers' Mess; Naval Air Station Norfolk, Va., Petty Officers' Mess; Naval Security Group Activity Skaggs Island, Calif., for the small enlisted mess category; Naval Security Group Activity Winter Harbor, Maine, for the consolidated mess with facilities for officers and enlisted alike; and Commander Fleet Activities Yokosuka, Japan, for consolidated mess, separate facilities/annexes for officers and enlisted.



The "Lancaster" eagle at the Mariner's Museum in Newport News, Va., provided the background for the re-enlistment of eight submarine chief petty officers serving aboard USS *James Madison* (SSBN 627). The Commander Submarine Force, Atlantic Fleet, Vice Admiral Stephen A. White, administered the oath of enlistment.

The eight chiefs, who re-enlisted for

a total of 30 additional years of service, are (l-r): RCMC(SS) Salvatore A. Sangiorgio—*Madison's* chief of the boat, STSCS(SS) James H. Thomson, MMCS(SS) Lilton W. Davis Jr., MMC(SS) James C. Nevels, FTBC(SS) John A. Huck, MSC(SS) Rodolfo M. Kabaitan, MMC(SS) Michael W. Osborne and RMC(SS) Kenneth E. Tromsness.

It Still Takes Sailors

“And now the old ships and their men are gone; the new ships and new men . . . have taken up their watch on the stern and impartial sea, which offers no opportunities but to those who know how to grasp them with a ready hand and undaunted heart.”

Joseph Conrad

The author of “Lord Jim” could just as well have meant his words for the sailors and ships of today who daily take up their watch.

Two such ships and their crews are USS *John Hancock* (DD 981) and USS *Nicholson* (DD 982), *Spruance*-class destroyers that recently took up the watch with the Navy’s Sixth Fleet in the Mediterranean.

While many landlubbers know the Navy only as a mammoth aircraft carrier, a sleek destroyer or an ominous submarine, Navy people know that ships alone do not make a navy. It’s the sailors serving in them who make the crucial difference.

Today’s sailors are surrounded by sophisticated electronics and state-of-the-art technology. Nevertheless, the ancient seafaring crafts and chores of the tall ships still linger. There are lookout watches to stand, brass to polish and a ship’s deck to maintain. These and other seemingly endless chores greet the sailor every morning.

From engine room to bridge, the ancient seafaring skills can be found. A skilled quartermaster still knows how to plot the ship’s course with sextant and chart. And even though ships are equipped with up-to-date communications systems, signalmen still use flags to communicate with passing ships.

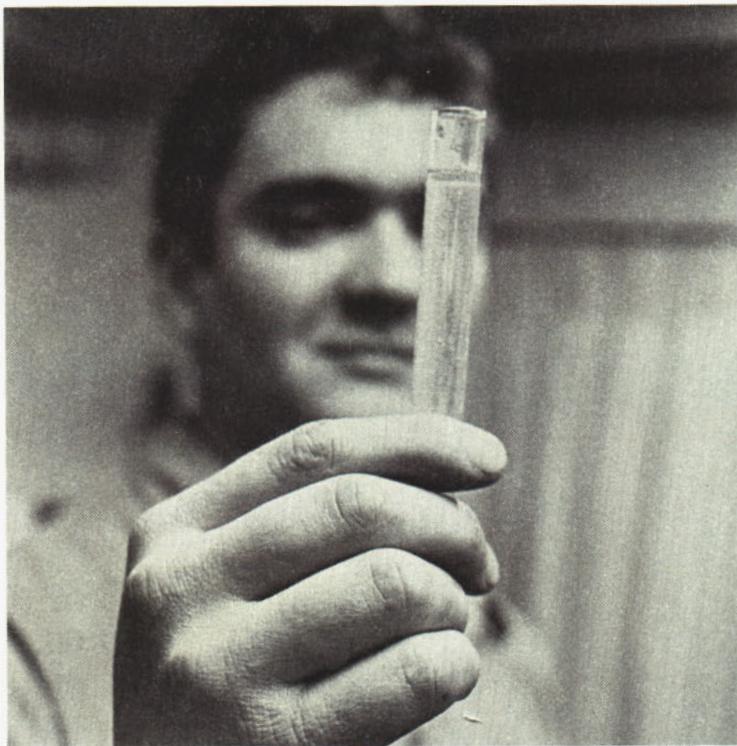
Many are the seafaring skills on which Navy pride and



professionalism are built. Modern sailors, with push-button consoles at their fingertips and modern technology at their command, are still eager to carry on the old traditions.

Some may ask why. Perhaps the photos on these pages can be the answer.

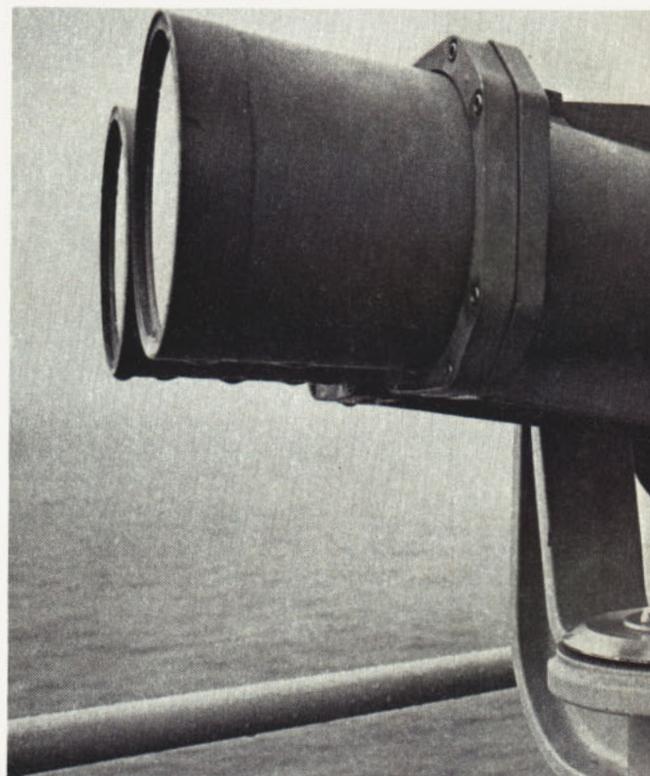
—Text by JOC James R. Giusti
—Photos by PHI Douglas Tesner

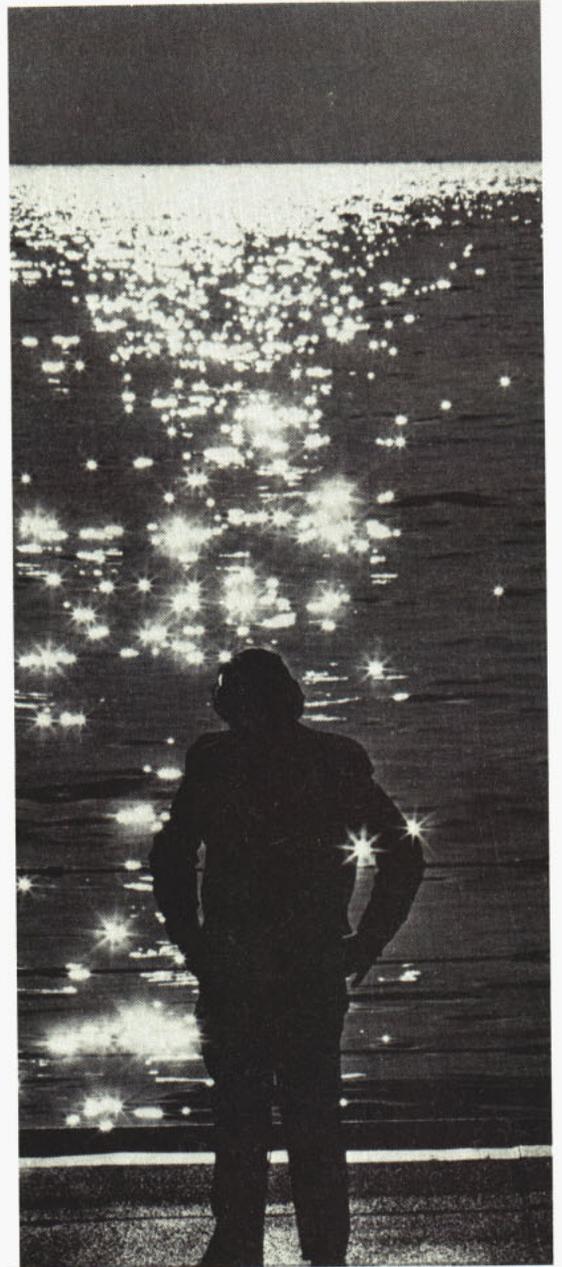
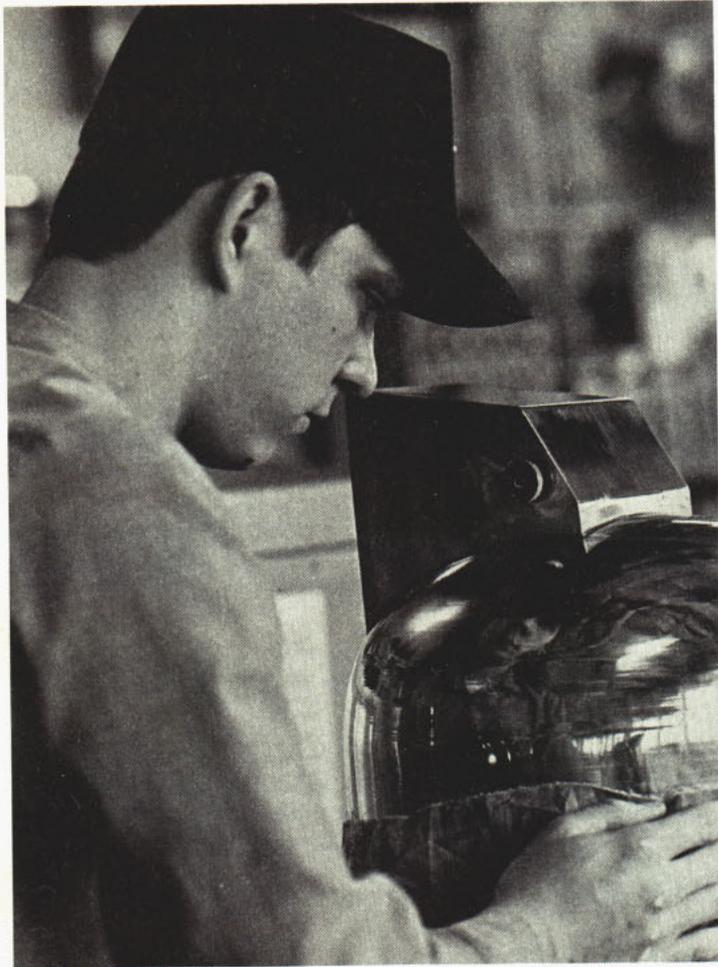


Top left: Hospital Corpsman Brian Bagat inspects a sample of Nicholson's fresh water. Top right: Signalman Second Class Ronald Fleming uses signal flags to communicate with a passing ship. Above: Flight deck crewmen on John Hancock refuel the ship's LAMPS helicopter. Left: Quartermaster Third Class David Churchill charts the position of Hancock while operating with the Sixth Fleet.

Sixth Fleet

Below: Sonar Technician Second Class Tommy Miller folds the flag following evening colors on board John Hancock. Right: Data Systems Technician Third Class Tim Russell operates one of Hancock's sophisticated computers.





Left: Seaman Apprentice Steven Green scans the horizon through Nicholson's "Big Eyes," the ship's high-powered binoculars. Top left: Quartermaster Third Class Michael Winger exerts a little extra effort in polishing the magnetic compass on Hancock's bridge. Above: Like thousands of others before him, a seaman on board Hancock stands the after lookout.

Lemoore's \$40

"Conveniently located home with four bedrooms, two baths, fully carpeted, central air and heat, new paint inside and out, landscaped yard with 16 deciduous trees, automatic sprinklers and a fenced-in backyard."

Doesn't sound much like base housing, does it? But Nancy Heath, who has lived in military housing units all her life, says it is the nicest she has ever seen.

Nancy and her husband, Chief Hospital Corpsman Patrick Heath, live in one of NAS Lemoore's renovated family housing units.

NAS Lemoore, the Navy's newest and largest master jet station, is undergoing one of the biggest housing repair programs ever initiated by the Navy. Located in central California, NAS Lemoore is home port for the light attack squadrons of the Pacific Fleet and the Navy's first fighter attack squadron, VFA-125.

"When we moved into housing two years ago, we were told we would probably have to move into a different house before Patrick finished his tour at Lemoore," says Nancy. "At that time, I never dreamed I would get to live in one of the remodeled homes."

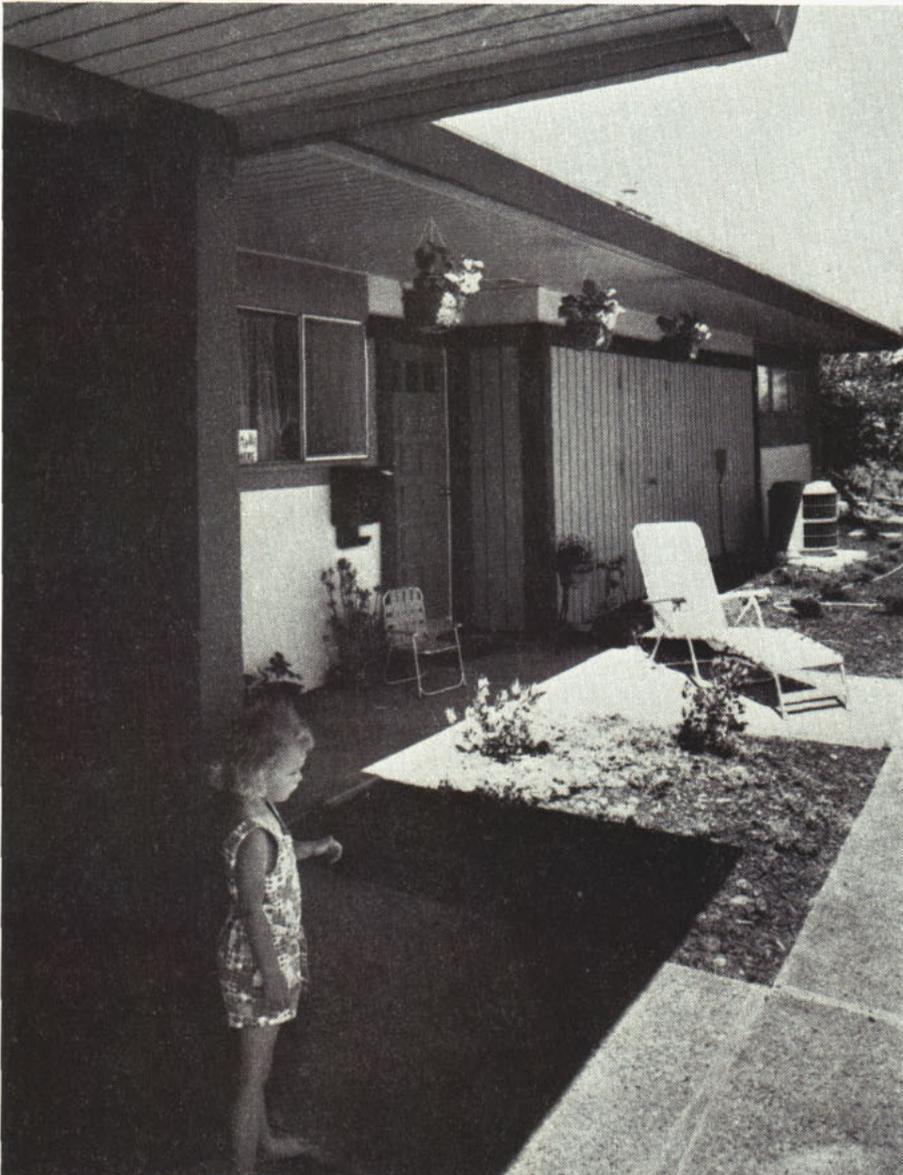
When Nancy was notified of the move, she was like a child looking forward to Christmas. "I was always calling the housing office to check on the latest developments, and I'd drive by every day to watch the construction. I didn't think moving day would ever come. You would have thought I was watching my own house being built," she said.

Yet Nancy and Patrick think of their Navy housing unit at Lemoore as their own. "We're really fortunate," said Patrick. "This house is much nicer than anything I could afford to buy or rent in town. The Navy is trying to do something for my family by giving us a better place to live, and I want to keep it as nice as I can," he added.

Nancy says her favorite renovation is the floor coverings. Soft, earth-toned carpet covers all rooms except the kitchen and entrance hall, which have no-wax shine linoleum.

Before renovation, the floors were concrete slabs covered with tiles that were old, cracked and mismatched; they were cold and hard. The water

Eighteen different front door designs and six color patterns add individuality to Lemoore's housing.



Million Facelift

pipes were buried underneath the concrete. Whenever a pipe broke, maintenance people had to pull up the tile and break the concrete with a jack hammer to repair the leak. Now the pipes have been rerouted to alleviate trouble.

"It's unbelievable, the difference carpeting can make in a house," Nancy said. "In my old house, no matter how hard or often I scrubbed the floors, they always looked dirty. It was so frustrating that sometimes I wanted to give up."

To add a sense of individuality, 18 different front door designs are being used, each yard has its own landscaping, and six different exterior color patterns are being used. "To look at the homes, you'd never realize they were family housing units. Yet because the houses are on base, they offer convenience plus the companionship of other Navy families," said Patrick.

About 100 repairs have been made to

the units. Some of the major items include shower stalls, central air conditioning, energy-efficient sliding doors and window shades.

Four new playgrounds are located within walking distance of the Heath's home. Each one features a different design to help develop a child's creativity.

"Back in 1961 when the units were constructed, they were adequate," said Warren Arnold, housing director at Lemoore, "but time and use have taken their toll. We're trying to bring the units equal to the level of the civilian community."

The \$40 million facelifting project involves 1,300 units ranging in size from two to four bedrooms. This averages \$19,000 per unit; the maximum allotted for each house is \$20,000. Total remodeling project is expected to be completed by May 1982, and will be open to both officers and enlisted people.

The Heaths are looking forward to another three years at Lemoore. "Now that we have high quality housing along with a good location, I'm afraid word might leak out, and NAS Lemoore will cease being the Navy's best-kept secret," said Patrick.

—Story by Donna Lowe
—Photos by Dave Fraker

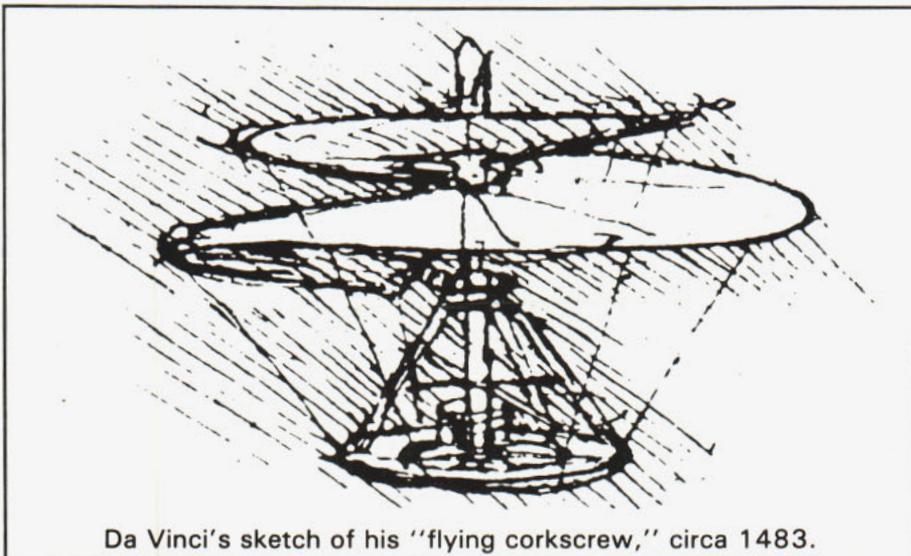


A spacious kitchen and a carpeted living room help make the station's housing some of the Navy's best.



Da Vinci's Dream

From Flying Corkscrew to Seahawk



Da Vinci's sketch of his "flying corkscrew," circa 1483.

Da Vinci's dream came true.

We called it "helicopter."

In 1912, Secretary of the Navy George von L. Meyer authorized the grand sum of \$50 (or less) for developing models of da Vinci's dream. After all, Leonardo's original contraption (he called it a Latin name that meant "flying corkscrew") left a lot of room for improvement. A couple of things weren't clear in his 15th century drawings, like what to use as a power source and how to control the craft in flight.

Humanity would work that out later, a bit later than 1912.

Along with the \$50, SecNav Meyer expressed a limited kind of interest:



XOP-1 autogiro took off and landed aboard USS *Langley* (CV 1) in 1931, but the experimental model never became operational.

“The Department recognizes the value of the helicopter principle in the design of naval aircraft and is following closely the efforts of others in this direction.”

Those efforts were forthcoming from pioneers in the field like Emile Berliner, Louis Breguet, J.C.H. Ellerhammer, Juan de la Cierva and Igor Sikorsky. By the 1930s, rotary-wing aircraft stood on the verge of feasibility. An oversized gadget called “autogiro” had evolved—propeller on the front and rotor on top—and the Navy decided to give it a try.

Aboard USS *Langley* (CV 1), Lieutenant Alfred Pride took off and landed in the XOP-1 autogiro with the carrier under way in September 1931. The craft’s ability to use limited landing space and to sustain slow flight impressed the Navy brass, but shortcomings in payload, range and operation outweighed the advantages. The autogiro was put on hold.

By 1940, improvements in helicopter design and performance pushed the autogiro into the background and eventual non-existence. Three years later, the Navy accepted its first helicopter—a Sikorsky R-4—after a 60-minute test flight and renamed it the HNS-1.

Primary interest in the helicopter was in its possible use as convoy protection against submarines. After a short evaluation period, it was apparent that the HNS wasn’t suited for anti-submarine warfare. But following World War II, these new flying machines were used with success in the Antarctic for observation and in the Bikini atoll for recovering film taken of atomic bomb tests.

In April 1948, Helicopter Utility Squadron Number One (HU-1), first unit of its kind in the Navy, was commissioned at NAS Lakehurst, N.J. Rotorcraft shifted from the experimental to functional stage in naval avia-

tion. The squadron was equipped with the HNS and another improved Sikorsky model, the HOS (R-6).

Meanwhile, Bell Corporation delivered the Navy’s H-13 (HTL) in 1948, a two or three-seater with one rotor and a bubble canopy. It replaced the HNS as the Navy’s primary trainer. In 1951, Bell gave way to the Hiller H-12 (HTE). More than 1,000 of these were accepted over the next 13 years. (Currently, the new Bell TH-57 *Sea Ranger* and UH-1 “Huey” are the main training vehicles for Navy and Marine Corps helicopter pilots.)

Almost from the start, helicopter evolution in naval aviation developed along four basic mission categories: observation, utility, transport and anti-submarine warfare.

VO-2, the last seaplane observation squadron, was decommissioned in April 1949. This marked the end of fixed-wing aircraft aboard battleships and cruisers. In their place came the

Da Vinci's Dream



Sikorsky HO3S was used by Helicopter Squadron One during the Korean conflict, proving the helicopter's value in war.



Bell's UH-1 *Huey* served a multipurpose role in Vietnam; the Navy's version is called *Iroquois*.

Sikorsky HO3S, used between 1947 and 1954. Instead of going through the time-consuming process of catapulting seaplanes and fishing them back out of the water, sailors now tended to other business; HO3Ss could land and take off from the tops of gun turrets.

During the Korean War, HU-1—equipped with the HO3S and

Piasecki's twin-rotored HUP—effectively demonstrated the multipurpose nature of their machines in wartime. Its exploits were immortalized in the book and movie "The Bridges at Toko Ri." Here's what that squadron's Presidential Unit Citation said:

"For extraordinary heroism in action against enemy aggressor forces in

Korea from 3 July 1950 to 27 July 1953. Pioneering in the employment of helicopters under combat conditions, HU-1 achieved a brilliant record while participating in every battle against the enemy throughout this period.

"Obligated to develop its own tactics and operational procedures, this resourceful and intrepid squadron spot-



The tandem-rotored CH-46 *Sea Knight* has been the vertical replenishment workhorse of the fleet since the mid-'60s.

Illustrations by DM2 Eugene Clark

ted and directed naval gunfire in actual combat; effected the rescue of 429 persons, many of which rescues were carried out over hostile territory in the face of enemy fire; transported personnel and prodigious amounts of mail and material at sea; relieved destroyers of daylight plane guard duties; and maintained 95 percent availability for

assigned missions."

Rotorcraft had proven their worth in the arena of war; they passed from the novel to the heroic.

Throughout the '50s, Sikorsky provided the Navy with improved versions of the HO3S for observation work. Another model, the Kaman HOK, featured a double intermeshing rotor ar-

rangment and three tailfins instead of the standard tail rotor.

Operationally, Piasecki's HUP was the Navy's first utility helicopter, starting in 1951. It was followed by Bell's single-rotor HUL (later version of the H-13) in 1957 and the Kaman H-2 *Seasprite* (HU2K) in 1962. For the H-2, it was the beginning of a long service life.

Da Vinci's Dream



The H-2 *Seasprite* has been in service for 18 years. Its use has evolved from plane guard to anti-submarine warfare Lamps I vehicle.



The SH-60B *Seahawk* is the latest addition to the fleet's helicopters, scheduled for operational use in 1984.

In 1963, jet-turbined *Seasprites* replaced HUPs as plane guards aboard fleet carriers. Their job was to hover off the starboard side of the flight deck, ready to pick up pilots who found it necessary to bail out or ditch their planes during landing operations. It was due largely to this rescue function that helos were dubbed "angels" by pilots.

Seasprite was the first utility chopper equipped for night rescue operations. Today—nearly two decades later—the SH-2F version is used as the Light Airborne Multi-Purpose System Mk I vehicle aboard destroyers, frigates and cruisers.

Another notable helicopter in the utility line was the Sikorsky H-34 *Seahorse* (HUS). Although the *Seahorse* is no longer generally used by the Navy, more than 700 were produced in the '50s and '60s. Bell's UH-1 "*Huey*" became operational in 1964 and saw extensive service in utility and attack roles during the Vietnam War; today the "*Huey*" serves a multipurpose role in the fleet.

Transport helicopters began with Piasecki's twin-rotored HRP model in 1947. The first American chopper to use tandem rotors, it proved its cargo-carrying abilities by lifting a 1-ton jeep and ferrying 10 passengers. But Piasecki's involvement in the area of transport helicopters was short-lived. Only 26 HRP's were produced when the Navy switched over to Sikorsky's H-19 (HO4S/HRS) in 1951. A year later, two H-19s made the first trans-Atlantic helicopter flight in history. It was also the first transport helo used in combat, when a squadron of them lifted supplies to the First Marine Battalion about seven miles outside of Pusan, Korea.

Boeing Vertol came through with one of the most widely-used and long-lived transport helicopters of them all: the CH-46 *Sea Knight*, with a twin-rotored silhouette that's familiar to anyone who's ever taken part in a vertical replenishment aboard ship.

Vertical replenishment at sea was discussed and tested as early as 1959.

But the first real use of helicopters in the fleet's supply chain didn't come until February 1964, when a helo from HU-1 landed on board the combat stores ship USS *Mars* (AFS 1) during her shakedown cruise off San Diego. First used by the Navy in 1964, the *Sea Knight* remains the primary vehicle for vertical replenishment; it can carry 6,000 pounds about 180 miles.

If the *Sea Knight* is the Navy's most familiar transport/cargo helicopter, then the CH-53 *Sea Stallion* is certainly its largest and most powerful. Characterized by a six- or seven-bladed rotor, it was introduced in 1966 to answer the Marine Corps' need for a heavy assault transport vehicle.

Early models, operational in Vietnam, could carry about 18,000 pounds and had a range of 257 miles. The latest version (CH-53E) has an extended range of 306 miles and a maximum lift capacity of 16 tons; it can accommodate 55 troops or carry 93 percent of the combat gear for a division's assault echelon. Fulfilling a long-needed vertical heavy lift requirement, the *Sea Stallion* is the most powerful helicopter in the Western world.

Another model, the RH-53, is outfitted for mine countermeasures and can sweep mechanical, acoustic or magnetic mines with its special equipment.

Helicopter Antisubmarine Squadron One (HS-1) was commissioned Oct. 3, 1951—kicking off involvement of da Vinci's flying corkscrew with an increasingly important military mission.

Bell Corporation provided the Navy with its first helicopter designed specifically for anti-submarine warfare. It was the tandem-rotored HSL and made its premier flight in May 1953. But due to a string of mechanical problems and production delays, it never saw active service as a sub-chaser.

That honor went to the Sikorsky H-34 *Seabat* (HSS-1), contracted by the Navy as a backup in case things didn't work out with the HSL—which they didn't. It assumed ASW duties in 1955, and three years later was equipped with an automatic stabiliza-

tion system that allowed it to track subs day and night.

The *Seabat*'s successor is that old standby, the SH-3 *Sea King* (HSS-2). A most familiar presence aboard aircraft carriers, the all-weather, amphibious *Sea King* began working for Uncle Sam 20 years ago and has never been laid off.

Newest addition to the Navy's anti-submarine force is the Sikorsky SH-60B *Seahawk*, slated to become operational in July 1984 as part of the LAMPS Mk III ship/air weapons system. Derived from the same basic design as the Army's UH-60A *Blackhawk*, *Seahawk* began shipboard trials in January; the Navy expects to acquire about 200 SH-60Bs.

Although designed primarily for ASW missions, *Seahawk* can perform anti-ship surveillance and targeting, communications relay, medical evacuation and vertical replenishment. The first ships to receive the newest naval helicopter will be the *Oliver Hazard Perry*-class frigates; assignments to destroyers and cruisers will follow.

Leonardo's dream has taken 500 years to arrive in the skies of today's naval aviation:

- Flying, it carries 16 tons while traveling almost 200 mph.

- Landing, its belly bursts open with the rush of 50 soldiers, a surreal version of the Trojan Horse.

- As a search and rescue vehicle, it can be a most encouraging sight to a downed pilot.

Dreaming once more in 15th century Florence, Leonardo scribbles more notes in his neat, backward script which can be read only in a mirror. He puzzles over the town's reaction to his little corkscrew toy that flies. They had been frightened out of their wits.

As he writes, Leonardo smiles. He knows someday the reaction will be much different. But his "flying corkscrew" would have to wait for a far more modern world. Why, Columbus wouldn't even be discovering America for another nine years.

—Story by JOI P. M. Callaghan

Clara Barton's Idea Lives On

"Emergency leave."

The term has an unpleasant ring.

Emergency leave is taken when something goes very wrong at home, when a wife or husband falls ill, when a close relative dies. Accidents. Sickness. Death. In case of emergency, contact . . .

The American Red Cross will let your command know that you have a good reason to be at home right away. Sure, the tidings are usually bad, but think how much worse the situation might be if you never got the news in time to do something about it.

Even bad news can sometimes produce good results. And the American Red Cross has produced more good with its work over the last century than it will ever receive credit for: damage repaired, people healed, lives saved, catastrophes averted. Throughout its 100 years, it has consistently shown itself to be an organization that really cares for people.

Notifying a service member about a serious problem at home is just one of the Red Cross' lesser achievements. Clara Barton had no idea what effect her actions would have on Americans in the 20th century when she followed the lead of Swiss humanitarian Jean-Henri Dunant.

June 24, 1859. Near the village of Solferino in northern Italy, French and Italian troops under Napoleon III are slugging it out against the Austrians and Emperor Franz Josef. Although

the battle lasts the entire day, its results are indecisive. The most memorable aspect of the blundering encounter is the fact that the opposing generals succeed in totally losing control of their respective forces.

On the field, nearly 40,000 soldiers lie dead and wounded. Monsieur Dunant decides to do something about them and organizes emergency aid services for the wounded on both sides. The International Red Cross is born.

About two years later, "Angel of the Battlefield" Clara Barton stepped out of her office job at the U.S. Patent Office in Washington, D.C., to organize a relief agency for Civil War soldiers wounded in battle. At one point she found herself crossing the Rappahannock River under a hail of rifle fire, struggling to save at least a few lives from the blue and gray deathtrap we remember as the Battle of Fredericksburg.

After the Civil War, Barton traveled to Europe for a rest, only to be caught up once more by armed conflict. The Franco-Prussian War broke out in 1869, and she helped reduce its destructive effects by distributing relief supplies to war victims.

With relief experience from two wars to draw upon, Clara Barton returned home and founded the American National Red Cross in 1881. She set a precedent by expanding the U.S. chapter's mission to include relief work for peacetime disasters.

The Red Cross didn't have long to wait for a chance to try out its new role; that same year, the Michigan Forest Fire disaster struck. Barton's brainchild went into action, marking the first peacetime effort by a Red Cross organization to provide relief for disaster victims.

More disasters followed. So did Red Cross aid: money, supplies, medical care and volunteer work. The organization grew nationwide, while disaster got to be more expensive: Mississippi Valley Flood of 1927, \$16.9 million; 1955 Eastern States Flood, \$18.2 million; 1972 Tropical Storm Agnes, \$23.1 million.

Each calamity seemed to make the American Red Cross that much stronger, to extend its base of support in the American conscience that much further. At 77, Clara Barton was still lending her support to the Red Cross in a very personal way—tending sick and wounded on Cuban soil during the Spanish-American War. She remained president of the group she founded until 1904, the same year one of her four books was published, "A Story of the Red Cross." Clara Barton died in 1912.

Five years later, The American Red Cross faced its biggest challenge up to

American Red Cross volunteers on the scene in May 1973 following a devastating tornado that struck Jonesboro, Ark.



American Red Cross

that time without the guiding hand of its founder. But Barton's spiritual guidance remained intact. What was it she had said? That the glories and benefits of the Red Cross didn't lie in its past, "but in the possibilities it has created for the future; in the lessons it has taught; in the avenues to humane effort it has opened . . . that shall constitute a bulwark against the mighty woes sure to come sooner or later to all people and all nations."

Sooner or later, it came.

On June 28, 1914, Archduke Francis Ferdinand of Austria and his wife were assassinated in Sarajevo, Bosnia (now part of Yugoslavia), while touring the city in a motorcar. Riding in the back seat was Emperor Franz Josef—that's right, the same fellow who lost control of his troops at the Battle of Solferino in 1859.

This tragic event triggered the Great War, and armies throughout Europe sized each other up, then plunged into

a four-year exercise of pointless slaughter. The American Red Cross showed up on the scene and tended the army of casualties left behind in no man's land. It offered each warring nation in Europe a hospital unit of surgeons and nurses—an offer they all accepted. But getting those medical teams to Europe wasn't easy.

At the time, no ocean-going U.S. vessel was available to carry the Red Cross volunteers to Europe, but the Hamburg-American Line offered the German-registered liner *Hamburg* for use. Terms of that agreement included a \$1 rental fee and guarantees that the vessel wouldn't be captured by the Allies.

Because it was a foreign vessel, the ship couldn't fly the American flag; Congress took care of that little catch by awarding *Hamburg* temporary U.S. registry. Its name was changed to *Red Cross*, whereupon the vessel's paint scheme blossomed with red crosses.

Then the regular crew (the ship's neutrality was questioned by some astute observers who noticed that many names of the individual crew members sounded distinctly German) was replaced by another—assembled from the ranks of retired U.S. Navy members and several U.S. maritime associations. Finally, *Red Cross* sailed for Europe Sept. 12, 1914, loaded with gauze, cotton, surgical equipment, other supplies, 33 surgeons and 137 nurses.

On the last leg of its journey from France to the Netherlands, a special British harbor pilot went aboard *Red Cross* to guide it through the mined harbor of Rotterdam.

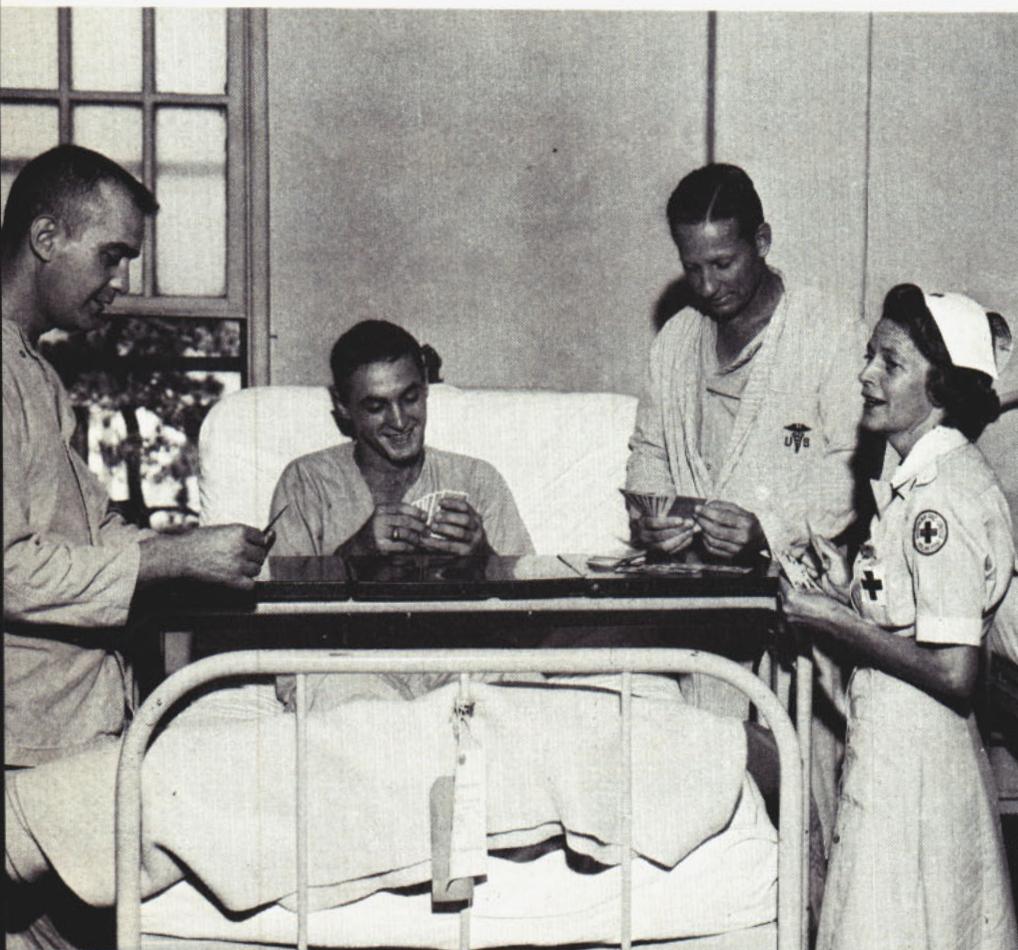
It was the first of many voyages that brought assistance to war casualties in Europe from the American Red Cross.

Sooner or later, global warfare had to happen again, but this time it was on a much broader scale. Clara Barton's legacy didn't even flinch; it went straight ahead to do a repeat performance of mending war-torn nations while generals, admirals, GIs and flyboys played out their roles in World War II.

During those war years, it was a habit of U.S. troops stationed in Great Britain to frequent Red Cross clubs in various cities. These clubs provided recreational facilities, meals and sleeping accommodations for minimal fees. Originally, the American Red Cross wanted to provide these services free of charge, as was their standing policy. But the group didn't get its way; a letter from Secretary of War Henry L. Stimson to Red Cross Chairman Norman H. Davis, dated March 20, 1942, explained:

" . . . The War Department appreciates the motive of the Red Cross with respect to this matter and its established policy of free service, but

Left: An American Red Cross gray lady and patients at the Naval Hospital, Yokosuka, Japan, in 1959. Upper right: A recent press conference to emphasize the campaign to have at least one member of every household trained in cardiopulmonary resuscitation. Richard S. Schweiker, Secretary of Health and Human Services, illustrates the CPR technique.





under the circumstances it is believed impractical, unnecessary, and undesirable that food and lodging be furnished free. It is understood that all similar allied clubs in the British Isles make suitable charges for this particular service. It is believed advisable that American soldiers be required to pay at least the actual cost of meals and lodging furnished for their convenience and benefit while on furlough. Such procedure is considered a sound business arrangement and conforms to local practice. It is therefore believed that such procedure should be adopted because of its merit rather than because the local military commander requests that charges be made for the proposed services”

A chief endeavor for the World War II-era Red Cross was to produce and deliver food parcels to Allied prisoners of war overseas. For example, on

March 10, 1943, the Red Cross ship *Caritas I* sailed from Philadelphia to Marseilles with 300,976 food parcels for distribution by the International Red Cross Committee to prisoners of war in Axis-held territory.

Not satisfied to just pack food and ship it, the nutrition service of the American Red Cross developed, in late 1940, a standard food parcel for prisoners of war.

Each parcel contained eight pounds of specially selected food, high in vitamins and nutrients, designed to help overcome dietary deficiencies that POWs might be susceptible to during their confinement. Throughout World War II, the Red Cross maintained four packing centers for POW parcels in Philadelphia, New York, Chicago and St. Louis. Production capacity for one month was usually more than 500,000 parcels. Ideally, each prisoner of war

was to receive one food parcel per week. In reality, many of the packages fell into enemy hands and never reached Allied POWs.

Two wars and 36 years later—along with numerous natural disasters (most recently the Mount St. Helens eruption in Washington)—the American Red Cross spends about \$30 million a year on relief aid to victims. Since 1971, it has responded to an annual average of 31,000 disasters, large and small.

“Responding” includes preparedness planning, mass evacuation and sheltering, feeding, emergency medical aid before and after a disaster and casework services. On the individual family level, the Red Cross helps out with clothing, food and essential furnishings, pays rent up to 30 days and foots the bill for minor home repairs. It sometimes replaces lost eyeglasses, prescription drugs, dentures, prosthetic devices, occupational supplies and equipment.

With all of the above and more, Red Cross Chairman Jerome H. Holland is still cautious. He feels his organization has to be modified to meet present-day challenges such as problems related to the unemployed, the aged, delinquents and the ghetto environment. If the Red Cross can't deal effectively with these issues, Holland warns, then it may not be able to last another century.

Red Cross President George M. Elsey, however, sounds more optimistic: “The past has proved the Red Cross to be a determined survivor. We will be a much stronger organization, providing even better services, in (the) next century.” Elsey is confident that, in the next 25 years, the Red Cross will identify those areas of American culture where it can provide the most help. And it will do so.

One final note: Of the 127 International Red Cross organizations of the world, the American chapter is the only one that provides services to members of its country's military forces during peacetime.

—Story by JOI P.M. Callaghan
—Photos courtesy of American Red Cross

Tracking Ice Today's Way

Somewhere along the coast of western Greenland, a gigantic chunk of ice breaks away from a glacier. For two years, the iceberg drifts until it is caught in the Labrador Current. Controlled by the wind and sea, it moves toward the North Atlantic.

A super luxury liner on its maiden voyage sails along a westbound sealane of the North Atlantic. Shortly before midnight on April 14, 1913, the ship collides with the iceberg; 1,513 lives are lost and the "unsinkable" *Titanic* goes down.

While the *Titanic* is the most notorious example of ice sinking a ship, icebergs are only one form of frozen navigational hazard. Ordinary sea ice—frozen salt water—in the arctic and antarctic regions also poses a

hazard to naval and merchant ships.

The earliest major recorded sea disaster involving sea ice occurred in 1777 when 12 Dutch whaling ships were trapped in heavy ice off eastern Greenland. More than 50 American whaling ships were caught in sudden arctic freezes in 1871, 1876, 1888 and 1896. Each was a loss in life and shipping.

The polar exploration efforts of the late 1800s and early 1900s had their run-ins with the ice packs at both poles. In October 1872, the naval ship *Polaris* was homeward bound with the U.S. government-sponsored Charles F. Hall Scientific Expedition when it was sealed in by arctic ice in Baffin Bay. The wind carried the icebound ship to a small bay named Lifeboat Cove and

there *Polaris'* crew was forced to winter over. In the spring of 1873, they abandoned their still entrapped ship. Most were eventually rescued.

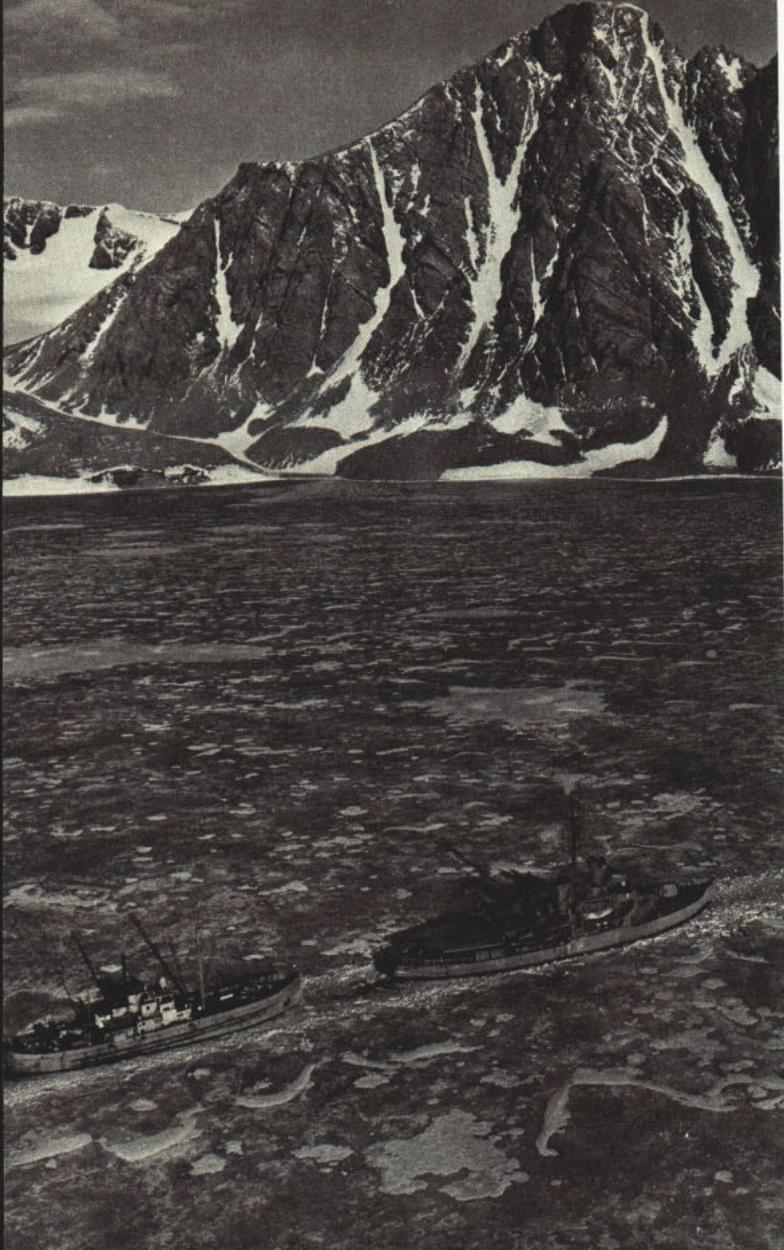
More than four decades later in the Antarctic, the exploration ship *Endurance*, carrying Britain's Ernest Shackleton's expedition—which was attempting a transantarctic sledge trek to Ross Island via the South Pole—became iced in off the north end of the Luitpold Coast.

Two months later, the ship, still icebound, began drifting northwest. On Oct. 27, 1915, *Endurance's* crew was forced to abandon ship when it became obvious that the vessel would be crushed by the ice. Shackleton and part of the crew left in a boat to find help. On Aug. 30, 1916, Shackleton and his men returned with help. The group left on Elephant Island had only four days of supplies left when they were finally rescued.

Sea ice, which covers a large area of the earth's surface, today still poses a problem to navigation, especially along the great circle route from North America to Europe. The ice pack of the Northern Hemisphere covers nearly 4 million square miles—more than eight times the size of the nation's largest state—Alaska. The antarctic ice pack is approximately twice that of the arctic and covers nearly 8 million square



Left: A U.S. Coast Guard icebreaker clears a path through the polar ice pack for Navy resupply ships. U.S. Navy photo.



Above: USS Burton Island (AG 88) tows the ship of the 1948 Finn Ronne expedition out of the antarctic ice. Upper right: A polar pack convoy makes its way through an ice pack. Right: Artist Arthur Beaumont paints a picture of the USS Glacier (AGB 4) in 1959 as it breaks ice in the Antarctic. U.S. Navy photos.

miles or about 8 percent of the Southern Hemisphere.

Today, however, with increased national and international scientific and industrial exploration in the polar regions, forecasting and plotting the movement of sea ice has taken on new importance. It has become a science in itself.

In the past, forecasting sea ice characteristics, distribution and movement was limited because of sparse records of ships operating near the edge of the ice pack or frozen in the pack. Explorers, traveling by foot over



NPOC

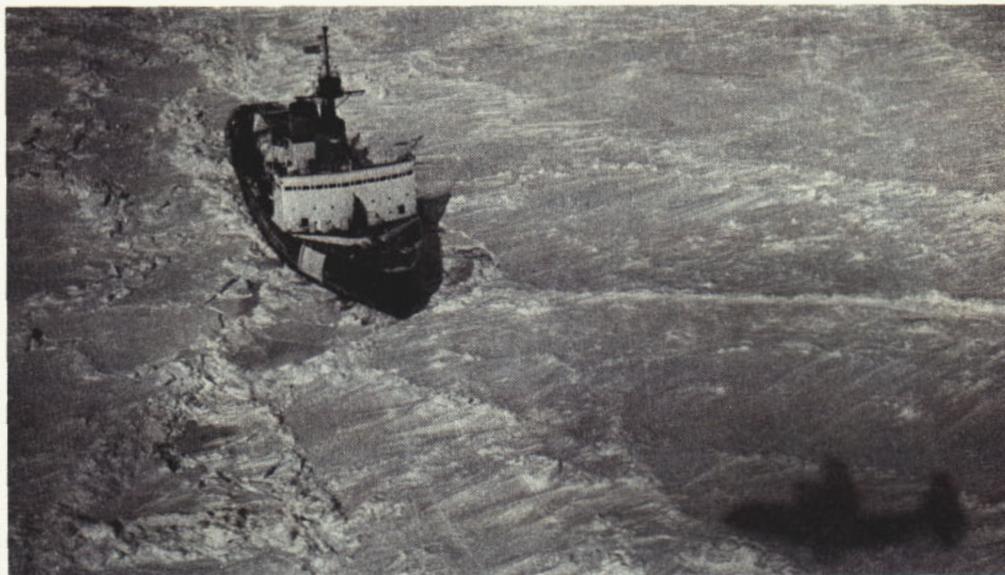
the polar regions, also made only limited observations about the sea ice. Today, satellite images and air reconnaissance patrols gather the information necessary to produce sea ice forecasts.

Reconnaissance and forecasting of the arctic and antarctic sea ice is conducted by a number of nations. But most of today's forecasts come from the U.S. Naval Polar Oceanography Center in Suitland, Md., which has controlled the sea ice analysis, forecasting and reconnaissance operations of the Navy since 1972 and, under a cooperative effort with the National Oceanic and Atmospheric Administration, has served as the nation's Joint Ice Center since 1976. NPOC's area of responsibility extends from above 60 degrees north latitude and below 60 degrees south latitude. The center's ice department monitors sea ice movement most closely in the Northern Hemisphere from June to October and in the Southern Hemisphere from December to March when shipping is at its peak in both areas.

"Interest in the polar regions has increased in general because of oil exploration and the 200-mile offshore fishing limit," said Captain James C. Langemo, NPOC's commanding officer. "Oil exploration, especially, requires a lot of logistical support in terms of ice forecasting. Our forecasts are sent not only to Navy ships but also to U.S. merchant ships, foreign ships and 200 agencies worldwide."

Common users of the center's service are the DEW line radar site resupply ships, the National Science Foundation's Antarctic Exploration and the Navy supportive task force known as "Operation Deep Freeze," and the Bering Sea's fishing fleet. Navy surface ships, submarines and anti-submarine warfare patrol aircraft in the polar regions also depend on NPOC's ice forecasts.

"A basic knowledge of ice movement can help a submarine take advantage of ice, ice noise and ice movement just as it can help the searcher patrolling for that submarine," said Langemo.



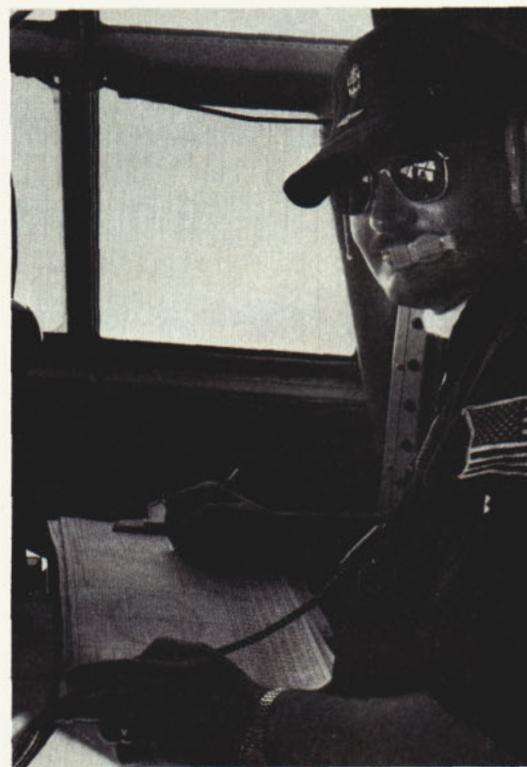
Above: The shadow of a P-3 Orion on an ice reconnaissance flight is cast on the sea ice surrounding the U.S. Coast Guard ice breaker Polar Sea in the Chukchi Sea this year. Right: Chief Aerographer's Mate Gil Wagi jots down ice observations during an ice reconnaissance flight. U.S. Navy photos.

"The movement can vary 20 miles either way. That can be critical to a fishing boat or a supply ship," added Aerographer's Mate First Class John Weyand. "Some of our forecasts are actually used by local television stations in the Great Lakes region."

Monitoring polar ice is not the center's sole mission. Its 85 Navy military and civilians are responsible for providing polar oceanographic and marine meteorological services; a global environment satellite watch; Naval District Washington, D.C., local and aviation meteorological support; and oceanographic, climatological and technical support for the National Military Command Center, Chief of Naval Operations and other Washington, D.C.-based naval headquarters. In addition, NPOC's parent command, the Naval Oceanography Command, has tasked it with being their Washington, D.C. area technical liaison and representative.

The 13-person ice forecasting unit is one of NPOC's four departments. It has seven billets classified as type two sea duty; the command's other billets are type one shore duty. The unit has seven of the last existing flying billets for Navy aerographer's mates.

To forecast changes in the regions



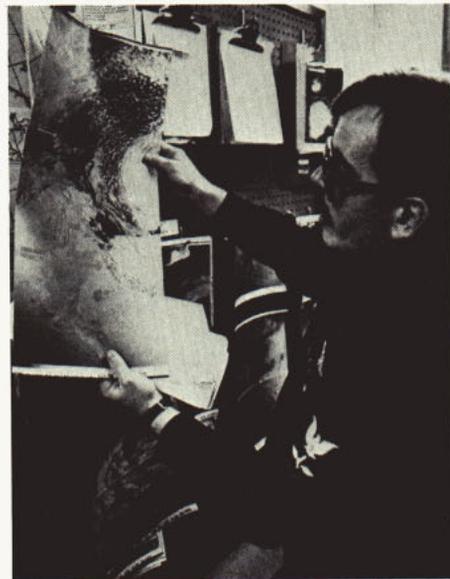
today, the center uses primarily environmental satellite imagery and data.

"Our forecasts are compiled from various forms of satellite data and images," said Weyand. "From this data, we can get a good overview of conditions and can even distinguish the narrow channel an icebreaker is making."

"Ice forecasting has been going on since 1953 when it was done primarily with air reconnaissance. But with satellites, the job has become less expensive and has taken on a global look," said Langemo. "We are now a global center. In our early days we



Left: Aerographer's Mate Second Class James A. Perry translates satellite data and images into an ice forecast. Below: Aerographer's Mate John Weyand examines a satellite photograph of the Arctic. Photos by JOC James R. Giusti.



were just concerned with the Northern Hemisphere.

"We still conduct aerial ice reconnaissance but on a smaller basis than in earlier years. Satellites have revolutionized the way we do business, and our access to the government satellite centers here makes collecting data more efficient."

The center's satellite imagery and supporting data are stored and collected in the Naval Environment Display station, which can hold more than 450 environmental displays including satellite imagery. It is updated every 12 hours. NEDS, with the master computer in Monterey, Calif., has become a key instrument in both Navy weather and ice forecasting.

The naval center's Ice Operation Department transmits and mails out a weekly ice forecast, a 30-day ice forecast, a Bering Sea ice analysis three times a week and a twice-weekly Great Lakes ice forecast. The forecast also carries iceberg information provided weekly by the International Ice Patrol.

From time to time, the department gets involved in weather forecasts via satellite to ships south of 60 degrees south latitude. Routinely, the unit even routes an icebreaker through the Amundsen and Ross seas by use of satellite imagery. It also has sent direct forecasts to ships south of 60 degrees south latitude by using satellite data.

Along with the satellite data, NPOC deploys two ice observers to Iceland

and Alaska to fly on P-3C *Orion* ice reconnaissance patrols. The three-day missions measure the amount of ice, age of the ice and other characteristics. The flights are flown mostly during the polar breaking up season and freezing season. Additionally, two ice forecasters deploy to McMurdo Station, Antarctica, during the austral summer to provide on-scene analysis, forecasts and reconnaissance services in support of the Navy's "Operation Deep Freeze."

While hundreds of individuals use the unit's forecasts, the aerographer's mates seldom see or have direct contact with their customers.

"Our fleet is sort of invisible," said Langemo. "We don't see the people we serve like other Navy oceanography centers. But we make an effort to get our people out to some of the Navy ships in Norfolk and in contact with our Navy and Coast Guard customers."

Nevertheless, the Ice Department's main mission is providing mariners venturing into the polar regions with the necessary forecasts for a safe voyage. Each bit of information they collect and distribute adds to a steadily growing knowledge of the remote polar seas.

—Story by JOC James R. Giusti

Currents

Rent Plus Approved

The Secretary of Defense has approved a new concept in the payment of housing allowance overseas. The system is called Rent Plus. Under this system service members will be reimbursed for their actual housing costs, plus utilities and initial occupancy expenses, up to a maximum ceiling. The ceiling will be prescribed by pay grade for each overseas geographic area and will be based on actual housing costs in each area. People currently receiving an overseas housing allowance will be allowed to continue to draw their current allowances if a reduction in allowances would occur under Rent Plus. This option period will continue for the remainder of a member's overseas tour or for four years from the effective date of country implementation, whichever comes first. The United Kingdom was converted to Rent Plus July 1, 1981. Bahrain and Puerto Rico also converted in July, Korea in August and the Philippines in September. Other countries having a housing allowance will be phased in over the next 12 months. Rent Plus will provide a more equitable means of reimbursing members for the high cost of housing experienced overseas. Additional details will be contained in a forthcoming NavOp.

Navy Strengthens Drug Abuse Control Program

An enhanced Navy drug abuse control program was promulgated July 9 by Chief of Naval Operations Admiral Thomas B. Hayward. The new program implements policies contained in SECNAVINST 5300.28. It adds emphasis to prevention, detection, deterrence and enforcement while still offering help to truly drug dependent members. The objective of the Navy's drug abuse control program is prevention and control of drug abuse through positive, visible leadership and action throughout the chain of command. The program emphasizes aggressive use of all available tools, including prevention education, awareness training, law enforcement services, command drug assessment team services, and detection methods such as urinalysis, drug dogs and punishment when appropriate. The following additional initiatives are included in the revised drug abuse control program:

- Purchase of new, better portable urinalysis equipment.
- More drug detector dogs.
- Accelerated assignment of limited duty officers and warrant officers to fleet commander and type commander staffs to coordinate drug law enforcement matters.
- Development of a drug safety action program patterned after the alcohol safety action program for remedial education of identified drug abusers.
- Replacement of the drug exemption program by a drug abuse self-referral rehabilitation procedure.
- New regulations prohibiting drug abuse paraphernalia are given the force of general orders upon which disciplinary action may be based.
- Urinalysis results may be used as evidence in disciplinary proceedings under certain conditions.

More information concerning the enhanced drug abuse control program may be found in NAVOP 97/81.

NJP Results Can Be Published

Commanding officers are authorized to announce the name, rate, offense and disposition of people awarded nonjudicial punishment according to a new change to the Navy Judge Advocate General Manual. NJP announcements are authorized to be published in the plan of the day and to be posted on bulletin boards within one month of the imposition of NJP. NJP cases may also be announced at morning quarters. As described by ALNAV 85/81, the publication of NJP results is rooted in the reasonable belief that it serves to inform and deter other service members from committing similar offenses.

Helicopter Rescues Two at Sea

A routine replenishment at sea almost turned into a tragedy recently when two men assigned to USS *America* (CV 66), Seaman Recruit Doug Owens and Boatswain's Mate Third Class Britt Bowers, were washed overboard in high seas. Helicopter Antisubmarine Squadron 12 took the matter firmly in hand and executed its fifth perfect rescue at sea since deploying to the Indian Ocean aboard *America* more than two months ago. An airborne *Sea King* helicopter commanded by Lieutenant Michael R. Brunskill and copiloted by Lieutenant Junior Grade David W. Bohannon made the save. The rescue helo's search and rescue hoist operator was Aviation Antisubmarine Warfare Operator Second Class Herman B. Anderson. Performing the actual rescue by jumping into the water, Aviation Antisubmarine Warfare Operator Third Class Gabriel A. Hernandez provided both men with assistance in donning the "horse collar," a rescue device used to lift a person from the water and into the helicopter. Hernandez provided first aid. Once back aboard *America*, Owens and Bowers were thoroughly checked by the ship's medical response team. Both men were released for duty, with no injuries. Captain J.F. Dorsey, *America's* commanding officer, commented on the squadron's performance: "I'm very pleased to have them aboard. Certainly two men have benefited from their professionalism." HS-12 is homebased at NAS North Island, San Diego.

Navy Plans to Retire Seven Ships

The Navy plans to retire seven ships from service during fiscal year 1982. The action will affect two active fleet ships, one Naval Fleet Auxiliary Force ship and four Naval Reserve Force ships. The four NRF ships were announced for retirement last year, but their retirement was deferred until FY 82. The average age of the seven ships is more than 36 years. The cost of modernizing these ships is far greater than the benefits that could be derived from their continued service. The ships to be retired and their home ports are:

USS <i>Dixie</i> (AD 14)	San Diego
USS <i>Sperry</i> (AS 12)	San Diego
USS <i>Furman</i> (TAK 280)	Seattle
USS <i>Robert A. Owens</i> (DD 827)	Pensacola, Fla.
USS <i>Vogelgesang</i> (DD 862)	Newport, R.I.
USS <i>Steinaker</i> (DD 863)	Baltimore
USS <i>McKean</i> (DD 784)	Seattle

Mail Buoy

A Matter of Opinion

SIR: As the commanding officer of the Red Lions of HS-15, I read your April 1981 All Hands article on HS-8 with interest and skepticism. Their claim to be "the most outstanding squadron in the Navy" is hereby challenged. The following documentation is provided:

Award	Red Lions	Eight Balls
Battle "E"	1980	1980
Isbell	1977	1979
	1980	
CNO Safety	1976	
	1979	
	1980	
Thach		1980

In addition to the Red Lions' 6-3 advantage in "head-to-head" competition, our safety record, currently nearly eight years and 28,000 hours in the making, is unsurpassed in the SH-3H community; our maintenance chief petty officer, AVCM Rodney R. Dunlap, is the ComNavAirLant nominee for the "National Helicopter Association Maintenance Petty Officer of the Year"; Red Lions' AD2 Thomas Filion and AO2 Dave Curlee were named "HS-Wing One Sea Sailor of the Year" for 1979 and 1980, respectively. Additionally, the Red Lions were honored as the ComSea-Based ASW Wings Lant HS Squadron of the Year for 1980 and have been the recipients of the ComHSWing Maintenance Excellence Trophy for the last two competitive cycles. HS-15 and USS *Independence* recently broke all records for open ocean salvage of an SH-3H forced to ditch upon suffering catastrophic main gear box failure while deployed in the Indian Ocean. The helicopter was recovered in less than 50 minutes virtually unscathed and was returned to operational flying 11 days later, a tribute to the "Can Do" attitude that permeates the CAG 6/Indy/Red Lion team.

Rest assured, sir, the Red Lions are not behind the Eight Balls.—Cmdr. Bill Crossen

• *All Hands is proud to share the achievements of the Red Lions with its readers.*—ED.

Learning Experience

SIR: When I was still a midshipman at the Naval Academy, I had the privilege of making two cruises to the Western Pacific.

My first cruise was in 1977 on board the USS *Ponchatoula* (AO 148)—she never closed the whole time I was on her! The second cruise was in 1979 when I was a firstie. The ship was the USS *Wabash* "Cannonball" (AOR 5). She, too, never failed to feed or gas up the *Connie* or other ships.

I learned a lot on those cruises. The enlisted men and the officers taught me what teamwork and professionalism were, through their daily actions. I am very proud to have served with such fine men.—2nd Lt. Joseph A.C. San Agustin, USMC

The Big Decision

SIR: When I was discharged from the Navy as a YN3(SS) in 1969, I immediately headed for my hometown in Illinois to seek my fame and fortune. I soon discovered that I would not fall into one of those great, high-paying jobs I had heard my shipmates talk about.

During the following 10 years, I worked at a variety of jobs, the last as a test monitor in charge of administering state civil service exams. There I saw an average of 3,000 people a month take exams for approximately 300 available jobs. It shakes you up to read an application from a woman who spent over seven years of her life in college earning a doctor's degree only to wind up taking an exam for a mental health technician trainee position, because it's the only job available. I'm sure many of you are saying, "But that won't happen to me, I have a job already set up." If you do have a firm secure job lined up, I say 'go for it' if it means a better way of life. However, for those of you who don't have such a setup, I would advise that you spend a considerable amount of time investigating all possible situations before you break your ties with the Navy.

Granted, life in the Navy is hard and demanding and often you think that no one seems to notice or care that you are often away from friends and family, busting your backside for over 60 hours a week. But take

it from one who's been there, very few employers on the outside are any different.

Also, don't be in too big a hurry to close a door leading to opportunity. When you consider the latest pay raises, the proposed pay raises and benefits packages, the 30 days paid vacation every year, the free hospitalization for you and your family, the free dental care for you (a proposal for dependent dental care is in the works), the educational benefits and probably the most important consideration in today's troubled times, job security, the Navy has a lot to offer.

Today, I am back in the Navy as the leading yeoman on USS *Narwhal* (SSN 671), undergoing a refueling overhaul in the Charleston Naval Shipyard. A Naval Reservist, I requested voluntary recall to active duty. At this point in my life, the Navy is a logical place for me to be. I have received a substantial increase in pay over my civilian job. I also have increased responsibilities. On the negative side, I do work longer hours (without overtime), I have a rough time calling in sick whenever the notion strikes me and I work for a demanding organization—the U.S. Navy. However, I am pleased with my situation and am proud of the role I now play in society.—YN2(SS) Robert D. Milleville

Masters of Disguise?

SIR: Your article entitled "Up, Up and Away" in the February issue shows conclusively that the Buckeyes of VA-85 are masters of disguise. Their ability to alter the basic A-6 airframe to look like an F-4 is nothing short of amazing. This accomplishment alone could mean a substantial change in the reputation of the A-6 as one of the ugliest aircraft in the Navy.

The commanding officer of VA-85 will also be chastised for arbitrarily changing his home station from NAS Oceana, Virginia Beach, Va., to Cecil Field, Jacksonville, Fla., without first consulting the wing. Thank you for keeping our squadrons honest.—The MATWing One Staff

• *Our trusting nature has tripped us up once again. We accepted the words supplied by source.*—ED.

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