

ALL HANDS

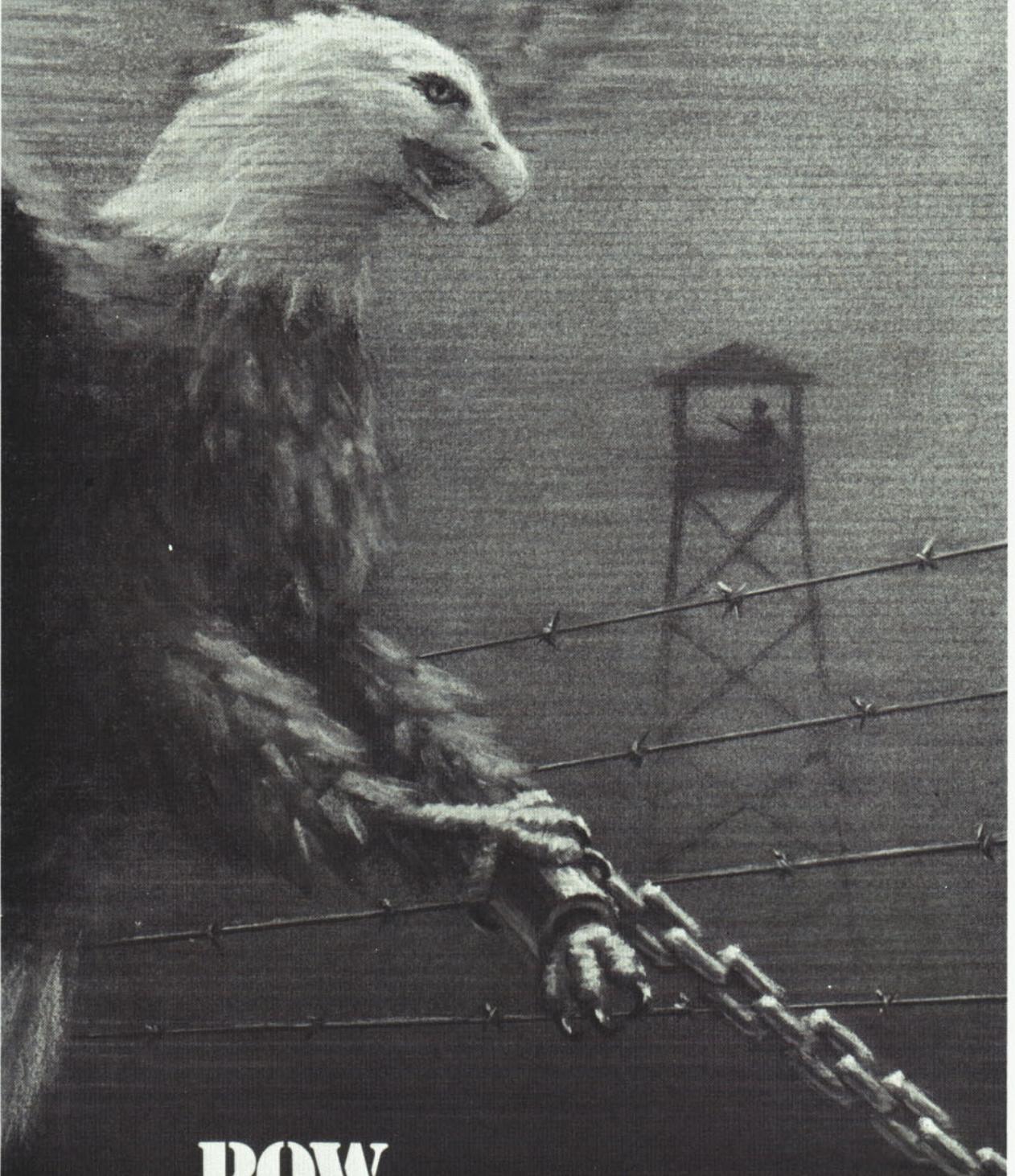
MAGAZINE OF THE U.S. NAVY

JULY 1985



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- Breaking the polar ice
 - Navy medicine
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America Remembers!



National **POW
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 Veterans Administration

ALL HANDS

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Covers: From the North to the South poles

Front: USS *Trepang* (ISSN 674) surfaces at the polar ice cap. *Trepang* operations in the area were in conjunction with a naval research team camped on the ice. See story on page 30. Photo by JOC(SW) Fred J. Klinkenberger Jr.

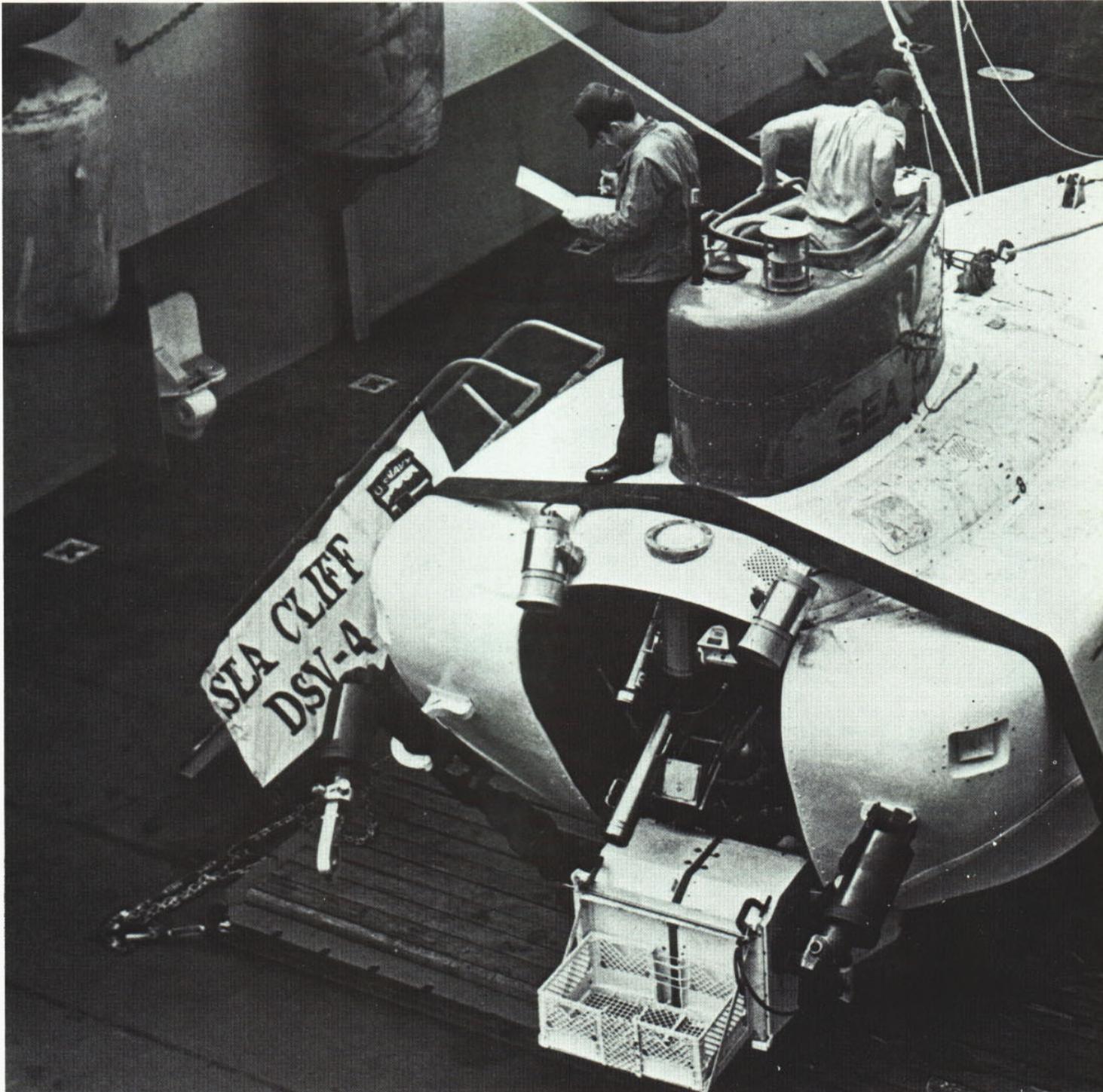
Back: Adelle penguins check out the "wild life" in Antarctica. See story on page 18. Photo by PH1 David B. Loveall.

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Exploring the



deep – Navy style

Story and photos by PH2 Gary G. Ballard



It may lack the flair of a space shuttle, but it's just as adventurous, taking man deep into an environment as alien and even more mysterious than outer space.

It's the Navy's deep submergence vehicle *Sea Cliff*, the world's deepest diving manned submersible, and it underscores America's commitment to ocean research.

The 31-foot, 29-ton, three-man submersible recently made a historic deep ocean dive off the coast of Guatemala.

The mission began in San Diego with *Sea Cliff* secured in the well deck of the auxiliary deep submergence ship USS *Point Loma* (AGDS 2). A week later, *Point Loma* was on station, and preparation for the dive intensified.

Technicians surveyed the ocean floor in search of a flat, smooth surface almost 20,000 feet deep. Once located, the dive target was electronically mapped with underwater buoys anchored just off the ocean floor.

The countdown began eight hours before the launch.

Within two hours of launch, everyone aboard was involved. Ballasting teams were flooding the well deck, and every sort of technician and engineer was on station giving final checks on their equipment.

"There's absolutely no room for error in the deep ocean," said Lt. Cmdr. Rick Williams, commanding officer of *Sea Cliff* and its 17 crew members. "It requires very close teamwork. Every individual is essential to the whole."

Zero hour approached.

Well-practiced, proven procedures re-

duce the danger, but heat and sea conditions can take their toll, according to Lt. Joseph Polio, docking officer in charge of the launch and recovery.

"We're working in a direct equatorial sun, hundreds of miles from shore," said Polio. "Even the smallest swell is amplified in the well deck, making *Sea Cliff* harder to control."

During the launch, the well deck became a blur of activity, each movement critical.

A towboat created tension on the towline as *Point Loma's* stern gate lowered into the ocean. A large capstan attached to tow rope controlled *Sea Cliff's* exit speed as various handling lines were expertly advanced, cleat by cleat, until the last line was thrown free and the sub was clear of the ship.

At 160 feet per minute, *Sea Cliff* descended, stopping periodically for required systems checks. Light from the noonday sun faded into total blackness. *Sea Cliff's* headlights cast an eerie green glow as it continued downward.

Three hours later it was on the bottom, 20,000 feet below the surface. The next four hours were busy for the crew who operated and tested every piece of equipment.

Just how deep is 20,000 feet?

"It's a long way down," said pilot Lt. Alan Mason. "It's 20 Empire State Buildings stacked end to end."

The pressure at that depth defies human comprehension.

"It's a crushing force, about 9,000 pounds per square inch," said *Sea Cliff's* executive officer, Lt. Eric Long. "One porthole alone takes a million pounds pressure at that depth."

"It's a totally alien environment, com-

Sea Cliff is readied for a 20,000-foot certification dive off Guatemala.

Exploring the deep



parable to outer space," said Chief Electronics Technician David Atchison. "It keeps me on my toes. I'm very much aware of what's going on around me. I can't afford not to be."

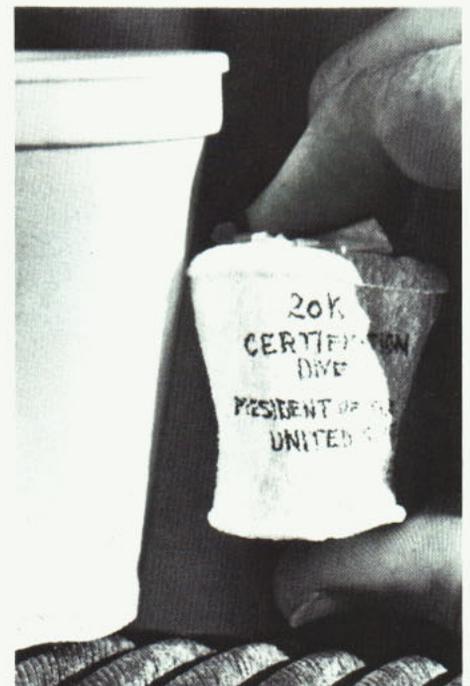
Finally, the time to surface came. *Sea Cliff* dropped a load of ballast weights and headed for the surface at 100 feet per minute. Eleven hours after launch, *Point Loma's* expert deck crew safely recovered *Sea Cliff*—its mission complete.

Sea Cliff has spent the past two years undergoing an extensive redesign and certification process which more than tripled its original dive capacity. The purpose of this dive, its deepest to date, was final certification.

To aid in its mission—search, recovery and science—*Sea Cliff* sports on board video and still camera systems, two exterior hydraulic "arms," and three viewing ports.

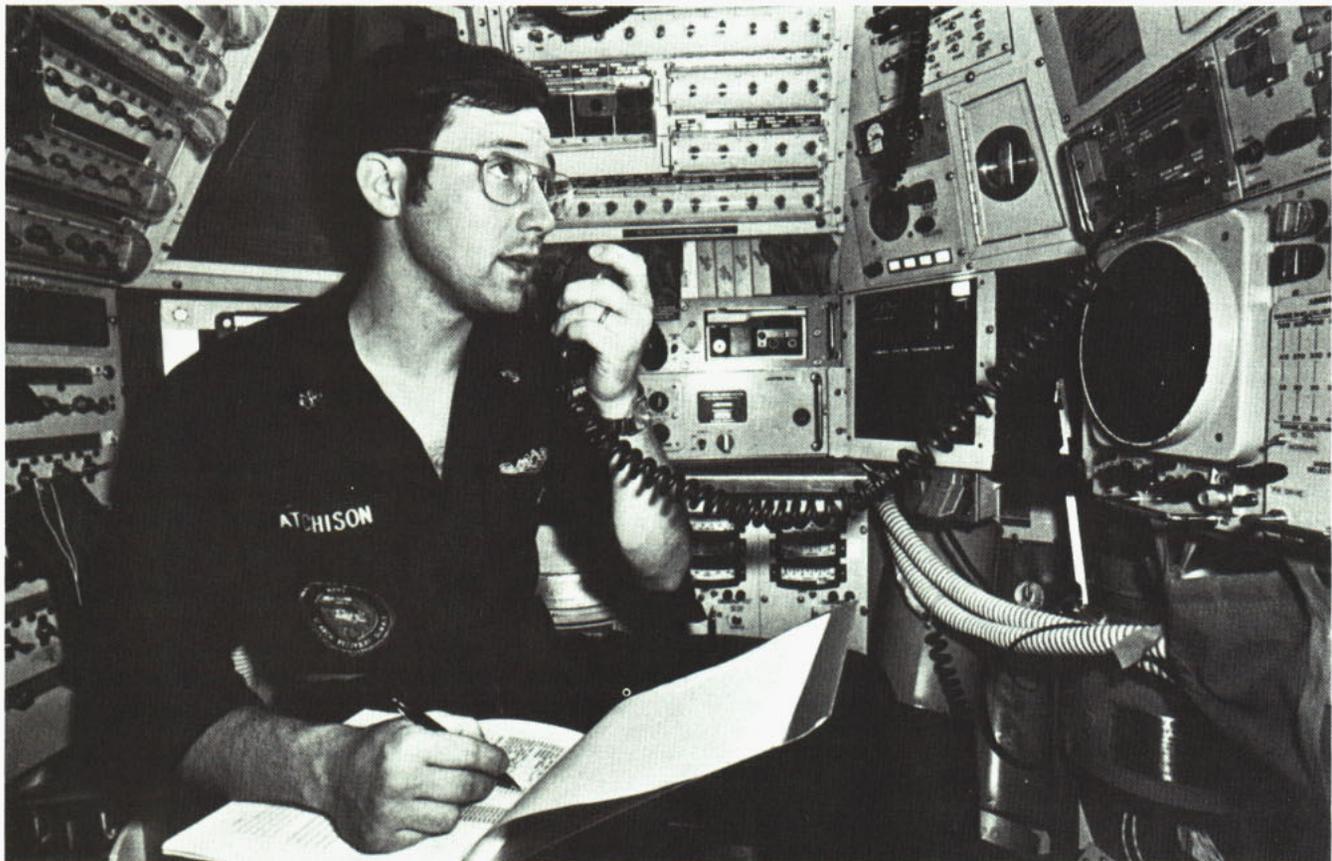
State-of-the-art technology, such as its advanced titanium hull and silver-zinc battery system, allows it to operate independently for more than 16 hours at a time. Its compact design permits rapid transport anywhere in the world by land, sea or air. □

Ballard is assigned to the Navy Public Affairs Center, San Diego.





Sea Cliff's dive included a launch, a tow, an equipment check by ET1 David Atchison, and a difference in styrofoam cups. The crushed cup was subjected to external pressure 20,000 feet below the ocean's surface.



The sunkist kid

Story by Edward T. Kreiner

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The Marine Corps was my first choice for military service. The recruiting sergeant who spotted me when I entered to sign up, took one look at my 5-foot, 1-inch, 105-pound frame and told me to go home, grow up, and come back when I became a man. The Navy, obviously desperate to fill its quota for enlistments, accepted me.

My journey to become a hero was well under way. World War II was winding down when I was a seaman recruit at the U.S. Naval Training Center, Bainbridge, Md.

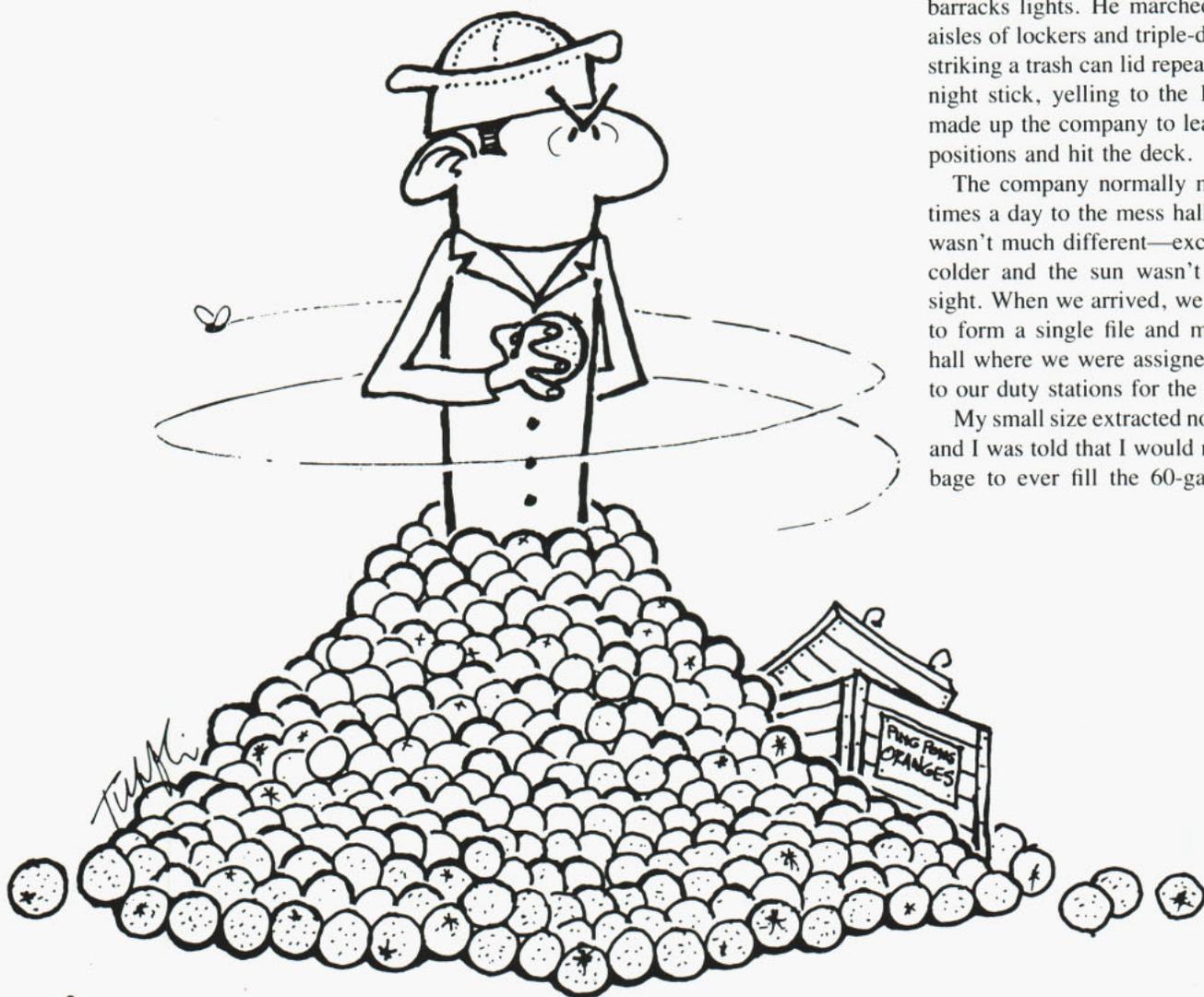
Near the end of the 16-week training, my company received assignment for "service week." The term was interpreted by those of us who experienced it as a

form of mental and physical torture, servitude, indignation and loss of self-esteem. We "bagged" metal trays to rid them of food, fed trays into a steam washer, carried scalding hot trays to wooden racks, handled the heavy garbage cans, cleaned and wiped tables or pushed swabs on slippery food-spilled floors (oops, I mean, decks).

It was 3 o'clock in the morning when the sailor on sentry duty turned on the barracks lights. He marched through the aisles of lockers and triple-decked bunks, striking a trash can lid repeatedly with his night stick, yelling to the 130 men who made up the company to leave their fetal positions and hit the deck.

The company normally marched three times a day to the mess hall. This march wasn't much different—except it seemed colder and the sun wasn't anywhere in sight. When we arrived, we were ordered to form a single file and march into the hall where we were assigned, like cattle, to our duty stations for the day.

My small size extracted no compassion, and I was told that I would not allow garbage to ever fill the 60-gallon cans for



which I had responsibility to carry, empty and replace. The size and weight of the cans required two men to carry them. My shipmate and co-worker was more than 6 feet tall, but the job of carrying the filled cans seemed to me to be a very one-sided undertaking.

The second morning was a near carbon of the first. The exception came immediately after the noon meal. Four 18-wheeler trucks had parked at the loading dock of the mess hall. The job was simple: unload the cargo on the double to the food lockers about 100 feet from the dock.

We lined up in single file from the food locker to the back of the trucks. Each shipmate from the company passed—actually threw—cases of food or crates of perishables to the sailor behind him. As I approached to accept my food package, I saw a heavy crate of oranges headed my way. I stepped back to avoid the heavy crate.

From out of nowhere came a deep, throaty question. "What's wrong, sailor?"

I turned and saw a monster. The voice belonged to the chief cook—a man who towered more than 6½ feet in height and who surely weighted more than 300 pounds. I snapped to attention, gave my best salute, and told him that the crate of oranges was much too heavy for me to handle.

The chief asked me if I were a sailor. I quickly responded that I was. He then advised me that if I were, in fact, a sailor, I was also a man and I, therefore, was required to do a man's work.

Out of absolute fear, I again approached the truck. With the aid of my shipmates working to distribute the cartons, I lifted the orange crate to my shoulder. Straining under the weight, I took about five steps and the crate fell to the ground, breaking open. Oranges rolled in every direction.

The chief cook had witnessed the event and quickly approached me. "Well," he exclaimed, "you were right. The crate was too heavy for you." My thoughts already were conjuring a courts-martial scene.

"Tell you what, sailor," he stated. "Reach down there, pick up the oranges and put them back into the crate."

It didn't take long before my frustration

showed, for I was involved in an impossible task. The last orange just wouldn't fit into the broken wooden-wired crate.

The chief, observing my dilemma, asked me, "What's your problem, sailor?"

I explained to him that all of the oranges wouldn't fit into the crate. He exhibited no surprise and ordered me to pick up one of the oranges. As I did, he told me, "Sailor, you take that one orange and hold it, stretch out your arm, palm up, and follow me."

The mess hall, which seated about 1,000 or more men, seemed to be several city blocks long. I dutifully followed the chief as he led me through a maze of tables and aisles to the most distant part of the hall and into a large refrigerated room. On the floor were a number of large steel tubs known as "gunboats." The chief ordered me to gently place the single orange into the tub. I did as ordered and then followed the chief back to the broken crate of oranges on the loading dock.

"Sailor," he exclaimed, "now, you pick up one more of those oranges and tote it to the same gunboat. And you repeat that process as before until each and every one of those bits of sunshine are in that boat. And, sailor, when you get done, you report to me, personally."

The evening meal was over and the work party had long gone when I made my last trip to the reefer. I knew I had walked 100 miles that day. Exhausted, I sought out the chief and found him sipping a cup of hot black coffee in his cluttered office.

"Reporting as ordered, sir," I said, trying to muster the strength to stand at attention.

"Oh, it's you," he replied. "Have you finished carrying those bits of sunshine to the reefer, sailor?" he asked.

"Yes, sir," I replied.

"Well, now, sailor," the chief asked, "what have you learned today?"

"Several things, sir," I smartly replied.

Well, that's nice to know, sailor. I would appreciate it if you would share with me what it was that you learned, exactly!" he said.

"Sir, I learned that there are 113 oranges to a crate, sir. I also learned that if you do a job the right way the first time,

you won't have to do it 112 more times, sir," I responded.

There was a hint of a smile on the chief's face, and he stood and told me, "You are truly one intelligent and smart young man. I got this feeling, son, that you have the makings of being officer material. Yep, I've no doubt that you will go far in this man's Navy. Now, you hustle back to your barracks, get some sleep and I'll see you in the morning."

The walk to the barracks was painful. Every muscle ached. I arrived to the taunting jeers of my shipmates, about 50 of whom had waited dutifully for my return. The chant went up, "Here comes the 'Sunkist Kid'." They were apparently enjoying my misery, but I couldn't share in their humor over my being subjected to torture, denigration and humiliation. The derision continued as I fell asleep in my bunk.

When the company arrived at the mess hall to start another day of servitude the next morning, we were called to attention.

"Kreiner, Edward T., Seaman Recruit, front and center," barked that deep, unmerciful sounding, voice.

I quickly stepped forward, saluted, and reported, "Reporting as ordered, sir."

The chief looked at me and, then, speaking in a voice for all 130 men to hear, stated, "Kreiner, you are an intelligent sailor! You have learned so much working under my supervision that I'm placing you 'in charge'. Here, son, take this clipboard, check off the groceries, and make sure your shipmates turn-to."

In less than a minute, I was the "acting chief," and I quickly assumed command and proceeded to bark out a litany of orders to my shipmates. The newly invested authority was sweet, indeed.

I often thought that I had the last laugh then. But the chief, in his crusty, salty and seasoned experience, not only knew what he was doing in teaching a young sailor a very needed lesson but also was a prophet of sorts. Ten years later, following the Korean War, I was commissioned an ensign in the United States Navy. □

Kreiner is a retired Navy lieutenant residing in Joppa, Md.

The battle for Leyte Gulf

In terms of manpower and overall destruction, naval history has no rival for the Battle for Leyte Gulf.

About 280,000 men participated in the World War II engagement which pitted more than 200 American ships against 64 Japanese warships. Every weapon in the naval warfare arsenal except mines, was used in this four-part battle.

Despite an advantage in numbers, the Battle for Leyte Gulf was far from an easy victory for the U.S. Navy. Mistakes were made on both sides, and anything could have happened.

Leyte Gulf, in the eastern Philippines, is bounded by three islands—Samar, Leyte and Mindanao. On Oct. 20, 1944, 145,000 Army troops landed on the beaches of Leyte—the first step in the recapture of the Philippines.

More than 150 warships screened and protected nearly 600 U.S. amphibious ships, landing craft and supply vessels participating in the invasion.

The American ships were organized into two fleets: Adm. William F. Halsey's fast carrier force and Vice Adm. Thomas C. Kinkaid's amphibious strike force.

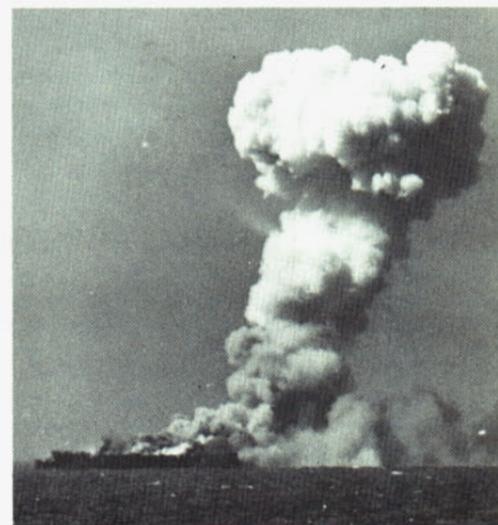
Anticipating the American invasion of the Philippines, Japan assembled surviving ships of its fleet in hope of delivering a telling counter-blow against the invasion force.

The Japanese called their plan *Sho*, which means victory. From their standpoint, *Sho* had to be a victory; if the Americans recaptured the Philippines, Japan's oil supply—along with its hope of winning the war—would vanish.



Operation *Sho* involved a coordinated movement of four forces. The strongest force, commanded by Adm. Takeo Kurita, was to pass through the central Philippines by way of the Sibuyan Sea and approach Leyte Gulf from the north. It consisted of two new "super-battleships," three older battleships, 10 heavy cruisers, two light cruisers and 15 destroyers.

Two smaller forces, commanded by Adms. Shoji Nishimura and Kiyohide Shima, respectively, were to enter Leyte



Above: Naval forces approach beaches at Leyte, Republic of the Philippines. **Right:** Princeton is hit by Japanese bombers.



Gulf from the south through Surigao Straits. Nishimura had two battleships, a cruiser and four destroyers. Shima, following four miles astern, had three cruisers and four destroyers. Lacking aircraft carriers, the attacking forces depended on land-based aircraft for air protection.

The Japanese forces planned to crush the U.S. 7th Fleet between the jaws of a pincers.

A fourth Japanese force, commanded by Adm. Jisaburo Ozawa to the north, consisted of four carriers, two battleships

modified to launch aircraft, and 13 cruisers and destroyers. However, Ozawa's force was merely a decoy intended to draw Halsey away from Leyte Gulf.

The enemy sighted

At dawn Oct. 23, 1944, U.S. submarines *Darter* (SS 227) and *Dace* (SS 247) spotted Kurita's force approaching the southern entrance to palawan passage. He hadn't stationed a screen of destroyers ahead of his formation and the submarines had a field day.

When the smoke cleared, two heavy cruisers had been sunk, including the force flagship, and one severely damaged.

Halsey planned an air strike for the morning of Oct. 24. However, the Japanese had similar plans and launched land-based aircraft in their most successful air counterattack of the Leyte operation.

Three separate raids of 50-60 Japanese planes were made on 3rd Fleet aircraft carriers near the island of Luzon. Superior aircraft and better trained pilots helped fend off the attacks. However, one enemy aircraft did get through and dropped its 550-pound bomb on the carrier USS *Princeton* (CVL 23). Despite heroic damage control efforts, the ship went down.

Battle of the Sibuyan Sea

While Halsey's fleet fought off these attacks, it launched 259 sorties against Kurita's reduced but still formidable force.

American aircraft concentrated their firepower on the super-battleship *Musashi*. It sank after being pummeled with 19 torpedoes and 17 bombs.

Additionally, the American air attack damaged several other battleships and forced one cruiser out of action. The at-



Top left and right: Kamikaze pilots hit USS *St. Lo* (CVE 63). Two men board USS *Waller* (DD 466) after being blown overboard from *St. Louis* (CL 49). Left: USS *Birmingham's* (CL 62) crew extinguishes *Princeton's* fires.

Leyte Gulf

Clockwise from right: Smoke screens protect allied ships from Japanese planes. The wardroom of USS Suwanee (CVE 27) as an emergency sick bay. Funeral services aboard USS Kalanin Bay (CVE 68). Torpedo Squadron 51 pilots (center) from San Jacinto (CVL 30). Loading a San Jacinto plane with a torpedo. Zuikaka crew members throw explosives over the side.

tacks compelled Kurita's forces to retreat and reorganize.

Kurita's force wasn't the only one fate failed to smile on. The two forces approaching Leyte Gulf from the south through Surigao Straits were about to play a role in a historic confrontation.

The battle of the Surigao Straits

As historian David Howarth put it, "That night in the southern sound the last traditional naval battle was fought, with no intervention from aircraft or submarines, the last time in history that a fleet advanced into battle in the traditional line ahead, and the last time its enemy used the tactic of crossing a T."

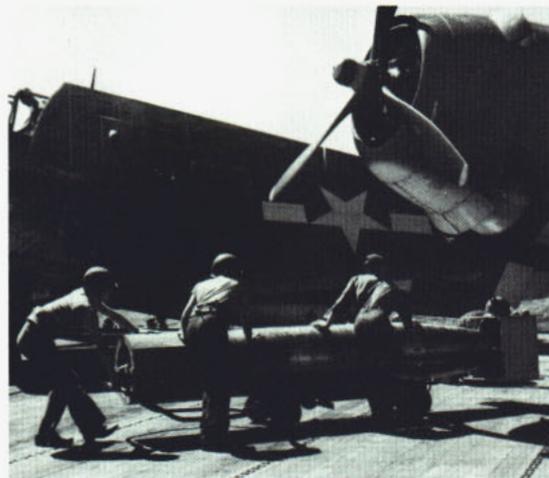
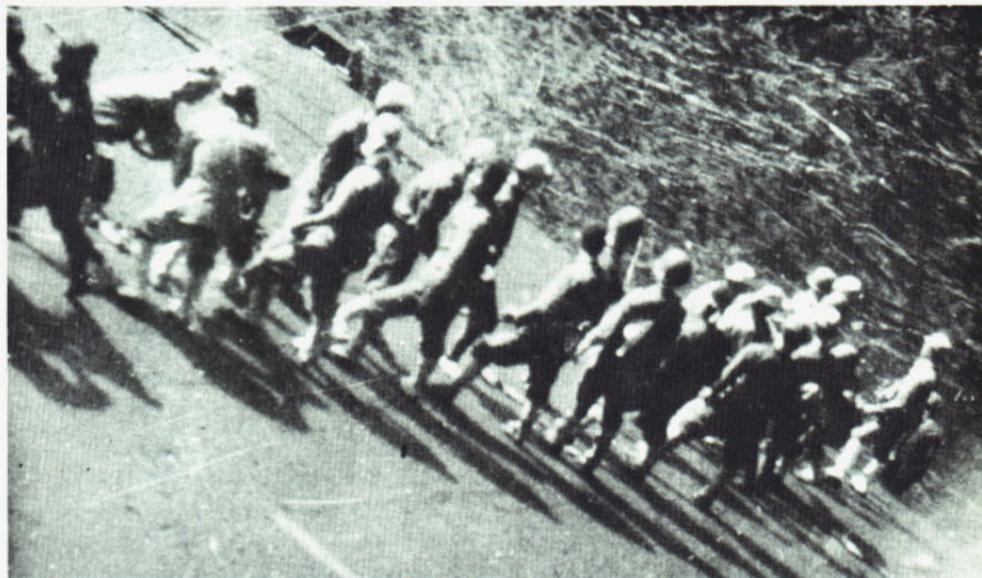
Nishimura's force entered the strait in a column formation from the south, unaware that a superior force of battleships and cruisers lay in wait.

Kinkaid correctly anticipated the Japanese approach to Leyte Gulf via Surigao Strait and ordered his fleet to prepare for a night engagement.

U.S. Battleships *Mississippi* (BB 44), *Maryland* (BB 46), *West Virginia* (BB 48), *Tennessee* (BB 43), *California* (BB 44) and *Pennsylvania* (BB 38) formed a battle line across the mouth of the strait. Just south of this mass of fire power, a force of 36 cruisers and destroyers plied the strait.

First to engage the Japanese was a group of 39 motor torpedo boats that launched torpedo attacks as the Japanese advanced. While none of the attacks were successful, the PT boats provided information on the enemy's progress to the big ships ahead.

The first real damage was inflicted by American destroyers. A group of five vessels swung into the strait and launched 27 torpedoes. The torpedoes hit three destroyers, broke the battleship *Fuso* in half, and hit the flagship *Yamashiro*. Not one attacking destroyer was hit.



Nishimura's ships continued forward with battleship *Yamashiro*, one cruiser and a destroyer remaining. Lacking the advanced radar systems the Americans possessed, the three ships steamed unknowingly into the jaws of devastating firepower.

West Virginia, *Maryland*, *Mississippi*, *Tennessee* and *California* opened fire.

The gunnery battle lasted 10 minutes. When it was over, flagship *Yamashiro* capsized and sank, the cruiser was burning and the destroyer was heavily damaged and in retreat.



Shima's second force entered the strait and found burning wreckage. Realizing the fate of the first force, Shima decided to retreat and reorganize.

Kinkaid's forces, fighting the battle in the south, believed that Halsey's fleet was protecting San Bernadino Strait to the north. However, in a decision that he has been criticized for, Halsey took his 65 powerful ships to thrash the 17 ships of Ozawa's northern force. Halsey had fallen for the bait and left San Bernadino Strait unprotected.

Kurita's force had been bloodied earlier, but was far from out of the fight. It still had the super-battleship *Yamato*, three other battleships, six heavy cruisers, two light cruisers and 15 destroyers.

Fighting off the American air attacks, Kurita reorganized his forces and proceeded unmolested through San Bernadino Strait. His force steamed into battle with an advantage—surprise.

The battle off Samar Island

On the morning of Oct. 25, Kurita's ships encountered six American escort carriers, commanded by Rear Adm. Clifton Sprague. The "baby carriers" had flown off most of their aircraft to protect ships in the Gulf. Their only protection was 5-inch guns, a few remaining aircraft and a screen of destroyers and destroyer escorts.

The American forces displayed unbelievable gallantry and resourcefulness in face of the enemy.

Sprague ordered three ships in his destroyer screen to attack. Attack they did.

U.S. destroyers *Hoel* (DD 533), *Heermann* (DD 532) and *Johnston* (DD 557) were first to engage the enemy fleet. *Johnston* fired all of its torpedoes and hit a heavy cruiser, knocking it out of the fight. A series of salvos from a battleship and a cruiser eventually put the spunky destroyer under.

Hoel fired all its torpedoes and guns, and took more than 40 hits before sinking.

One after another, the other destroyers joined in the attack, damaging many of the larger enemy ships. The destroyers sank another cruiser and put Kurita's forces into retreat.

Three destroyers were lost in the battle, but only one of the light carriers succumbed to the Japanese attack. Meanwhile, Halsey was engaging the Japanese decoy fleet to the north.

The battle off Cape Engano

The northern force only had 29 aircraft on its six carriers when Halsey's fleet found them. Accompanied by three cruisers and eight destroyers, the Japanese ships were no match for the American force of five fleet carriers, five light carriers, six battleships, eight cruisers and 41 destroyers.

However, Halsey's fleet sank only four carriers and one destroyer. The remainder of the Japanese northern force retreated. American submarines sank another two destroyers and a light cruiser after the battle.

The battle off Cape Engano was the only phase of Japanese operations at Leyte Gulf that went according to plan. However, it was too little too late to thwart an overall American victory.

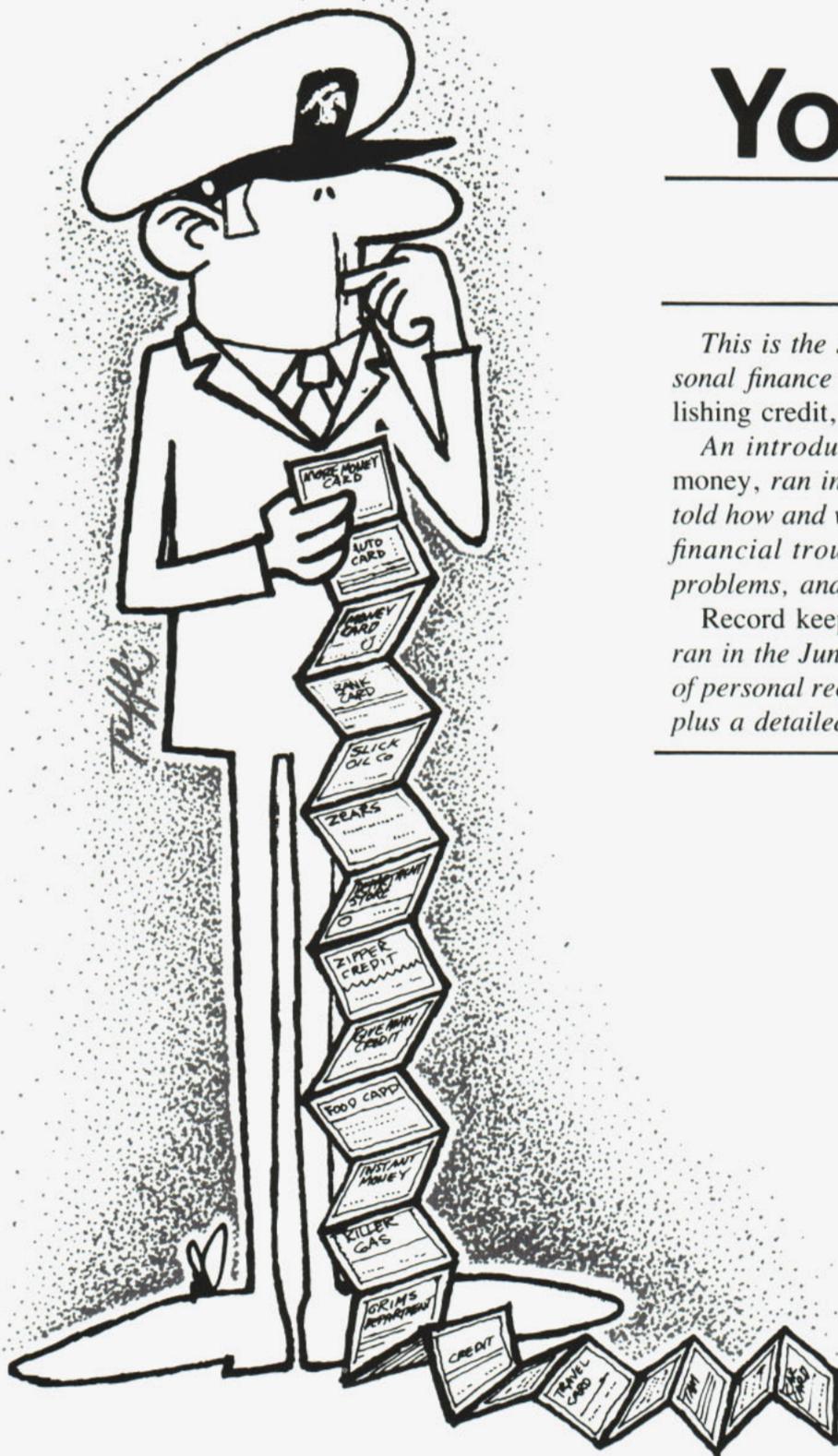
The Navy's victory in the Battle for Leyte Gulf sealed Japan's fate in World War II. It allowed positioning of American forces so close to Japan as to make victory inevitable.

As Samuel Eliot Morison put it, "However you look at it, the Battle for Leyte Gulf should be an imperishable part of our national heritage." □

—Story by JOI(SW) E. Foster-Simeon

Managing

Your credit



This is the second of a three part article on personal finance which covers record keeping, establishing credit, and family budgeting.

An introduction to the series, Managing your money, ran in the June 1985 issue of All Hands. It told how and why sailors and their families run into financial trouble, the warning signs of financial problems, and where to go for help.

Record keeping, the first part of the series, also ran in the June issue. The article included the kind of personal records to keep and where to keep them, plus a detailed listing of a filing system.

By Faith R. Connors

Careful financial planning can help you and your family get what you want most. Planning can help you live within your income and reach your financial goals. In addition to establishing a household budget and paying attention to record keeping for your family, you also need to be credit worthy and to make continuous efforts to build your net worth.

Here are some tips to help you establish a credit identity, and to prepare an annual balance sheet.

Obtaining credit cards

Establishing credit in your own name is important. In fact, it's essential to economic stability. You will need to establish at least one line of credit either through a credit charge card or a credit checking account. According to the International Consumer Credit Association, there are

your money

cards and net worth

10 action-oriented tips to keep in mind as you work to develop a good credit record:

1) Establish a steady employment record.

2) Budget your income to cover necessities and savings before purchasing luxuries.

3) Deal only with reputable firms.

4) Shop as carefully when you buy on credit as when you pay cash.

5) Know the exact amount of the finance charge, annual percentage rate and all other credit costs.

6) Do not contract for larger payments than your budgeted income will permit.

7) Build a good credit record—pay as agreed.

8) Contact your credit grantor immediately if you cannot pay as agreed.

9) Notify your creditors immediately if you plan to move to a new address.

10) Contact your local credit bureau if you have any questions regarding your credit record.

Bank credit card

If you earn at least \$10,000 to \$15,000 per year, you can apply for a bank international credit card. Decide which card or cards you prefer and complete the application form. Application questions include personal financial and credit information concerning your annual income, length of time you have been employed, your checking and savings accounts, how long you have lived in your home, and whether you own or rent. If the bank considers you to be a good credit risk, you will be issued a card. An annual charge

for a bank credit card—aside from monthly interest charges—is from \$20 to \$50 per year.

Consider the payment terms as well as the limits and liabilities regarding your card. The bank will give you a credit limit ranging from \$300 to \$5,000 or more, based on how much credit they think you can handle.

Record your card number and related information in your household records, readily at hand if you need to notify the bank that your card is lost or stolen.

Once you get your credit card, sign it and carry it in a safe place. You will receive a monthly bill for your charges. If you elect not to pay the full amount of your first bill, you will pay a finance charge of approximately 1.65% on your unpaid balance the next month. That may not sound like much but the annual rate is 19.8%.

Store credit card

It may be easier for you to first get a store credit card and then a bank credit card. There usually is no fee for credit cards issued by most major stores; they offer credit cards to make it easier for you to buy their merchandise. While your credit limit may be as low as \$300 at first, the store will extend your credit if you pay your bills on time. Yearly finance charges on unpaid balances will range from 12 to 20 percent.

Another approach

If you are not able to get a bank credit card or a store credit card, you can still

take steps to establish credit identity. First, open a savings account, then take out a small personal loan. You need not spend the money you have borrowed, but can put it in your savings account. Repaying the loan on time will establish you as credit worthy person.

Charge card

You must have a very good credit rating in order to obtain a major charge card. Credit is not extended by charge card issuers; bills are due as soon as they are received in each month. Annual costs for a charge card typically range from \$35 to \$75.

Convenience of credit cards

Credit cards, used wisely, can be very helpful to you. You can buy on sale—and not have to wait until you have saved enough money for an item. In addition, you don't have to carry large sums of cash. In an emergency, credit cards are an excellent resource. For now at least, interest charges are tax deductible. You get financial leverage—that you can use borrowed funds to purchase an asset. You can also use your credit cards to supplement your emergency funds . . . in effect, giving yourself a temporary loan.

Disadvantages of credit cards

Interest rates and fees can be hefty. Spending on credit is so easy that you can get into financial difficulty quickly—you can get overextended, playing havoc with your budget, or even get into more serious trouble. If you overspend and can't pay

Managing your money

on time, you can be forced into bankruptcy or other legal difficulties. Here are some tips to help avoid some of the common problems with credit cards:

- Keep all credit card receipts.
- Decide how much you will spend each month and keep careful track of that spending.
- Report lost or stolen credit cards promptly. You are liable for up to \$50 on charges made on a stolen, unreported credit card. If you notify the credit card company immediately—usually via their toll free number—you may not have to pay anything.
- Tear up all carbons of a bill if you decide not to keep it as a part of your personal finance file. Thieves rummaging through waste baskets or garbage can easily make a new card using your account number . . . the one they lifted off the bill

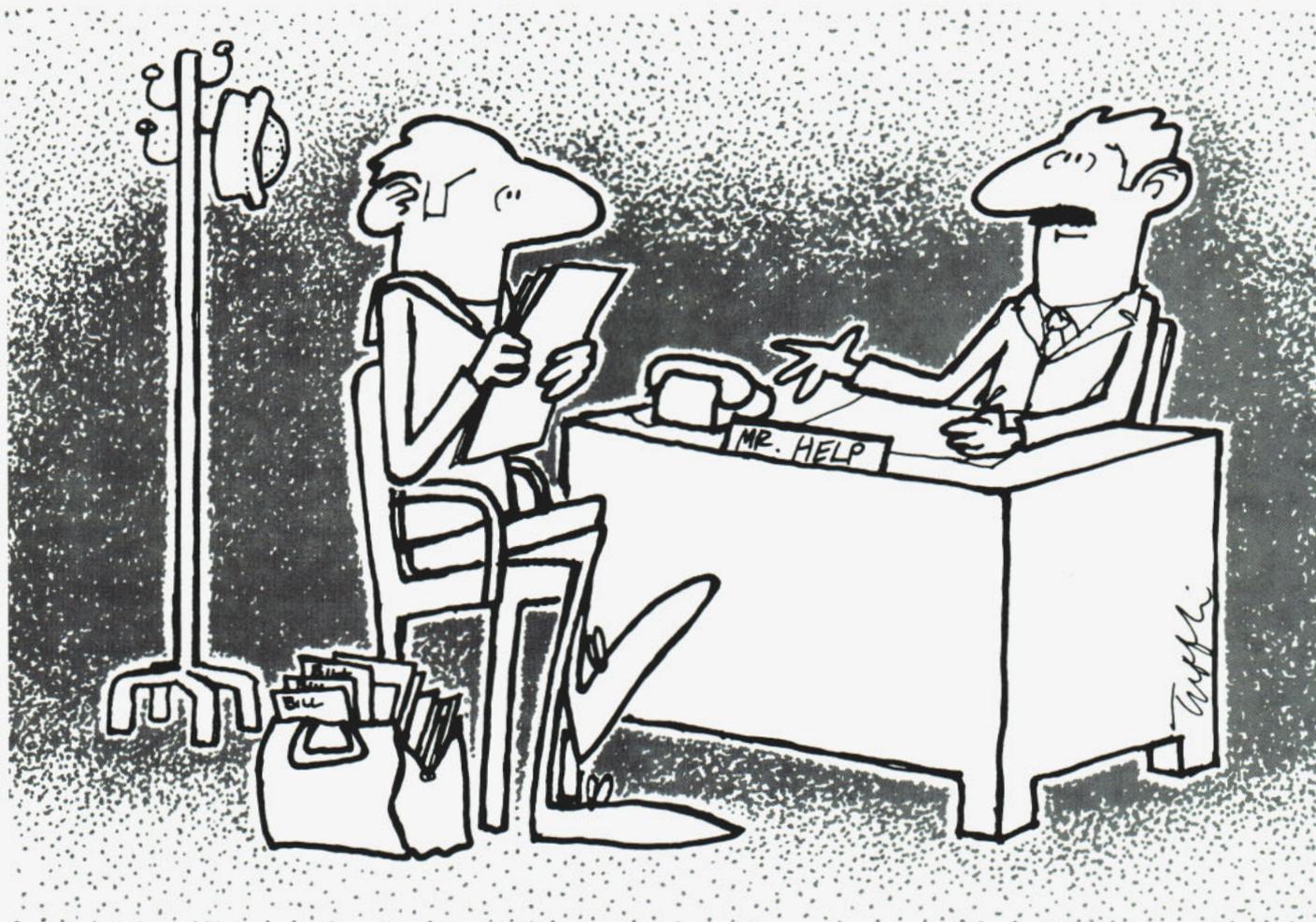
carbon copy.

- Keep careful track of your credit cards. Always know where they are.
- Never give your credit card number over the telephone to anyone calling to “check your credit card number.” The caller can then use your card number to make charges to your account by telephone.
- Check your credit card bills as soon as they arrive in the mail. Check all charges with copies of your receipts. If there are any charges you do not recognize, then call the company immediately (which usually has an 800- number for this purpose).
- Finally, check your credit from time to time. Contact your local credit bureau and request a copy of your credit record. It’s a good idea to review your credit record on a regular basis—about once a year—to make sure the information in your

electronic “file” is accurate and up to date.

Determining your net worth

All of your efforts in personal financial planning can be focused on a very important goal: increasing your net worth. According to a recent government report, the typical American family had a net worth of \$24,000 in 1983. How can you determine your own net worth? By adding up all of your assets such as saving accounts, bonds, real estate and personal property, and subtracting that from your liabilities, such as bills and loans. To help you figure your net worth, use the balance sheet included here. Why not prepare such a balance sheet annually? With good record keeping, financial planning, and cost cutting, you should see steady progress. □



Annual Net Worth

NAME(S) _____	
DATE _____	
BALANCE SHEET	
ASSETS	LIABILITIES
<p>MONETARY ASSETS</p> <p>1 <i>Cash</i></p> <p style="padding-left: 20px;">On hand _____</p> <p style="padding-left: 20px;">Checking account _____</p> <p style="padding-left: 20px;">Savings account _____</p> <p style="padding-left: 20px;">TOTAL CASH _____</p> <p>2 <i>Money loaned to others</i> (repayment expected) _____</p> <p>3 <i>Investments</i></p> <p style="padding-left: 20px;">Savings bonds _____</p> <p style="padding-left: 20px;">Stocks and bonds _____</p> <p style="padding-left: 20px;">Mutual funds _____</p> <p style="padding-left: 20px;">Cash value of life insurance _____</p> <p style="padding-left: 20px;">Cash value of annuities _____</p> <p style="padding-left: 20px;">Cash value of retirement funds _____</p> <p style="padding-left: 20px;">TOTAL INVESTMENTS _____</p> <p>4 TOTAL MONETARY ASSETS _____</p> <p>FIXED ASSETS</p> <p>5 <i>Home and property</i> _____</p> <p>6 <i>Investments</i> _____</p> <p style="padding-left: 20px;">Other real estate _____</p> <p style="padding-left: 20px;">Retirement fund _____</p> <p>7 <i>Automobiles</i> _____</p> <p>8 <i>Ownership interests in small businesses</i> _____</p> <p>9 <i>Personal property</i> _____</p> <p>10 TOTAL FIXED ASSETS _____</p> <p>11 TOTAL ASSETS OF FAMILY _____</p>	<p>12 <i>Unpaid Bills</i></p> <p style="padding-left: 20px;">Taxes _____</p> <p style="padding-left: 20px;">Insurance premiums _____</p> <p style="padding-left: 20px;">Rent _____</p> <p style="padding-left: 20px;">Utilities _____</p> <p style="padding-left: 20px;">Charge accounts _____</p> <p style="padding-left: 20px;">Other _____</p> <p style="padding-left: 20px;">TOTAL UNPAID BILLS _____</p> <p>13 <i>Installment Loans</i> (balance due)</p> <p style="padding-left: 20px;">Automobile _____</p> <p style="padding-left: 20px;">Other _____</p> <p style="padding-left: 20px;">TOTAL _____</p> <p>14 <i>Loans</i> (balance)</p> <p style="padding-left: 20px;">Bank _____</p> <p style="padding-left: 20px;">Education _____</p> <p style="padding-left: 20px;">Other _____</p> <p style="padding-left: 20px;">TOTAL _____</p> <p>15 <i>Mortgage Loans</i> (balance due)</p> <p style="padding-left: 20px;">Home _____</p> <p style="padding-left: 20px;">Other _____</p> <p style="padding-left: 20px;">TOTAL _____</p> <p>16 TOTAL LIABILITIES _____</p> <p>17 NET WORTH _____</p> <p>18 LIABILITIES AND NET WORTH _____</p>



On the road to 1988 Olympics

Navy martial artists gathered at Naval Amphibious Base Little Creek, Va., recently for the 2nd Annual Navy Tae Kwon Do Tournament. The event was the final opportunity for members of the Navy Tae Kwon Do Association to qualify for the U.S. National Championships at Hartford, Conn.

According to a spokesperson for the as-

sociation, five Navy fighters will compete in the nationals, first step on the road to the 1988 Olympic Games in which Tae Kwon Do is slated as a demonstration sport.

Olympic competition is still a long way off, however, and Navy competitors are currently fighting to make Tae Kwon Do an official Navy sport. According to of-

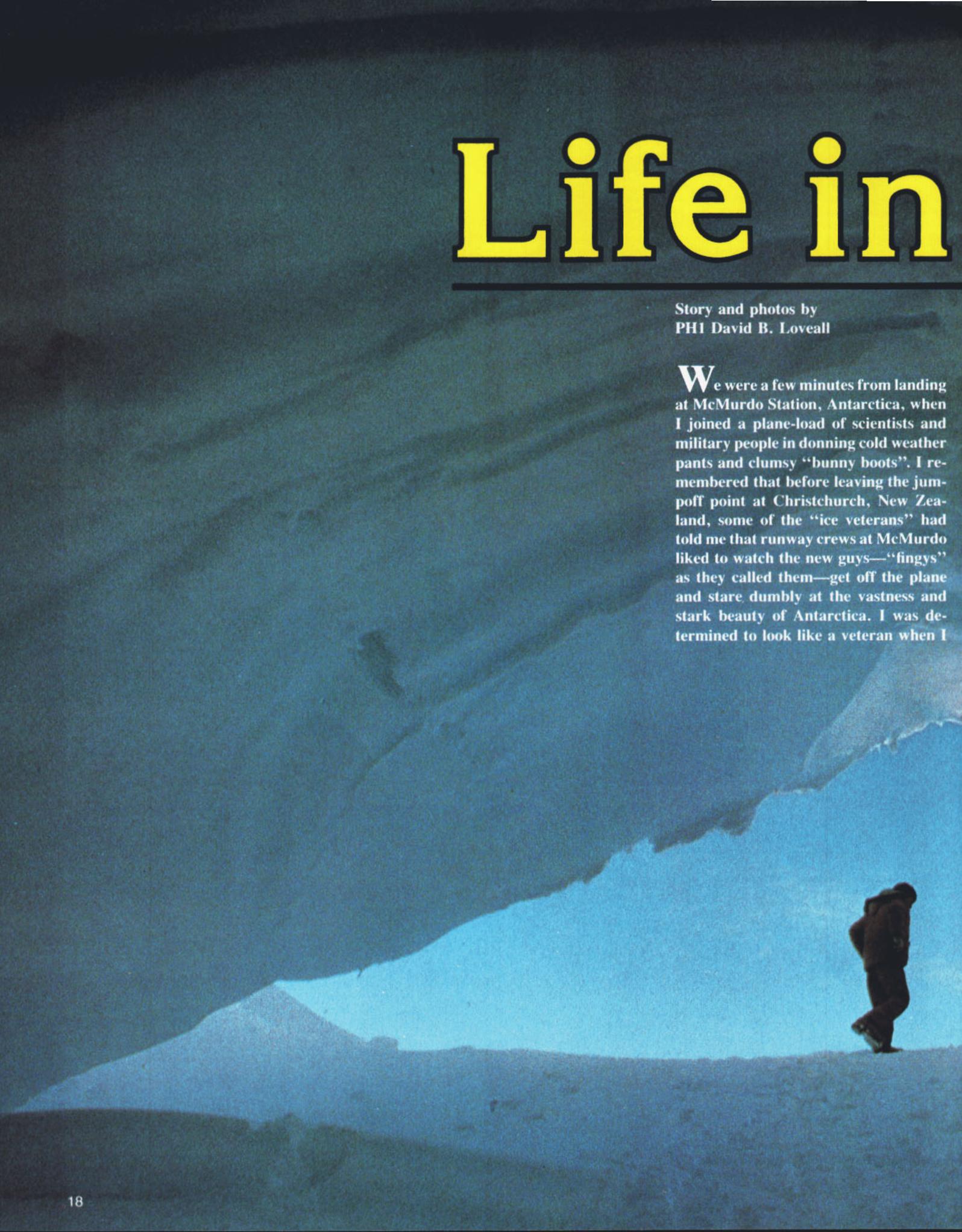
ficials at the Navy Sports Office in Washington, Tae Kwon Do must demonstrate its popularity in the Navy and other services before receiving official sponsorship.

For more information or to join the Navy Tae Kwon Do Association write to: Navy Tae Kwon Do Association, c/o Special Services Office, NAB Little Creek, Norfolk, Va. 23521. □



Clockwise from top left: Steve Goad prepares to take on an opponent; fighters meet in a flurry of kicks and blocks; Goad's family and friends study the action; winner of a hard-fought contest. Photos by JO1(SS) Peter D. Sundberg.

Life in

A person in dark winter gear stands on a snow-covered ridge, looking out over a vast, flat, snow-covered landscape under a pale, overcast sky. The scene is desolate and emphasizes the scale of the environment.

Story and photos by
PH1 David B. Loveall

We were a few minutes from landing at McMurdo Station, Antarctica, when I joined a plane-load of scientists and military people in donning cold weather pants and clumsy “bunny boots”. I remembered that before leaving the jump-off point at Christchurch, New Zealand, some of the “ice veterans” had told me that runway crews at McMurdo liked to watch the new guys—“fingys” as they called them—get off the plane and stare dumbly at the vastness and stark beauty of Antarctica. I was determined to look like a veteran when I

Antarctica

got off the plane and began trying to scuff up my brand new, snow white bunny boots.

We landed smoothly, the door was opened and a rush of dry, frigid air slammed me in the face. My nostrils were freezing, and my eyes were burning as I stepped off the plane. I stared dumbly, another finny providing entertainment for the McMurdo ground crews.

It looked like a place forgotten by its creator, like another planet. Seventy miles away, white, knife-edged mountains circled the ice shelf we had landed on.

In terms of modern conveniences, stations in Antarctica have progressed considerably since the exploration days

of South Pole discoverers Capt. Robert F. Scott and Roald Amundsen. However, memorial crosses dotting the volcanic ash hillside near McMurdo serve as grim reminders that the continent remains anything but tame.

We rode into town aboard a 20-passenger, II-vehicle Penguin Ice Transit System known as PITS. To say the ride was bumpy would be overly kind. We were dropped off at "Derelict Junction" in the heart of what appeared to be an old mining town—only without hitching posts and horses. We had arrived on the ice.

McMurdo Station is the primary jump-off point and main hub of activity for all work done in Antarctica. In the summer season, McMurdo's population is roughly 900—National Science Foundation workers, scientists, and U.S. Navy and Army support person-

nel. All work together in a cooperative scientific research effort. The Navy's logistical support role is provided by ski-equipped KC-130 *Hercules* cargo planes, and UH-1N *Huey* helicopters.

For the men and women of Naval Support Force Antarctica, summer deployment means September through mid-February. Since the sun never sets during this period, it also means one continuous six-month day. The advantage of constant daylight results in long, demanding work hours.

"We do have set working hours, but they're not 100 percent firm. The clocks around here don't mean a thing," said Equipment Operator 1st Class J.W. Branch. "We had a dozer crew out for a 'night's work' to clear the runway, and it came back into town three weeks later. Guys down here really hump."

Clearly, the weather in Antarctica is the main obstacle to overcome. Conditions range from ONE (severe) to THREE (sunny). "Herbies" are fierce-blowing snow storms that can disorient a person only yards away from the safety of a shelter. When "whiteouts" occur, clouds hang in the horizon and obscure all sense of direction and distance. Aviators can't fly, and outdoor activity



Life in Antarctica

Clockwise from right: McMurdo Station in the Antarctic; Marble Point Air Facility is a helicopter refueling station; blizzards called "Herbies" limit outside operations; snowmobiles are the workhorses of the Antarctic; a seal pup sunbathes on the McMurdo Sound ice shelf; new arrivals—fingys—debark a C-141.

nearly comes to a halt. Temperatures in Antarctica have been recorded as low as minus 186 degrees, and at a balmy 32 or more degrees in the summer months. Because of the extremely dry air—less than 2 percent humidity—a person can work outside on a sunny zero-degree day without wind in combat greens and thermal underwear. The weather is always a key topic of discussion, but life on the ice demands more than acclimatization to the elements.

"Life in general here leaves a lot to be desired," said Photographer's Mate 2nd Class Richard Stone of Antarctic Development Squadron 6. "You miss little things in life, like not being able to wash your clothes more often than once a week, not being able to change the T.V. channel when you want to. But all the people here try to create their own fun and diversions. We have outdoor barbecues and chili cook-offs, and we get together and play trivial pursuit—things you might not do anywhere else."

Anywhere else, however, it wouldn't take Utilitiesman Joe Dolan long to find a broken sewer line. Here, the problem is under 3 feet of ice under a building. It's a typical job where Joe's basic training must take a back seat to old-fashioned horse sense and ingenuity.

"How well you survive down here may depend on how well you can utilize and improvise all aspects of your rate," he said. As he chipped away at the murky-colored ice with a hand axe, two portable heaters outside the building poured 300-degree air through flexible hoses, softening the ice and Dolan's job.

"I like the cold weather," he said, wrinkling his nose at the stench of flying sewer ice chips. "The work's good, too, although when I signed up to be a utilitiesman, I never thought I'd be doing this."

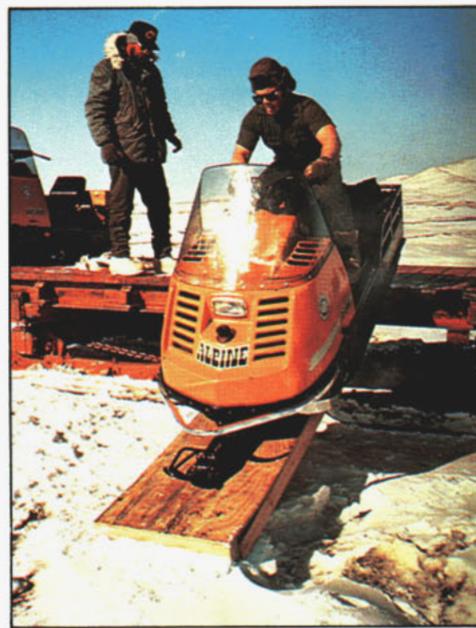
Other rates on the ice also find pecu-



larities in their work. Equipment operators conduct bulldozer and sled re-supply runs called traverses. These operations carry fuel, food and support equipment to Marble Point, a helicopter refueling station and staging area for more remote research camps. Before pulling out on the fourth and final traverse of the season, Petty Officer 2nd Class John Hills, traverse leader,

described this unique evolution.

"It's about 140 miles and two to three days across the ice shelf, weaving around cracks and pressure ridges every step of the way," Hills said. "It's a long trip for us, but only about a half-hour flight by helicopter. Thanksgiving is about as late as we go out because of the ice condition. It looks like a relatively safe operation—



and it is—but you gotta remember that we're pulling around 80,000 pounds of bulldozer and sled over ice, with 1,000 feet of water under us."

The first thing I noticed about Hills was the huge wad of leaf chewing tobacco stuffed in his cheek. The first thing he noticed about me was my sparkling new, ultra-white bunny boots.

'Arrrrggghh,' he groaned, pointing to my feet. "I hate white bunny boots. We'll have to fix that later."

We left McMurdo Station in a yellow, box-like track vehicle called a Spryte. Once under way, Hills radioed back to McMurdo every hour or so, checking in, while constantly scanning the desolate ice shelf ahead for cracks and pressure ridges. He

stopped frequently and left the Spryte to pick at an ice fault with his climbing axe, then to drill a hole to check the strength of the ice.

We traveled less than five miles per hour—nothing happens quickly there. Hills pulled intermittently at the steering levers, and the only sounds were those of the Spryte's engine and crunching ice un-

Life in Antarctica

Clockwise from right: A supper break inside a Jamesway shelter; EO2 John Hills drills into the ice shelf to determine its thickness; Mount Erebus, an active volcano, lies behind Marble Point; EOCN Scott Gardinier prepares one of his "ice omelets"; a bulldozer and trailers inch over the McMurdo Sound ice shelf.

der the trackbelts. For miles on end, the landscape was littered with jagged ice, twisted and broken from the pressure of changing tides. Icebergs the size of apartment buildings overlooked the frozen world we had become such a miniscule part of.

After 15 hours of kidney-jarring bumps, and still a day and a half away from Marble Point, we stopped at midnight to rest. Petty Officer 2nd Class Jim Porter, a dozer driver, lit off a diesel stove to heat the sleeping shelter we towed on one of the sleds. I noticed that each side of the shelter held bunk beds, three high. Porter explained the arrangement.

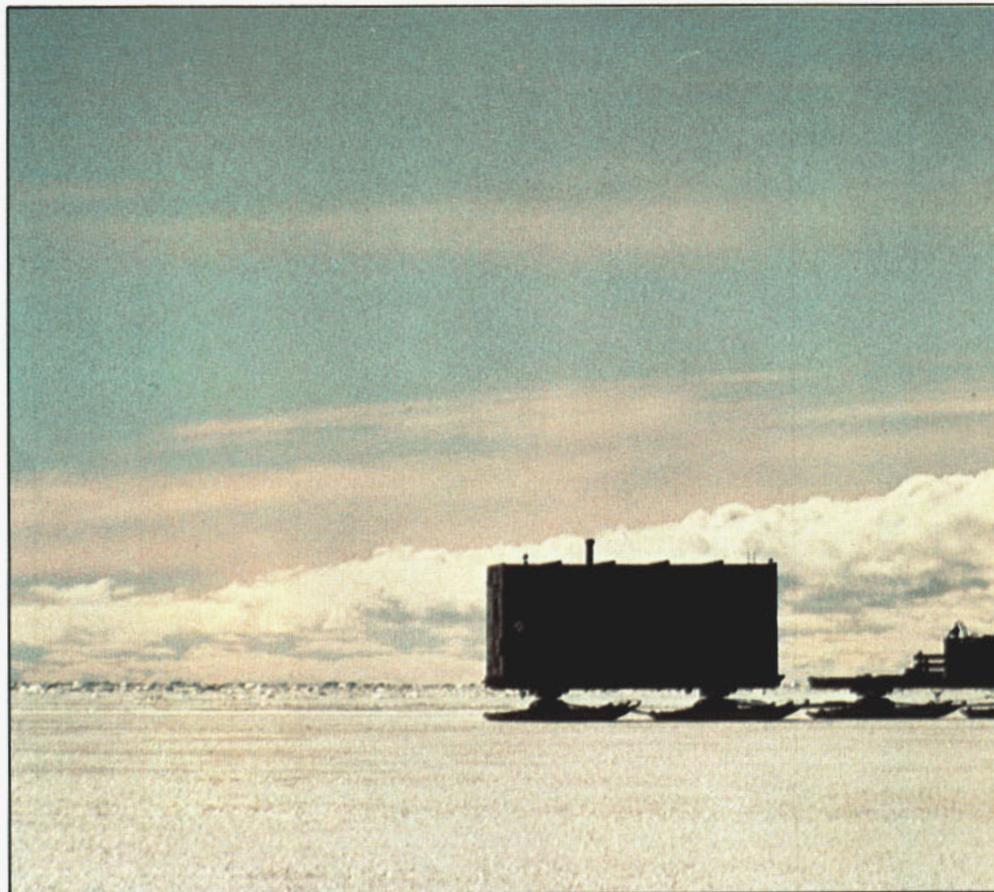
"These racks are temperature controlled," he said. "The one next to the floor is about 30 degrees, and the one at the top is a toasty 100 degrees." (Like Goldilocks, I chose one of the middle racks that was "just right".) After I rested, my education continued.

The second dozer driver, Scott "Hoss" Gardinier, was assigned cook. I watched as he poured water into tins of dried green peppers and onions, the first steps in preparing his famous "ice omelets". As Hoss prepared breakfast, my attention was taken by an odd pair of bunny boots lying on the floor of the shelter; odd because they were painted a bright international orange.

"Hey," I hollered, "whose boots?" The snickers and chuckles around me were all the answer I required. "My boots! Those ugly suckers are my boots!" Hills glanced over at me, a smirk on his face, and said, "I hate white bunny boots."

Pranks and ice humor are a way of life in Antarctica. In McMurdo there's a road sign that reads, "Texaco Ahead," and on the road that crosses the ice shelf to the ice runway, some inventive person placed a "deer crossing" warning sign for the benefit of all finky travelers.

In the McMurdo barracks, humor eased



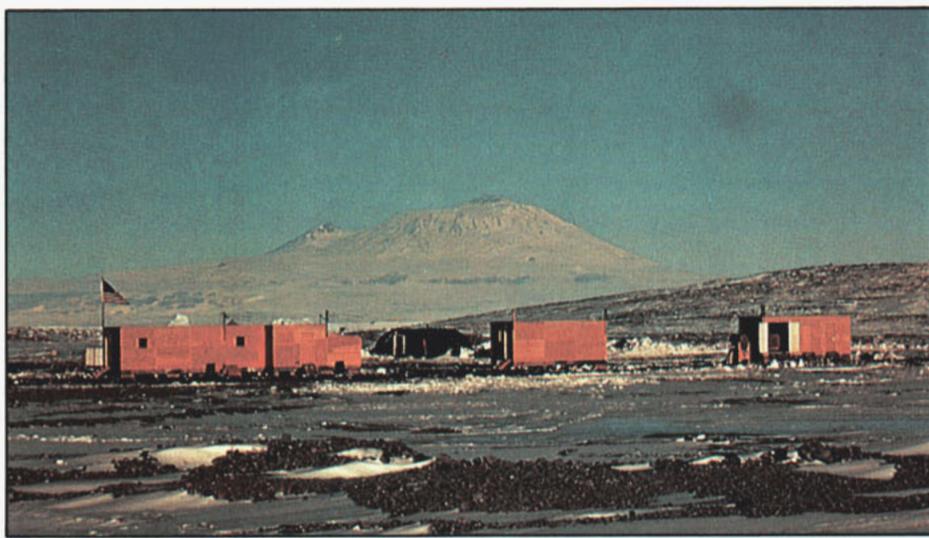
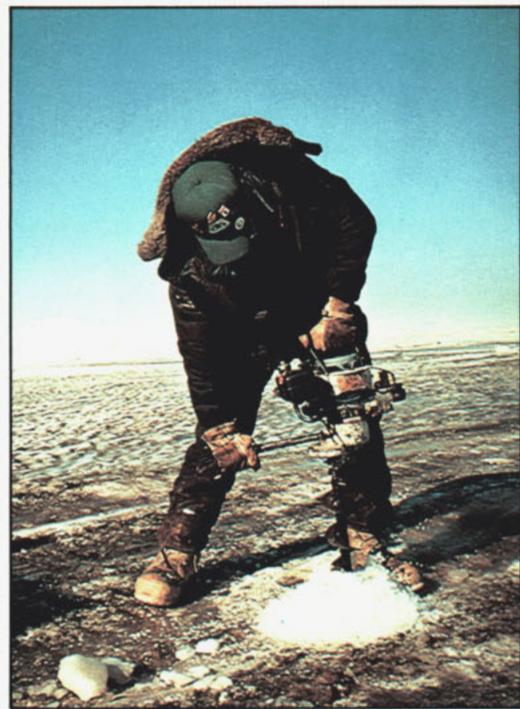
the tension created when four roommates lived virtually on top of each other during an isolated five-month tour.

A classic example was the legendary Room 233 gag. While Electronics Technician 2nd Class Mike Vick worked late one evening, his three roommates stripped the room. When they'd finished, all that

remained was Vick's mattress and a note which read, "Dear Mike, I know you've been cheating. I've taken the kids and went to mother's."

It took three days to put the room back into shape. On the ice, you take a good three-day diversion where you find it.

Antarctica's December weather was a



tropical 32 degrees and brought rapidly melting snow. McMurdo Station quickly turned into a quagmire of mud and muck, and lived up to its old mining town image. The snow runoff started the Bean River flowing through town past the tiny park and under the fishing bridge. There was talk of the catch being better than last sea-

son, which yielded not a single nibble and no sightings of fish.

My month in Antarctica was over. As I waited for my flight out, I collected recent memories and deliberately scuffed my dirty orange bunny boots on the ice. I watched the plane touch down on the ice runway and taxi to a stop. An impressive

load of fingys began to disembark. I could tell they were fingys—every one of them stared dumbly at the vastness and beauty of Antarctica. Every one of them wore unblemished, snow-white bunny boots. □

Loveall is assigned to FltAVComPac, San Diego.

TRAGEDY AT LENA DELTA

Story by Jan Kenneth Herman

For many casual and serious students of exploration, the names Kane, Greely, Nansen, Amundsen, Peary, and Byrd are forever linked with the Arctic. But how many remember George De Long, George Melville, James Ambler, and the voyage of the *Jeannette*?

In a basement storeroom at the Naval Medical Command's Building 2 rests a massive bronze tablet that once hung in the Naval Medical School library. It commemorates the tragic fate of Passed Assistant Surgeon James Markham Ambler and his fellow crewmen of the arctic steamer *Jeannette*. Their story reads like a classic novel with all the essential ingredients—discovery, adventure, sacrifice, heroism, and the struggle to survive against the odds. The story of *Jeannette* began in the 1870s with a young naval officer's ambition to conquer one of Earth's last frontiers—the North Pole—and ended along the frozen banks of Siberia's Lena River in 1883.

Birth of an expedition

By the last quarter of the 19th century, many nations, including the United States, had tried and failed to reach the North Pole. Some explorers were forced to turn back when polar ice blocked their way. Others, who believed the pole might be accessible by ship, ventured too far and became entrapped in the ice, suffering frightful losses of life. Yet the quest continued.

Lt. Cmdr. George W. De Long made the next attempt. The U.S. Naval Academy graduate had served aboard several

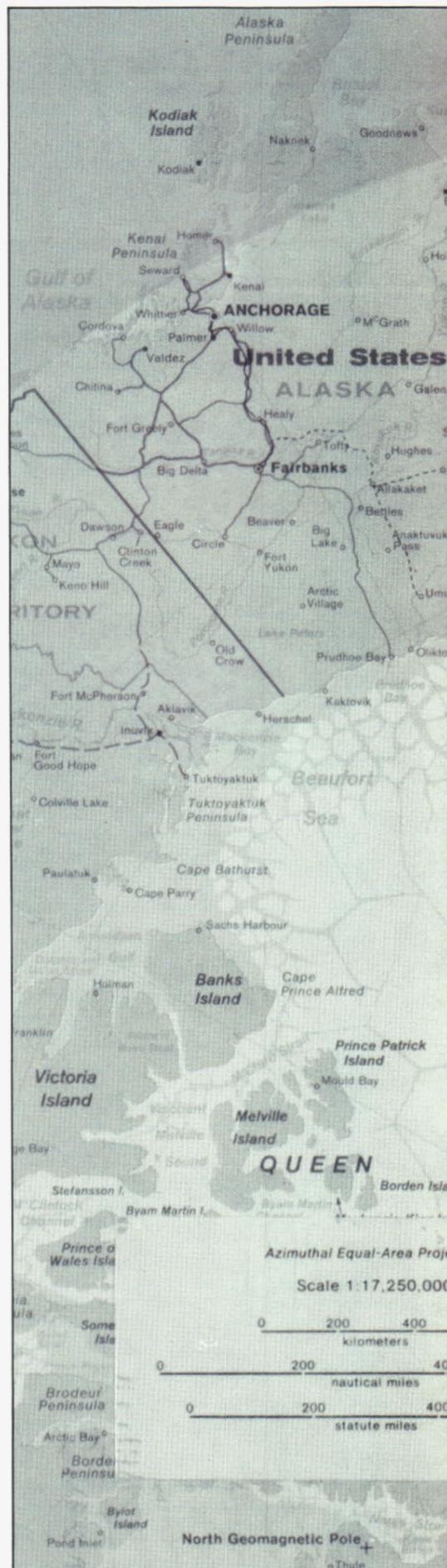
warships before getting his first arctic experience helping search for the missing exploring steamer *Polaris*. His determination to return to the Arctic translated into a correspondence and a friendship with James Gordon Bennett, owner of the *New York Herald*. Would Bennett be interested in funding an expedition if the Navy supplied the officers and men? The answer was an emphatic yes. The controversial and somewhat eccentric publisher was one of the wealthiest and most powerful men of his time. When the news lagged, he created it. It was the *Herald* that had sent Henry Stanley to Africa in search of the missing Dr. David Livingston.

Bennett wasted no time. He purchased the *Pandora*—a 142-foot barque-rigged steamer—in England, renamed her *Jeanette*, and took her to San Francisco for refitting.

Wielding power and influence, he engineered a bill through Congress that converted the ship into a U.S. Navy vessel. The act also authorized the secretary of the Navy to detail line officers and crew-

Track of the *Jeannette* and her crew:

1. Frozen in ice Sept. 6, 1879
2. April 18, 1880
3. Aug. 13, 1880
4. April 26, 1880 and returned almost to same position Nov. 3, 1880
5. Discovered *Jeannette* Island May 17, 1881
6. *Jeannette* crushed by ice June 12, 1881
7. Discovered Bennett Island July 29, 1881
8. Boats separated by gale Sept. 12, 1881
9. Melville's landing Sept. 16, 1881
10. De Long's landing Sept. 17, 1881



Lena Delta

men to *Jeannette*. De Long would head the expedition.

Refitting began at a San Francisco yard. Shipwrights buttressed portions of the steamer's wooden hull with solid Oregon pine inside the bow. They sheathed the stem with wrought iron and iron straps bolted to her outer planking. From the waterline to below the turn of the bilge, American elm planks gave the hull a new thickness of more than 19 inches. Workmen bolted massive wooden beams athwartship for lateral strength and installed new boilers. Felt insulation was applied to the insides of the wardroom and forecabin. By July 1879 the work was completed and three years' worth of coal and provisions were loaded aboard. Few doubted that *Jeannette* was as ready for arctic cruising as any ship had ever been.

Bennett and the secretary of the Navy exercised care in picking the crew. Lt. Charles W. Chipp, second in command, was a trusted officer and first-rate seaman. The navigator was Lt. John W. Danenhower. Chief Engineer George Melville, an experienced Civil War ironclad veteran, was in charge of the ship's engines and other machinery. Ice pilot William Dunbar, an ex-whaler, was said to have cut his teeth on the polar ice. Raymond Lee Newcomb, the expedition's naturalist and taxidermist, hoped to study and bring home specimens of arctic flora and fauna. Bennett appointed Jerome Collins, *Herald* staff weather reporter, as meteorologist.

Jeannette's physician was 31-year-old James Markham Ambler. Ambler began his military career as a 16-year-old Virginia cavalryman fighting for the Confederacy. After the war he studied medicine at the University of Maryland and joined the Navy in 1874. While stationed at the naval hospital in Norfolk, the passed assistant surgeon received a telegram from De Long asking him to join the crew. For Ambler, the prospect of arctic adventure was irresistible.

On to the pole

On July 8, 1879, festooned with signal pennants and with appropriate ceremony,

Jeannette weighed anchor, steamed through the Golden Gate, and set her course for the North Pole.

The ship put in at several Alaskan ports to take on sleds, dogs, other supplies, and two Alaskan Indians as hunters and dog-drivers. After crossing the Bering Strait and stopping at Kolyuchin Bay on the Siberian coast, *Jeannette* headed north toward Wrangel Island. De Long, like many of his contemporaries, hypothesized that Wrangel Land, as it was then called, was part of a continent that traversed the pole and became Greenland on the other side. If necessary, he would anchor the ship on Wrangel Land's south coast and continue the trek to the pole by dog sled.

Ice prisoner

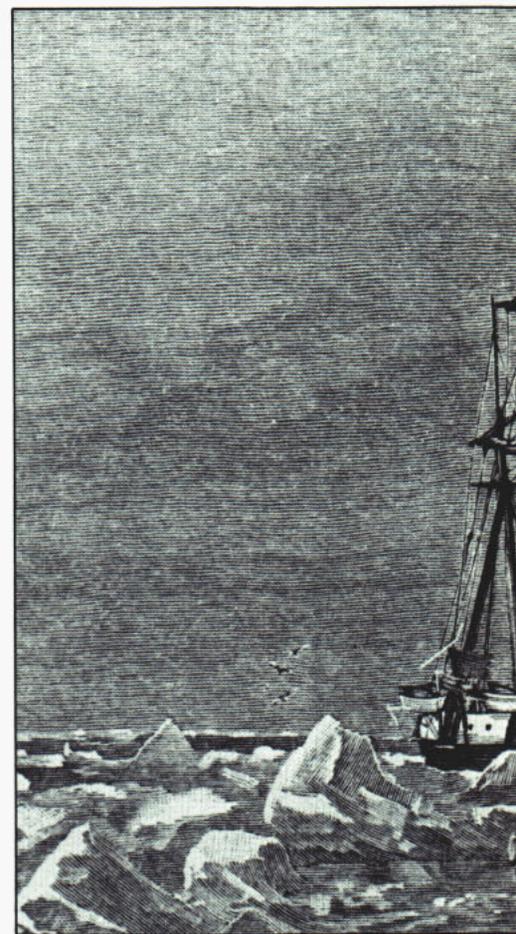
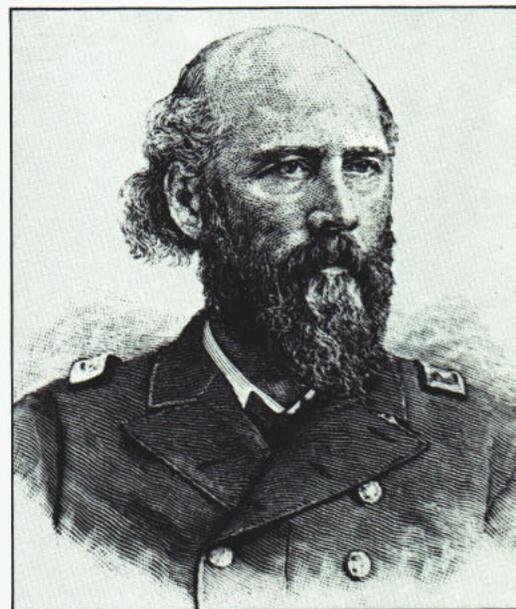
Just two months after leaving San Francisco, *Jeannette* encountered heavy ice. De Long carefully threaded her through the floes, but on Sept. 5, 1879, all progress stopped. The following morning, the captain and crew awoke to find themselves stuck fast.

"As far as the eye can range is ice, and not only does it look as if it had never broken up and become water, but it also looks as if it never would," wrote De Long in his journal. (1)

The expedition and its hopes were imprisoned for an indeterminate sentence. The men could only hope to survive a winter in their greenless, white, monochromatic world and wait for spring.

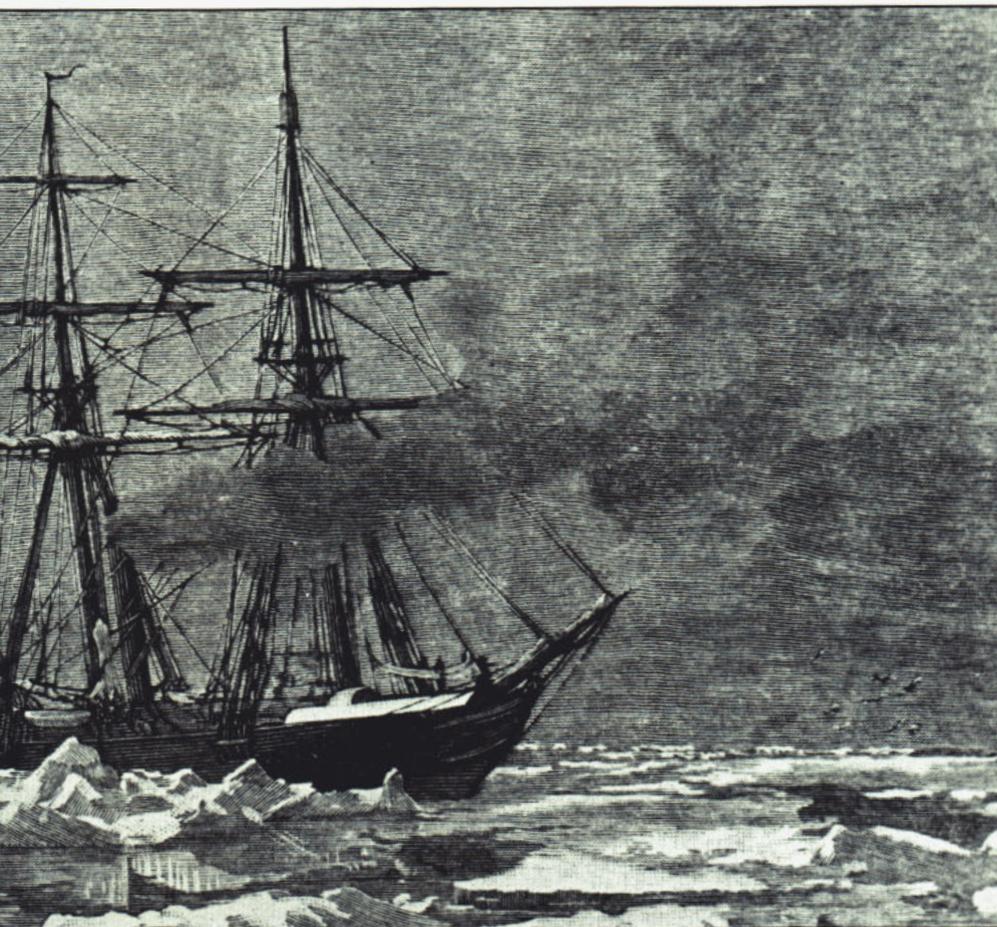
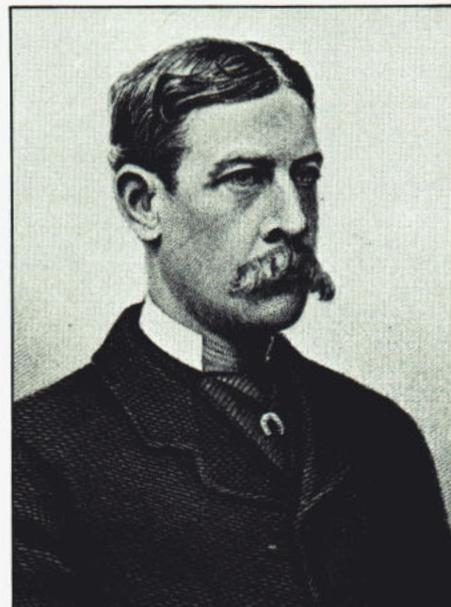
Monotony and isolation coexisted with challenge and discovery. During the day, the men left the ship and hunted seal, walrus, and polar bear to augment their diet of canned chicken and turkey, a fare the crew described as looking like "a railroad accident." (2) At dusk the brilliant ice glare often gave way to breathtaking auroral displays and skies drenched with stars.

As ice pressured the hull, one could hear the snapping and crackling of bolts and timbers. Windless nights were ghostly quiet but for the barking of the dogs. And each succeeding day the ice pack drifted northwestward with its prisoner. The days



grew shorter until the pale sun disappeared altogether and the temperature dropped to 45 degrees below zero.

On Jan. 19, 1880, *Jeannette's* fragility became more evident. Skipper De Long described "a loud noise as if the cracking of the ship's frame from some great pressure." (3) His worst fears were confirmed as icy water suddenly poured into the



Four players in the Jeannette drama were (top, left to right) Chief Engineer George Melville, who survived to recover his shipmates' remains and tell their story; Passed Assistant Surgeon James M. Ambler, who chose to share the fate of his starving companions; Lt. Cmdr. George W. De Long, Jeannette's commanding officer; and publisher James Gordon Bennett, who funded the expedition. The ice closed in on Jeannette (left) for the last time on June 12, 1881.

bilges. Only heroic efforts at the pumps kept the rising water in check. For months crewmen manning hand pumps worked around the clock just to keep ahead of water; steam pumps alone were not enough to keep the ship afloat.

The persistent leak and the heaving of the ice were worrisome. "The noise was not calculated to calm one's mind," De

Long wrote. "I know of no sound on shore that can be compared to it. A rumble, a shriek, a groan, and a crash of a falling house all might serve to convey an idea of the noise which this motion of ice-floes is accompanied." (4)

Through the long months of aimless drifting, Ambler continued to practice his profession. His vigorous brand of preven-

tive medicine kept the crew healthy. The men received their daily rations of lime juice, and scurvy was never a problem. Neither did the young surgeon let down on sanitation and hygiene. He saw that garbage details removed the ship's refuse, and he periodically sampled the ship's below-deck atmosphere for toxic gases and excessive dampness.

The procurement of fresh water was the biggest concern. "Should we be so fortunate as to return without having the scurvy break out among us I think it will be because we had pure water to drink . . .," wrote Ambler. (5) The ice pack and snowfall in no way insured a ready fresh water supply, being far too salty for drinking or cooking. The ship's distilling unit worked overtime to keep up with the demand.

Ambler's one chronic patient was Danenhowe, who suffered a serious eye affliction. For many months the navigator was confined to his bunk in great pain.

Retreat

The first winter gave way to spring, but the ship remained stuck in the ice, no closer

Lena Delta

to the North Pole than months before. A second winter came, followed by another spring. The routine wore on De Long and the crew.

“There can be no greater wear and tear on a man’s mind and patience than life in this pack. The absolute monotony; the unchanging round of hours; the waking to the same things and the same conditions that one saw just before losing one’s self in sleep; the same faces; the same dogs; the same ice. . . .” (6) *Jeannette’s* skipper faced the reality of inevitable defeat. “A ship having the North Pole for an objective point must get to the pole, otherwise her best efforts are a failure.” (7)

On June 12, 1881, the ice ended the stalemate. *Jeannette* broke free and lay in open water between two floes. All cheered to the possibility of continuing the voyage. Suddenly the ice shifted, the channel narrowed, and the ship’s once stout hull gave way like an egg shell in a vise. Water slowly rose in the hold and the men abandoned ship, taking with them two small open cutters, a whaleboat, and 60 days’ provisions. One by one *Jeannette’s* spars toppled and she slipped beneath the ice with but her foremast still upright. At 77° 15’ North and 155° east, the crew was alone in the middle of the frozen East Siberian sea.

What followed must be one of the most epic journeys in the history of arctic exploration. De Long and his 33-man crew began the long trek over the ice, dragging their boats and supplies with them. Their destination was the settlements thought to lie along the Lena River on Siberia’s northern shore.

Oak runners shod with whalebone had been affixed to the boats. One cutter weighed 3,000 pounds; the second 2,300 pounds; the whaleboat weighed 2,500. The five sleds with their provisions weighed close to 6,600 pounds. Ambler harnessed two starving dogs to a sled upon which he lashed surgical instruments, medical stores, and records and then took his turn on the tow ropes. Fissures and massive blocks of ice were in the way. The boats were so heavy that the entire crew first had to drag one, then another. They walked many miles back and forth just to gain but

a mile or two nearer their goal. And only De Long knew that even as they trudged southward the ice was moving even faster northward.

The weather worsened—sleet, rain and fog alternated with blinding glare. The men were always wet, and Ambler’s sick list grew. On July 29, 1881, after 42 days of terrible trials, they landed on solid ground, raised the American flag, and named the uncharted island Bennett in honor of their benefactor. They rested several days and then continued their voyage south until they reached the New Siberian Islands. There they hunted and rested, embarking from Semenovski Island Sept. 12.

That night a terrible gale from the northeast separated the boats. Chipp’s cutter foundered with the loss of all hands. The remaining two boats under the commands of De Long and Melville became separated, and the former’s craft nearly swamped. The “gale increased, carried away our mast at the foot and we became a wreck, taking in water, wallowing in the trough of the sea the whole night . . .” wrote Ambler. (8) Several days later the two boats went ashore many miles apart on the Lena Delta.

Lost in the Delta

Melville’s band, although exhausted and frostbitten, worked its way south for several days subsisting on tea and short rations of pemmican. De Long’s party fared poorly. Provisions ran low even though Alexae, one of the Alaskan natives, managed to shoot a deer. Slowed by the sick, they made little progress following the Lena River southward. Frostbite and hypothermia continued to take their toll. Ambler was forced to amputate the severely frostbitten foot of one crewman, who succumbed shortly thereafter. De Long decided and his surgeon concurred that no man would be left to die alone. The pemmican ran out, and each day another crewman either sickened, weakened, or died. On Oct. 9, Ambler wrote:

Yesterday without food except the alcohol. The Capt. spoke of giving the men option to-day of making



their way as best they could, that he could not keep up. . . . I told him if he gave up I took command and that no one should leave him as long as I was alive. I then suggested that we send two men ahead to try to make the settlement, and that we make the best of our way with the rest of the party. This was done. . . . (9)

Two of the strongest, W.F. Nindemann and L.P. Noros, were sent ahead to find help, and De Long gave Ambler the option of going along but he refused, choosing instead to remain with the sick and ultimately to share their fate.

Three days later, out of food, the survivors drank grain alcohol fuel and ate short rations of glycerine. They sought shelter from the wind and snow in a hollow in the river bank. On the 18th, Alexae expired. Those who were strong enough gnawed strips of leather from their boots. And one by one they lay down to die.

Epilogue

Chief Engineer George Melville and his party encountered three natives on Sept. 19, who fed and sheltered them and then showed the way to a Russian settlement.

Nindemann and Noros were rescued by other natives several days after leaving De Long and the others. Bad weather and difficulty in communicating with their res-



cuers delayed their reunion with Melville, who set out to find the De Long party. Hampered by a lack of provisions and bitter cold weather, Melville reluctantly concluded that De Long and his companions had perished. He decided to wait until spring to search for their remains.

The following March, Melville searched much of the Lena Delta before finding what he was looking for. He constructed a crude tomb and buried his comrades, marking the site with a 22-foot wooden cross.

It was not until the close of 1883 that another U.S. Navy party returned to Siberia and recovered the frozen bodies. De Long and several other members of the crew were reinterred in New York City with full military honors. Ambler came home to a quiet country churchyard in the rolling foothills of Virginia's Blue Ridge. Years later Navy medical officers erected a bronze memorial in the simple, gothic, one-room church where Ambler and his family once had worshipped. Its simple, poignant inscription duplicates the tablet that once held a place of honor at the Naval Medical School. "His sense of duty was stronger than his love of life."

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The crew retreated south across the frozen East Siberian Sea toward open water (above left) dragging thousands of pounds in boats and supplies with them. A gale separated the three boats (above); one boat foundered with the loss of all hands.

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Herman is editor of U.S. Navy Medicine.

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Jeannette update

The March-April 1984 *U.S. Navy Medicine* story on the voyage of the *Jeannette* continues to draw interest. Recently, Mrs. Julia A. Cox, grandniece of Dr. James M. Ambler, surgeon of the arctic steamer *Jeannette*, forwarded her greatuncle's dress uniform and sword to the Navy Memorial Museum at the Washington Navy Yard.

The Navy on and

The polar ice cap.

It is an expanse of ice floes, pressure ridges and narrow navigable passages called leads.

It is an environment where "warm" days offer minus 30-degree Fahrenheit temperatures, if the wind isn't blowing. If the wind picks up, the wind chill factor brings temperatures to minus 40, 50, or 60 degrees.

Chief of Naval Operations, Adm. James D. Watkins, recently visited Ice Camp Opal in the Arctic—one of three scientific research camps established there this year—and described how and why the Navy is operating in that demanding area of the world.

"The Arctic is an area which the Soviets have almost assumed is their private lake, a hideaway where they have sole autonomy.

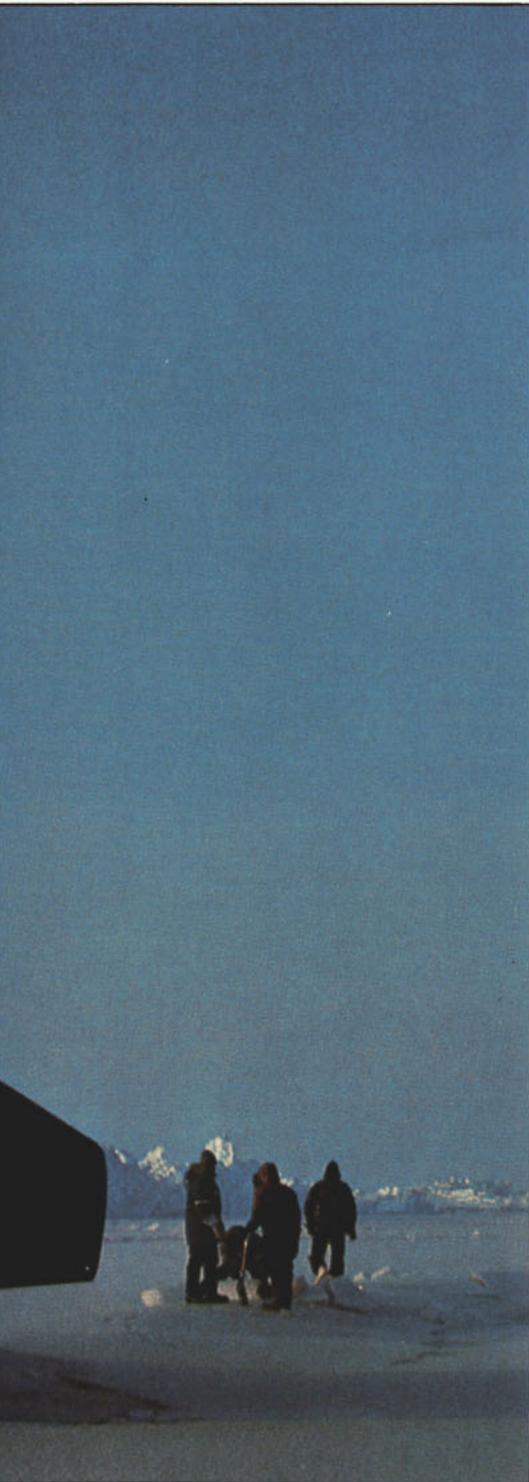
"Over the past 20 years, the Navy has been involved in modest experimental work in the Arctic—periodic deployment of our submarines, and the like. But in the last four years I have accelerated our program. The whole concept of the Soviet Union is one of deployment of their forces out of their Northern Fleet into the Atlantic or into the Arctic, the Arctic specifically in the case of their ballistic missile submarines.

"From this vantage point, were the United States not to have any (Arctic operational) capabilities, it would give the Soviets a free reign, a sanctuary. Our whole strategic concept is forward deployed forces to carry the fight to the enemy. Therefore, we must master this area where they have found this particular hideaway."

Vice Adm. N.R. Thunman, deputy chief of naval operations for submarine warfare, accompanied the CNO to the ice camp. As part of their visit, they boarded USS *Trepang* (SSN 674), which surfaced near the camp, and sailed un-



under the ice



Far left: Members of the polar research team remove ice from Trepang's access hatch. Above: A DeHaviland Twin Otter is preheated for flight. Left: Scotsman Rick Airey, a member of the naval scientific research team.

The Navy on and under the ice

der the ice for several hours for a hands-on demonstration of our Navy's ability to operate in the Arctic. Thunman summed up that ability.

"Our submarines are capable of operating against the Soviet submarines in any environment, including under the ice. We do practice up here in the Arctic, as well as in all the world's oceans, to be ready—to take them (the Soviets) on, in whatever mode of operations they choose. We have significantly expanded our operations in the Arctic. Just having come back from being aboard the submarine (*Trepang*), I was very impressed with the capability of the crew to handle the environment, to get the ship up and down in very narrow areas. We're trained to operate here, as we train to operate everywhere.

"I feel very good about the capability of any of our attack submarines to come into this environment and perform their mission."

Since 1980, naval research commitments in the Arctic have quadrupled. This includes an increased tempo of under-the-ice submarine operations and associated experiments.

Dubbed AREA, for Arctic Research and Environmental Acoustic program, Navy-sponsored research consists of experiments in oceanography, acoustics, geophysics, communications and anti-submarine warfare; this knowledge is applied to Arctic submarine operations.

AREA '85—this year's research expedition to the ice cap—consisted of three camps, or stations: Opal, Crystal and Ruby. The logistics base for the ice camps is Thule Air Base, Greenland.

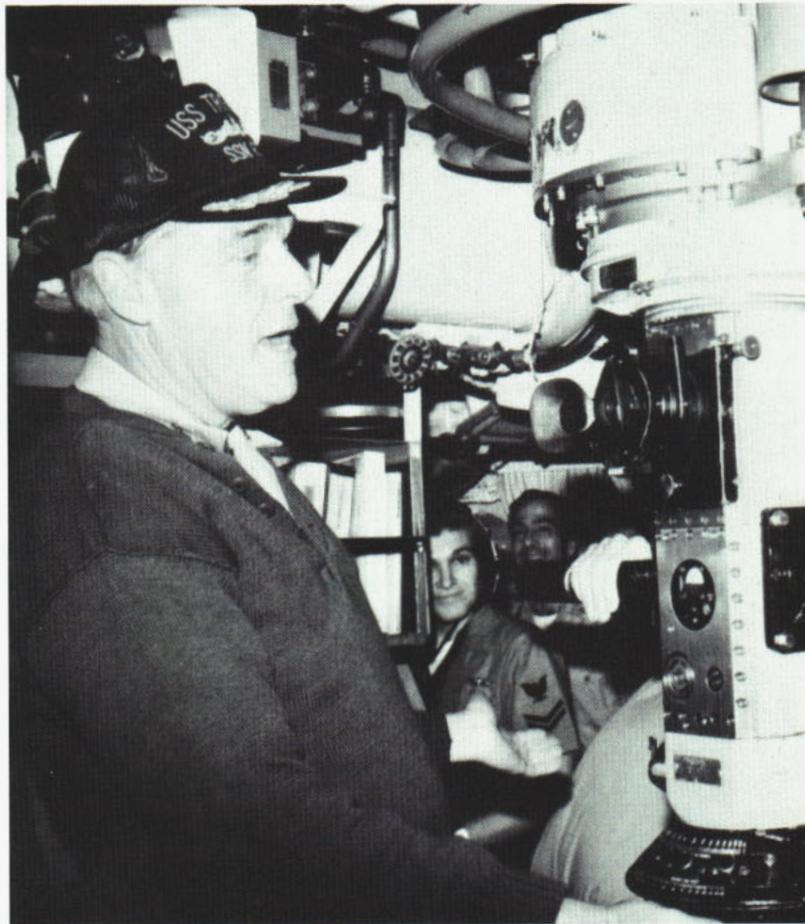
The camps are established each March and manned until early May. Two conditions in the polar region dictate this narrow operational window: aircraft cannot land on the ice during darkness (March begins the period of 24 hours of daylight); and the ice begins to

melt and break up in May.

This year's experiments involved nearly 149 people, including scientists, contractors for support services (such as arctic-qualified pilots and air crews), several U.S. naval officers and P-3 *Orion* anti-submarine warfare aircraft and their crews. Participating Navy organizations included Naval Ocean Systems Center (including the Arctic Submarine Laboratory); Naval Research Laboratory; Naval Air Development Center; Naval Oceanographic Research and Development Agency; Patrol Squadrons 11 and 40; and the Naval Electronic Systems Command.

Other participating organizations were TRW Inc.; Sandia National Laboratory; Defense Systems Inc.; Defense Advanced Research Projects Agency; and Polar Research Laboratory.

Officer in charge of this year's expedition was Lt. Cmdr. Carl A. Wales, a graduate of Massachusetts Institute of



Technology and a former enlisted sonarman. Wales participated in similar Arctic expeditions in 1983 and 1984. Chief civilian scientist for AREA '85 was Gerald A. Gotthardt, a graduate of the University of Rhode Island and a naval scientist for 17 years. This was his first Arctic expedition.

The Polar Research Laboratory provided leaders for all the ice camps. Leader of one of the ice camps, B.M. "Beau" Buck, is a 1948 graduate of the U.S. Naval Academy and has more than 30 arctic field experiments to his credit. Buck is a 13-year Navy veteran whose specialty is underwater acoustics. Leader of the second camp was his son, Manor Buck, and A. Magnuson led the third camp.

Two men initially established each camp. They parachuted onto the ice from a ski-equipped DC-3 modified for arctic flying; dropped with them were basic materials—tents, stores, commun-

ications equipment—for setting up camp. They set up camps and prepared an ice runway so subsequent flights could take in other members of the scientific team.

Once an initial camp is in place, satellite camps are set up in a similar man-

ner. Inter-camp transportation is provided by an Arctic-adapted DeHavilland *Twin Otter* aircraft, also equipped with skis.

When research begins, holes are drilled into the ice for inserting anything from salt water batteries to acoustic devices and underwater telephones for communication between submarines and the ice camps. Antenna arrays are set up to study radio wave propagation; ice samples are sliced from cores taken out of the ice cap, and the thickness of the cap is measured. And thick it is, varying from several inches to 20 feet.

Polar ice topography consists of leads, floes (also known by the Russian name, Polynyas) and pressure ridges. The actual ice cap consists of many floes and is constantly shifting—slowly until the warm season when the floes begin to break up. Leads, which are often navigable, are areas where a floe has broken and its edges have drifted apart. The re-



Far left: John Bitters and Lt.Cmdr. Carl Wales remove ice from Trepang's access hatch. Left: Adm. James D. Watkins and Vice Adm. N.R. Thunman share a light moment aboard Trepang. Top: John Bitters and chief scientist Gerry Gotthardt drill into the polar ice. Above: The vastness of the polar ice cap dwarfs Ice Camp Opal.

The Navy on and under the ice

maining water re-freezes, resulting in reduced thickness. Pressure ridges are where the ice has broken and the edges rub against one another, are tipped upward and create a ridge. These ridges can be up to 20 feet high and, with their blue-green hue, are an impressive sight.

Special arctic tents, rectangular in shape and sleeping four to six men, are home for the scientists. Kerosene heaters provide warmth, and electricity is provided by a portable generator. There is no running water.

This environment has no amenities. Even toilet facilities are reduced to bare essentials: the head is simply a hole drilled into the ice and surrounded by three pieces of plywood to protect an individual from the polar wind.

Inside each tent there are three temperature layers. The temperature closest to the plywood deck is about -20 F and serves as an inside freezer. The waist level temperature is in the 40s (refrigerator

level). Towards the top of the tent it is actually warm, since it is there where heat is trapped (other than that which sneaks out through the kerosene heater's chimney). Only the day's rations are stored in the tents: most of the food is stored outside—there is no need for refrigerators with the subzero temperatures.

About 20 pounds of clothing keep each member of the expedition warm when he goes outside. Long underwear is a must. A pair of special arctic woolen pants; one, two or three sweaters; and a pair of cold-weather, nylon bib overalls help insulate the body. Then there are the arctic boots, seemingly bulky but after a while quite comfortable. This is topped off by a woolen watchcap or balaclava, and a down-filled arctic parka completes the ensemble. Of course, when scurrying quickly to the privy, some of the articles may be left behind since they could

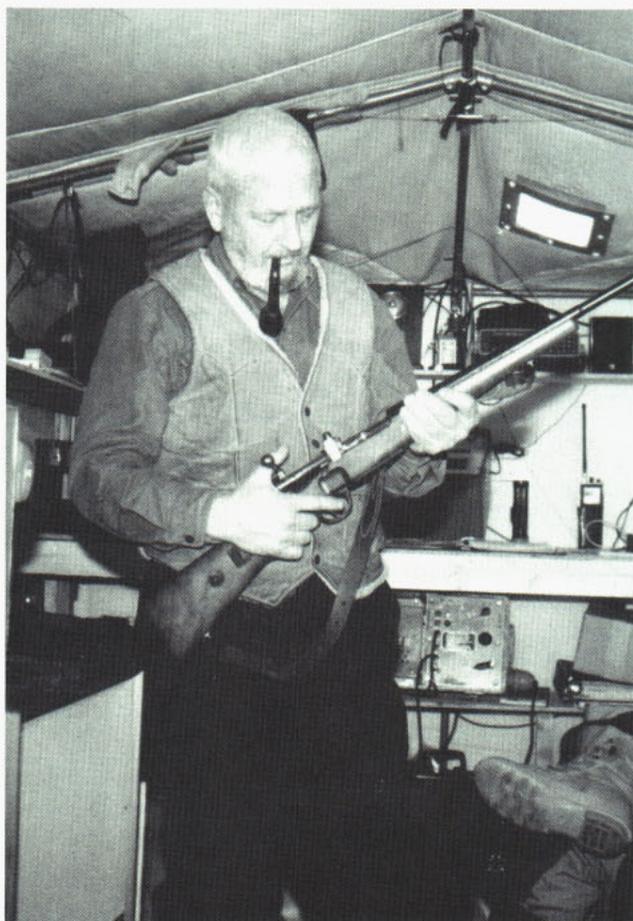
be somewhat cumbersome.

Sub-freezing temperatures are not the only danger man faces on the ice. Whiteouts are common; during a whiteout wind whips up snow flurries to the point of nonexistent visibility. Under such conditions, a man could lose all orientation, get lost and possibly die from exposure when only yards from shelter.

Frostbite, quite painful and often resulting in loss of limb or extremities—fingers and toes are most commonly claimed—is a constant danger.

Polar bears, which have no fear of man, roam the area. Scientists in the ice camps are armed with highpowered rifles and handguns to protect themselves from bears.

Possible dehydration also must be closely guarded against. The polar environment is extremely dry, and those on the ice must ensure an adequate intake of fluids. Alcoholic beverages are



prohibited, not only because alcohol hampers an individual's performance but because it also is dehydrating.

The hostility of the environment doesn't hamper the dedicated scientists, pilots and naval officers who conduct their research there. Most of them have prior experience on the ice, through participation in scientific research or military training. Their backgrounds are varied—from commercial airline pilots specially trained in Arctic/Antarctic flying to highly decorated Vietnam veterans.

This year's data will be added to that learned during past AREA programs. Meanwhile, research will continue to update the Navy's knowledge of the Arctic environment as we learn how our operations and tactics can best be adapted to that hostile polar environment. □

—Story and photos by
JOC(SW) Fred J. Klinkenberger Jr.



Far left: "Beau" Buck, a leader of Ice Camp Opal, checks his high-powered rifle used as protection against polar bears. Left: Sailors at Trepang's controls guide the submarine through waters below the Arctic ice cap. Top: Inside the headquarters tent at Ice Camp Opal. Above: The Tri-Turbo, a converted World War II DC-3, lands at Opal.

Midshipman shoots for the stars

Story and photos by Dave Fraker

Sammy Nava saw the distant lights of Fresno, Calif., as he looked out the small window of his privately rented jet. He was dressed in a white tuxedo with a yellow bow tie. Sitting beside him was his date, Sandy Luna, in her custom-made white evening gown with yellow shoulder straps. They had been visiting San Francisco, and a limousine waited for them at the Fresno Air Terminal to take them to their Senior Prom at Sanger High School.

Six weeks later, when he entered the U.S. Naval Academy, Nava had \$10 in his pocket. He is one of eight Sanger High School Navy Junior Reserve Officer Training Corps students to be accepted there—the most from a single school in one year.

Why such an expensive and extravagant prom night?

“When I first entered Sanger four years ago, I knew I wanted to leave in style, and I planned and saved for that one special night since then,” said Nava.

The 17-year-old honor student’s philosophy is simple: “If you shoot for the stars, you may not get there, but you could get the moon.”

Nava’s story is one of persistence, not taking no for an answer, not giving in to peer pressure, and having a very warm, passionate and loving grandmother.

Shortly after Nava was born, he was sent to stay with his grandmother and ended up living with her. He has lived in the same tiny two-bedroom apartment, attended the same church and stayed in Sanger all his life.

Nava said, “When I was little, she would read to me and always gave me

advice. She helped me a great deal, even though she only had a sixth grade education.

“I always dedicated myself to my studies and set high goals for myself. I never liked to be told ‘try for something less, your goals are too high’. I now look back and am glad I lived with my grandmother.

“My real mother and father are divorced, and my dad is a pastor with a congregation in Indio, Calif. My mom lives in Arizona and raised my older brother and sister.”

Nava’s handshake is firm, his smile is always present. He exhibits confidence in his mannerisms and his communications. Nava had been a member of Sanger’s NJROTC since his first year there and wore his Navy uniform to class each Friday.

“I saw the program as a way to help me achieve my goals and have always had an interest in the military and flying,” said Nava. Since he joined the unit, he has visited Naval Air Station Lemoore several times and completed a tiger cruise with VA-195.

“When I first entered high school, I told my counselor I wanted to attend the naval academy, and he told me to set more realistic goals like trying for a scholarship to attend Fresno State. I then found another counselor,” said Nava.

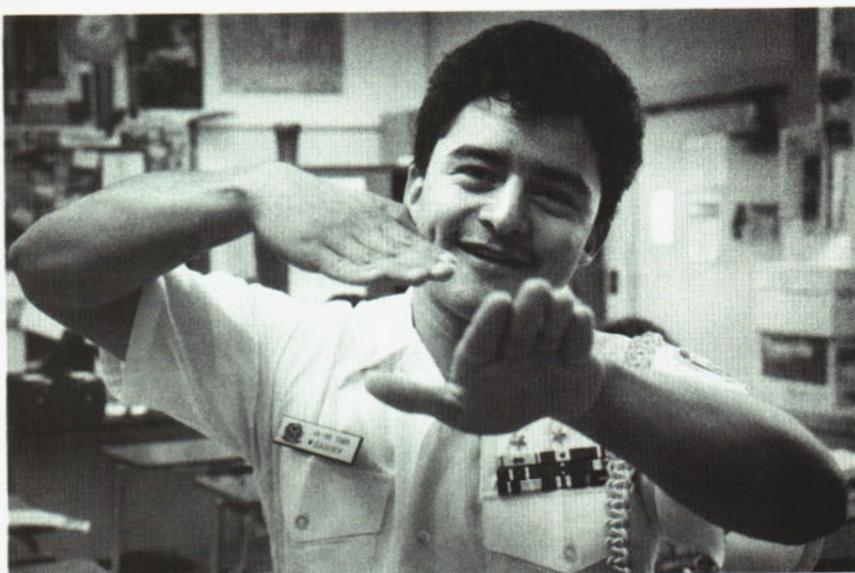
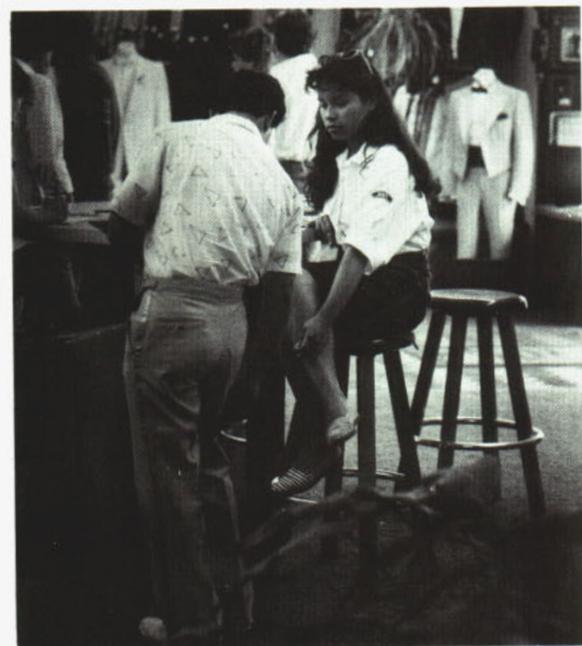
Nava’s road has not been easy. His grandmother, at 63, lives on a small, fixed income and cannot get around by herself. To increase the family’s income Nava went to work at a local fast food restaurant during his junior year and worked his way up to night manager.

He gave part of his money to his grandmother for food and helped pay the rent. He kept his own checking account and worked five or six nights a week. His aunt and uncle are helping his grandmother now that he’s at the academy.

“Budgeting my time and controlling stress were my biggest challenges,” said Nava. “Shortly after starting work, I felt like the world was closing in on me and I had to get away.

“I took my motor scooter, some food, a bed roll and headed for the





mountains. I spent the next 30 days with nature and getting my act together.

"I have learned to budget my time and make full use of my time. I also have started practicing Yoga to learn to relax and control stress."

A typical day for Nava started at 8:10 a.m. when the bell for first class sounded—independent study, which gave him a chance to finish his physics papers.

He second class was advanced level U.S. History. Nava sat in the third desk back of the far left row. Three other seats in the same row were also occupied, and all four students were honor students.

Third period was English, one of Nava's best subjects, and fourth period was French 4. Nava's goal is to become completely trilingual. Physics followed lunch. During open study periods or wherever he could steal time, he read or finished assignments.

One day before the prom, Nava left school at 3 p.m. and went to Clovis High School to pick up his prom date. They were out to select a tuxedo.

Rock music blared from the car radio as Sammy and Sandy carried on small talk about the prom. Sandy pulled a small piece of material from her purse. She had saved enough money to have her dress custom made.

After selecting the tuxedo, Nava dropped Sandy off at her home, then headed back for Sanger. He had less



than two hours before heading for work, and his day wouldn't be finished until 1 a.m.

Nava said, during the long drive back, "I am sad about leaving, but excited about the challenges and changes ahead. I want to get my degree in aeronautical engineering, then become a Navy jet pilot.

"I want to experience what it is like to land on a carrier. I have always been interested in flight and built model airplanes at an early age."

Nava credits many of the people in his

Opposite page: Nava jokes with his night crew at the fast food restaurant. Clockwise from top left: Selecting a tuxedo for the prom; principles of aerodynamics; Nava with his family.

church with steering him in the right direction. "Former drug addicts and school dropouts would come and tell us about their experiences, and I made up my mind never to follow in their footsteps, no matter how strong peer pressure became." □

Fraker is editor of the Eagle, NAS Lemoore.



The world of Navy medicine

The world of Navy medicine is a world that co-exists with every facet of the Navy's operating forces. It's everywhere you look throughout the Navy. It's doctors and corpsmen on ships and submarines. It's hospitals and clinics throughout the world—staffed by doctors, dentists, nurses, medical service officers, administrators, enlisted people and civilians.

Vice Adm. Lewis H. Seaton, Navy surgeon general and director of naval medicine, described Navy medicine in his paper, *Navy Medicine Today*: it operates “. . . from the North Pole to the South Pole and on every ocean and continent of the world . . . (with) provider units ranging from a sickbay or an aid station with a single, independent-duty hospital corpsman to a large tertiary care teaching hospital with a staff of hundreds of doctors, nurses, dentists, administrators, hospital corpsmen and dental technicians.”

Navy medicine includes a medical system of 31 hospitals and 188 branch medical clinics which sees 13 million patients each year, admits 250,000 in-patients, delivers 35,000 babies, and performs 150,000 surgical operations. To accomplish this, the Navy employs 4,000 medical officers, 3,000 nurses, 1,700 dentists, 2,300 administrators, 25,000 enlisted people, and 10,000 civilians.

The mission of this enormous medical system is to provide prompt and sustained

medical support to the operational forces of the Navy and Marine Corps in time of conflict and to provide health care to beneficiaries during peacetime. But today's mission did not always exist. In the early 1800s, medical care was crude by present standards. When sailors were transferred ashore for medical care, they were admitted to small hospitals or to shacks that served as sick quarters near Navy yards.

The establishment of the Bureau of Medicine and Surgery in 1842—the beginning of Navy medicine's proud tradition—greatly contributed to the development and efficiency of Navy medicine. Increased quantities of improved medical equipment and supplies became available; the medical officer corps became larger

and better organized; and the Navy's first well-equipped hospitals were built at Norfolk, Va., Philadelphia, Boston, and Brooklyn, N.Y.

After establishment of the Bureau of Medicine and Surgery, Navy medicine has a list of achievements, including:

- design and development of hospital ships capable of following the fleet around the globe;
- research in submarine medicine, including deep-diving and cold weather medicine;
- research in preserving tissue transplants;
- preservation of blood elements and development of a technique for long-term storage of frozen blood;



Left: The emergency room at Bethesda Naval Hospital, Washington, D.C. Right: A senior medical officer aboard a carrier directs emergency medical operations following a berthing space fire.

Photo by PHAN J.F. Knowles

Navy medicine

- rehabilitation of amputees and research and construction of prosthetic devices; and
- leader in urinalysis drug testing and alcohol abuse programs.

In 1982, former Bureau of Medicine and Surgery was reorganized into the Office of the Director of Naval Medicine/Surgeon General (OP-093) and Naval Medical Command. The office of naval medicine is part of the chief of Naval Operations' staff and is responsible for policy and program development, resource planning and programming, and oversight of the Navy medical system for wartime and peacetime health care. The Naval Medical Command is responsible for program execution, professional and technical guidance, and professional development.

Field activities are organized into broad geographic regions—six in the continental U.S., one in the Pacific area and one in Europe. These geographic medical commands exercise authority over medical and dental treatment facilities in their respective areas.

How does this massive medical system remain ready to provide its number one priority—the ability to give life-saving medical care to Navy and Marine Corps operating forces? One way is through the use of the Mobile Medical Augmentation Readiness Teams. The MMARTS are forces of medical personnel trained to provide rapid care. They are kept on a rotating 48-hour alert at their parent medical treatment facilities and are able to deploy worldwide on short notice.

Since training is considered the key-stone of medical competence and professional development, the Navy operates a variety of training programs for its officer and enlisted people. Four training hospitals provide physician training in major specialty and subspecialty areas, and there are centers dedicated to aviation and undersea medicine. All enlisted personnel attend basic hospital corps school, and technicians can receive additional training in 43 enlisted specialty programs. The Navy maintains the only school in the world for training medical technicians in the field of transplantation, including transplant patient care, kidney dialysis,

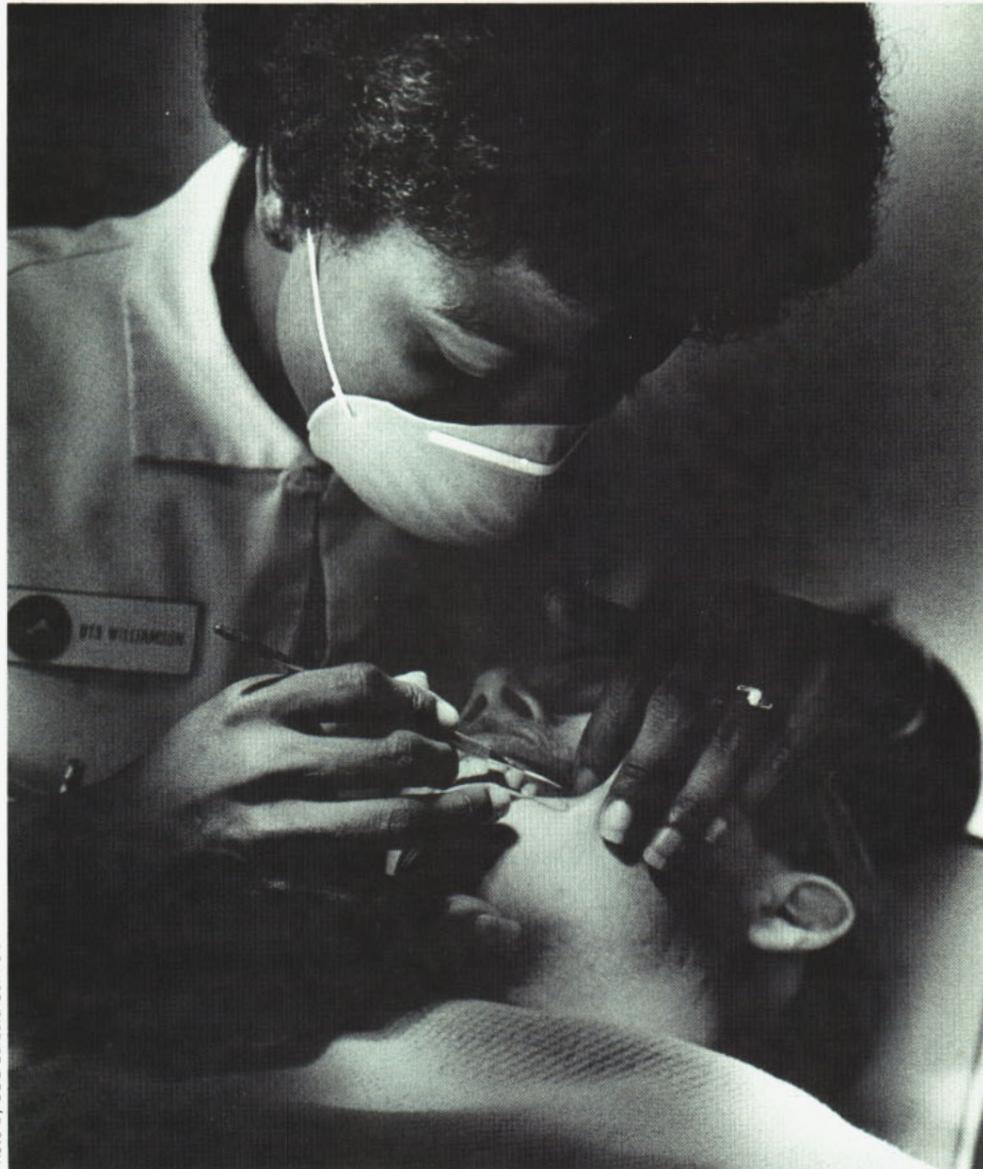


Photo by JOC Barbara Cornfield

blood collection and processing, tissue collection and storage, bone marrow collection, and cryopreservation.

A major source for training for physicians is the Armed Forces Health Professions Scholarship Program. The program provides the Navy with more than 300 medical corps officers each year.

Some of the Navy's readiness training programs are geared to specific combat environments, including training in cold weather medicine, tropical/jungle survival medicine and desert/hot weather medicine.

Probably one of the most important areas of Navy medicine is research and development. Presently, efforts are designed to

evaluate adverse health effects of fleet and amphibious operations under a variety of environmental extremes and to develop new approaches to the treatment of casualties as well as techniques for improving the performance of Navy and Marine Corps personnel.

The Navy is continuing research into saturation diving, decompression procedures, storage of frozen blood, preparation of sterile water for production of resuscitation fluids, restoration of bone marrow, and techniques to produce medical selection, classification and retention standards for naval aviators.

The Navy is continually seeking to im-



prove the quality of its health care system.

This involves many factors:

- problem solving
- departmental reviews
- occurrence screening
- medical record reviews
- patient satisfaction surveys
- incident reporting
- medical staff monitoring.

To accomplish this, the Navy instituted the Quality Assurance Program in 1981. Briefly, the program is one which uses "peer review" to ensure that Navy medical beneficiaries are provided with the finest care available.

At the heart of the Quality Assurance

Program is the "credentialing process," which begins during the recruitment of medical officers and continues throughout their careers. Medical officer applicants must undergo an intensive screening which includes obtaining and verifying previous education, training and letters of recommendation. Only half of all applicants pass this review.

Each Navy doctor has a credentials file which is a compilation of initial credentials review information, proof of verification, description of medical privileges previously held, previous credentials actions, and information relating to ongoing competence, performance and conduct.

Left: Dental care is only one part of Navy medicine. Above: A medical team rushes a traffic accident victim into a shore-based Navy emergency room.

This file goes with the doctor to each of his new duty stations where it is reviewed. If found satisfactory, the doctor is granted temporary medical practice privileges. Those doctors found unfit to execute their medical responsibilities will have their privileges limited, suspended or revoked. Depending on the degree of

an infraction, a doctor may be separated from the Navy and, if so, will be reported to medical licensing agencies.

The Navy also is concerned that patients at naval hospitals have their needs addressed and problems resolved. To give patients direct access to medical commanding officers in registering complaints

or suggestions, patient hot lines have been installed in all medical facilities.

In hospitals, patient contact representatives will investigate complaints or problems and analyze patient satisfaction surveys. Patients also will get information concerning their access to health care. The advisors perform community outreach

The Navy's quality

In the past few years, Navy medicine has been scrutinized and subjected to pressures by patients, the press and Congress. Some examples of poor medical care were greatly publicized and held up as typical of all Navy medicine practices. However, what is typical of Navy medicine is the overall excellence of the medical care provided—an excellence that is monitored and maintained by the Quality Assurance Program.

Capt. John C. Babka, head, quality assurance branch, Office of Naval Medicine, said that the Joint Commission on Accreditation of Hospitals instituted its quality assurance program in 1979, and the Navy followed suit shortly after.

"The Navy has gotten on the quality assurance bandwagon to the extent that there is no civilian hospital or medical system anywhere that can match us."

Credentialing is at the heart of quality assurance. It's a process in which a doctor's qualifications and performance are checked and rechecked. Before doctors are granted temporary medical privileges, a board of doctors reviews and verifies their previous documentation and experience. After three to six months of successful practice and constant peer review, doctors may be granted full privileges. If a doctor's performance is substandard, the Navy can limit that individual's medical privileges, can retrain the doctor in certain areas, or can separate the doctor from the

Navy and report the individual to the medical licensing agencies.

The Navy's new quality assurance program is more than simple peer review. "The main focus is to identify problems, analyze them and try to fix them," said Babka. "The second focus is ongoing monitoring and evaluation, and the third focus is coordination and integration."

Why does the Navy practice quality assurance? "Because we won't accept being mediocre," said Babka. "That isn't the way the Navy operates. We have a responsibility to our patients—active duty, retired and dependents."

"Quality assurance is important to doctors in a personal way," said Babka. "I wear a uniform, and every other Navy doctor wears the same uniform. I don't have a tag on me that says, 'I'm a good doctor,' and some other doctor doesn't wear a tag that says, 'I'm a bad doctor.' If we have a bad doctor, it rubs off on me."

A major benefit of the program is that it creates trust in the quality of Navy medical care—and trust is of prime importance. "When Navy medicine has a bad doctor or gets bad press, our patients come into our hospitals making sure they don't get bad medical care," said Babka. "A lot of what doctors can do is because our patients trust us. If we assure them they will get better, they get better. If they don't trust us, they might not get better. So,

indirectly, a bad doctor or bad press hurts me and hurts my colleagues—but most of all, it hurts our patients, and our patients deserve better."

Medical misconceptions

Navy medicine is sometimes plagued by people whose way of thinking about health care is based on medical misconceptions. Capt. John C. Babka, head, quality assurance branch, Office of Naval Medicine, said that one of the greatest misconceptions is that doctors can diagnose illness with a simple test.

"Rarely is it that easy. Medicine is a series of educated guesses with a 95 percent probability of what the illness is. But there's always a chance you may be wrong. People can't accept that. They see on television that mechanical hearts are being put into people, and (they) believe there aren't any limits to what doctors can do."

Television can create misconceptions, but it also can help people understand medical care more realistically. "*Marcus Welby* was wonderful to everybody all the time. But if you remember, he rarely had more than one patient per episode. That's not realistic. A show like *ER* (a medical sitcom) brings home some of the frailties of physicians and nurses and patients," said Babka.

Another misconception is a misunderstanding of why doctors come into the

services and assist in preparing health insurance claim forms.

To provide for higher level review, each geographic region has at least one Board of Visitors which consists of commanding officers of line activities who advise the geographic medical commander on the effectiveness of health care operations and

develop recommendations on health care issues.

The people of the Navy medical community will ensure that a trained and experienced medical force is available to meet the peacetime and wartime mission and to provide the best quality medical care available anywhere.

From North Pole to South Pole and around the world, the Navy's health care professionals will continue to fulfill their mission with the commitment to excellence that has been their tradition for the last 143 years. □

—Story by JO1 Dale Hewey

assurance program

Navy. People sometimes assume that a doctor can't be first rate if he or she is not in a high paying civilian practice.

"One of the major reasons doctors stay in the Navy is that they are genuine hu-

manitarians who hate to bill patients," said Babka. "Doctors often don't like to mess with the business end of medicine. In the Navy we don't worry about payment, so we can be more patient-oriented.

"Personally, I would much rather have a doctor taking care of me whose motivation wasn't profit. When a civilian doctor recommends surgery, you have to ask yourself, 'Do I really need it or is he just trying to make more money?'" In the Navy, if a doctor recommends surgery, you know you need it. In our system you have a better chance of getting good, objective care."

Another misconception is that of lumping all Navy doctors together in one category. "If you see a Navy doctor, he loses his face—you just see the uniform. So, if you have a bad experience, you'll carry a chip on your shoulder," said Babka.

For some reason, this process of generalizing doesn't apply for civilian doctors. "If you see civilian Doctor Jones and he does a bad job, then you don't go back to Doctor Jones—but, you don't generalize. You think of him as an individual, not as 'civilian medicine.'"

A final misconception that is hard to combat is the prejudice of choosing your own doctor. People often assume that if they choose their doctor they get a better one. "Navy people have to take the doctor they're given," said Babka. "However, people should keep in mind that what they frequently like about doctors may not be relevant to quality." □

Navy medical quality assurance is for every doctor and every patient.

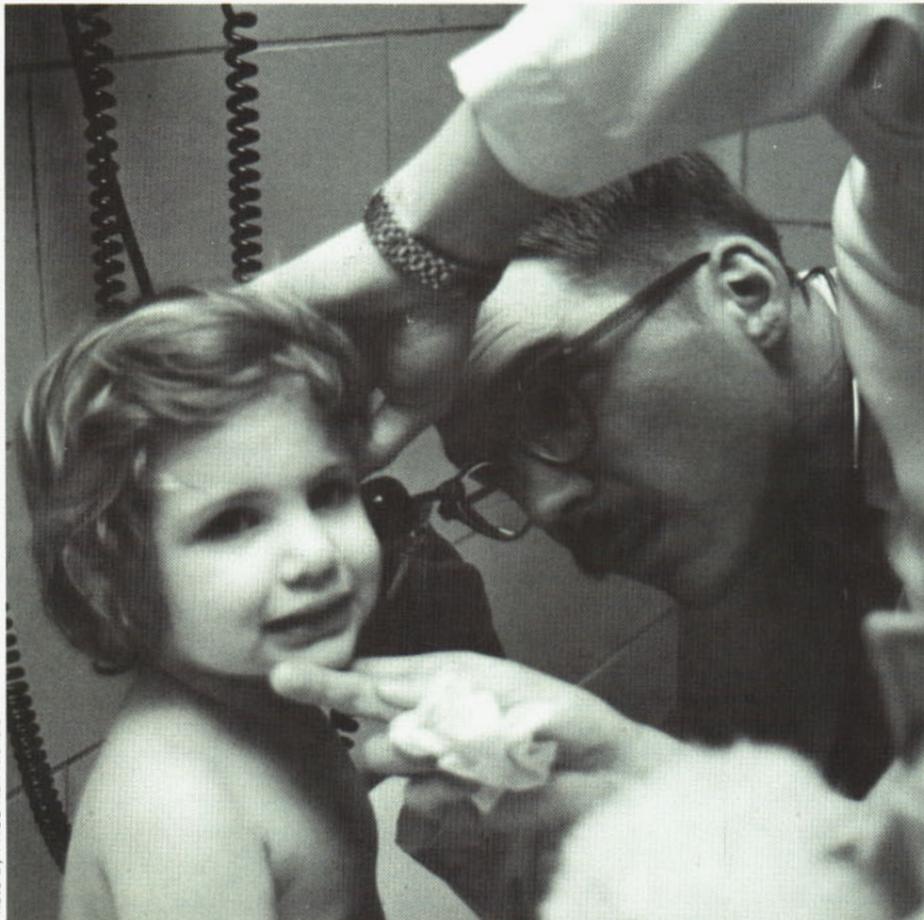


Photo by PHCS Ken Nichols

Bearings

Father, son and similar careers

An experienced journalist and his son had different goals but found a similar solution—they joined the Navy.

John J. Rochfort, who was in the Navy from 1968–72, became interested in the Navy again when he accompanied his son, Salvador, to a recruiting office in Chico, Calif., last October.

While advising Salvador, John learned about the Navy's Direct Procurement Program, which allows qualified people to join the Navy in advance paygrades because of civilian experience—and he's back in uniform for a six-year enlistment.

John was editor and publisher of *North*

American Indian magazine.

When he graduates from the Defense Information School, Fort Benjamin Harrison, Indianapolis, this summer, John will be promoted to second class under his direct procurement contract.

Salvador, who qualified for the Navy's nuclear power program and machinist mate school, will be promoted to third class after completing initial training and will then attend nuclear power school in Orlando, Fla.

John and Salvador said they hope to be stationed together sometime during their careers. ■

Cubic Corp. supplies AIS pods

The Naval Air Systems Command has awarded a \$16.25 million contract to Cubic Corporation to produce additional airborne components for electronic air combat training ranges.

The contract calls for more than 100 P-4A Aircraft Instrumentation Subsystem pods and five P-4A test sets. Beginning in September 1985, the pods will be deployed to Navy and Air Force units. The first 42 pods delivered to the Air Force will be used at the Red Flag range, Nellis Air Force Base, Nev.

AIS pods are mounted to an aircraft's missile launcher during training missions over TACTS/ACMI ranges. Each pod is designed to measure pertinent aircraft information and sense weapon firing signals, transmitting that data to ground facilities. The pod can be mounted on any aircraft capable of carrying a *Sidewinder* missile. Different versions also are provided for internal mounting on the new F-18 fighter and externally for aircraft such as French *Mirage* jets that carry a *Magic* 550 missile. ■

Photo by PH2 Joe Walls



Recruiter AW1 Matthew P. Cyr with SN Salvador Rochfort and AN John Rochfort.

Sailors and Scouts camporee

Sailors and Boy Scouts from several communities along the southeastern Connecticut seaboard teamed up recently for a weekend camporee at the Admiral Fife Naval Recreation Center, Stonington, Conn.

Volunteers from Naval Submarine Base New London and ships in port hosted nearly 200 Scouts from 17 troops during the two-day event that featured a camp out on the baseball field, naval orientation and training. The event followed a "Freedom of the Seas" theme celebrating New London's Bicentennial and the Navy's 209th birthday.

The 17 Pequot District Scout troops pitched multicolored tents on the ballfield at the Fife Estate and cooked on grills set up by Construction Battalion Unit 414.

Scouts attended training sessions that mirrored requirements set by the Boy Scout Handbook, including orienteering (navigation), first aid, fire fighting (damage control), pioneering (marlinspike seamanship) and signaling.

Corpsmen from the Naval Undersea Medical Institute taught first aid.

"People need to know first aid," said Hospital Corpsman 2nd Class Erich Junger, an Eagle Scout. "We are proud to show people what we do."

Signalman 2nd Class Mike Calderon of the Naval Submarine Support Facility New London taught the scouts semaphore, the

Navy's hand-signal language.

"Semaphore is my profession," said Calderon. "Teaching these Scouts is a lot of fun. I enjoy seeing the response from them, and I'm learning something new about myself by seeing how I'm getting across to them."

Boatswain's mates taught the boys knot tying, and shipboard firefighting was taught by Senior Chief Machinist's Mate Harold Buzzell, submarine school damage control trainer.

In the orienteering session, Scouts used a compass to find their way along a trail.

The camporee closed with a traditional campfire, including award presentations, skits and song. ■

—Story by Lt. E. H. Lundquist,
Naval Submarine Base, New London

Show Band West swings on Coast



MU3 Hilary Jones, drummer for Show Band West.

Like the great stage bands and orchestras led by Count Basie, Maynard Ferguson, Duke Ellington and Stan Kenton, The Navy Band San Francisco has its own version of big band swing and current pop music: Show Band West.

Under the direction of Musician 2nd Class David Gardner, 16-piece Show Band West has completed road tours throughout the western United States. Recently, Show Band West began noonday summer concerts in San Francisco, performing at Ghirardelli Square near Fisherman's Wharf and at the Justin Herman Plaza on the city's Embarcadero.

Gardner recently reported aboard Naval Station Treasure Island from Italy where he directed a NATO Big Band.

"Directing this band has been a dream come true for me," said Gardner, "and although the group is newly organized, we've come very far with regard to the music we produce."

Though most of the selections chosen by the band come from a variety of musical origins, almost all of the arrangements are portrayed in a brassy, fiery type jazz. This kind of instrumentation was typical of the big bands in the late '40s and '50s, and popularized again in the '60s by Maynard Ferguson. Though Show Band West plays many current tunes, elements of Ferguson's style are apparent in several of the compositions. ■

—Story and photo by JO2 Roger T. Ward,
Naval Station Treasure Island

Recruits flip hamburgers before basic

Houston Navy recruiters and an area Wendy's fast-food service chain have teamed up to help recruits enlisting under the delayed entry program keep out of financial trouble. While awaiting their trips to basic training, the recruits are flipping hamburgers at local Wendy's restaurants.

"To the best of my knowledge, this is the only type of program available where the Navy is working with another organization to help delayed entry recruits find part-time employment before they go to boot camp," said Cmdr. William Snider, commanding office of the Houston Naval Recruiting District.

Most delayed entry recruits are in their late teens, just out of high school and looking for jobs. Many are interested in the Navy but are reluctant to wait for guaranteed schooling. The program, which began in 1983, helps the Navy keep its recruits, helps the recruits financially, and gives the fast-food service chain reliable temporary employees.

"We were losing recruits because there was no incentive for them to stay in Houston during the waiting period between sign-up and reporting," said Gerry DeFillippo,

a member of the Houston Recruiting District Assistance Council.

"The Navy has a supply of people in need of a job in a less-than-permanent situation and Wendy's, through new stores and seasonal needs, has a need for people on the same basis. Our two objectives merged real well," said Tom Taylor, Wendy's Houston regional recruiter.

"There is no guarantee of a job," Taylor said, "but an opportunity is provided for the young men and women. It's a foot in the door."

Chief Navy Counselor Leo Montez, a recruiting supervisor in north Houston, said his station has used the program since early 1984.

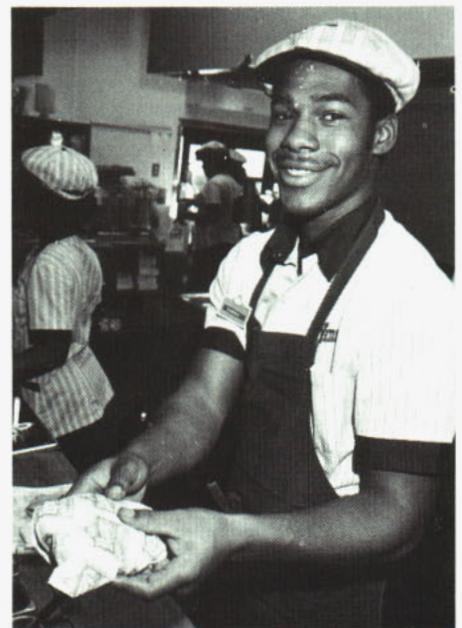
"In that time, we've had 10 recruits get jobs at Wendy's through this program," he said. "The Navy has a backlog, and a recruit may wait three to four months before going to boot camp. He may think that's too long. He may need to pay his bills now."

Terence Bivens, a delayed entry recruit, on the job at Wendy's.

"This is where the program helps. We tell him, 'We'll set you up in a part-time job to keep in money until you leave.'"

"He can at least pay the bills and isn't in debt when the time comes to leave for boot camp. It also gives the recruit the sense that, 'Hey, the Navy's taking care of me and I'm not even in yet,'" said Montez. ■

—Story by Ensign Beth Ann Hutko,
NavInfo Det. 310, Houston



Bearings

When the patients demand quality

Ten years ago he was a jeweler's apprentice in Port Orchard, Wash. It was a delicate job that needed steady hands and the touch and imagination of a sculptor.

Today, he constructs something as valuable and priceless as gems—teeth.

Dental Technician 2nd Class Scott Emerson uses his jeweler's background to make smiling a little more pleasant for many Marines and sailors. A prosthetics expert at Marine Corps Air Station, El Toro Branch Dental Clinic, Santa Ana, Calif., Emerson said there is more than a slight similarity between the two jobs.

"They're almost identical because the tools are basically the same. Prosthetics is precision work, just as jeweler's work is," he said. "Prosthetics is also like being a mechanic—getting things to work properly. And then there's the artistic side of it, making sure the cosmetics are right. Like anything else, though, the results are not always 100 percent."

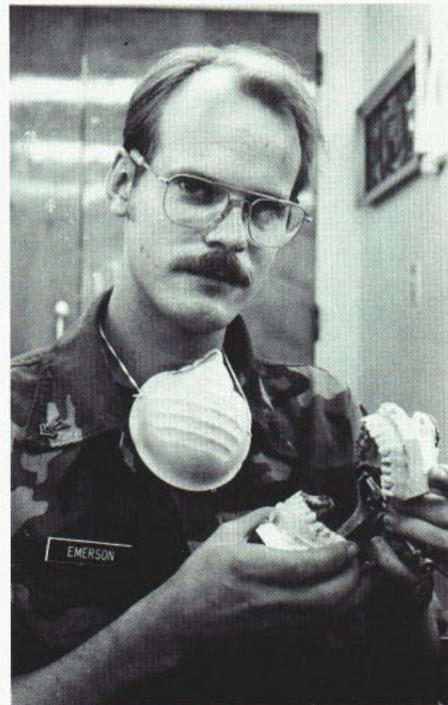
Emerson said prosthetics is a meticulous service that takes plenty of concentration and dedication. "It's a challenge. Every case I work on is different. It's not like sitting on a production line," he said.

Sharing prosthetics duties with two other technicians, Emerson said his shop is normally faced with heavy work loads, days when each technician is juggling as many as five projects, with more waiting. "It gets busy, but we keep things going smooth. If one of us gets behind, we rely on the others to help," he said.

Emerson is comfortable with his profession, well-versed in his job, but said he is always learning something new. Regardless of how difficult a case may be, Emerson said it does not deter him from producing a Grade "A" product.

"The most important thing is quality. The patients demand it." ■

—Story and photo by Sgt. Pepper Davis, MCAS El Toro, Santa Ana, Calif.



Prosthetic technician DT2 Emerson works at MCAS El Toro's dental branch clinic.

NRL formula cleans statues

The Naval Research Laboratory, Washington, D.C., has developed a chemical mixture that will clean rust and corrosion from hard-to-reach shipboard metal surfaces.

The mixture, which is scheduled for testing aboard USS *John F. Kennedy* (CV 67), can be applied to a rusty metal surface as a thick paste. The outer surface of the paste will harden into film that can be easily peeled from the cleaned surface and disposed of as a solid waste.

The new chemical will make cleaning various shipboard areas such as overhead high-temperature valves and pipes more efficient and economical. The formula can be applied as soon as rust is seen, and sandblasting or washing is not needed. The mixture, once peeled, will protect sur-

faces from rusting so painting cleaned surfaces can be delayed until a number of areas need painting.

The cleaning mixture has been used on several public statues in New York City and on the Iwo Jima Memorial, Arlington, Va. The Statue of Liberty will be cleaned by a commercial adaptation of the Navy product. ■

Leadership essay contest winners announced

Winners of the U.S. Naval Institute's 11th annual Vincent Astor Memorial Leadership Essays Contest have been selected.

Naval Reserve Lt. Alphonsus J. Fennelly received a gold medal and \$1,500 as first place author with "The Art of Leadership, the Science of Management,

and the Leadership of Subordinates." Fennelly is a physicist with Teledyne Brown Engineering in Alabama. His essay will be published in the July issue of *Proceedings*.

Lt.j.g. Scott A. Hastings won a silver medal and \$1,000 as first honorable mention for "Putting the Spirit Behind the Sword." Hastings is assigned to USS *Gary* (FF 51).

A tie for second honorable mention went to Lt. Charles Pryde and Capt. John D. Williams. Pryde, assigned to Fleet Training Group, San Diego, wrote "Leadership and Combat." Williams, chief intelligence analyst for 1st Marine Division, wrote "Leading the Quality Force." Each received a bronze medal and \$500.

Essays were judged by the institute's editorial board for depth of research, analytical and interpretive qualities, and original thinking on the topic of leadership. ■

Sailors help SHARE

Sailors from Recruit Training Command Great Lakes, Ill., show their community awareness when they volunteer their personal time for a self-help program in Chicago that reaches in to the local community.

Approximately 50 sailors volunteer each month to help with various jobs at the Self-Help and Resource Exchange one Saturday each month.

The sailors' day begins at 3:30 a.m. with reveille, breakfast and catching SHARE's bus at 4:30 a.m. Once at the

SHARE/food facility in Chicago, the sailors begin their work—operating fork-lifts, assembling orders, loading, sorting, directing traffic, and keeping control of the inventory.

Senior Chief Aviation Electronics Technician Phillip Cupples, leading chief of the apprentice training department at RTC and coordinator of the volunteer sailors said, "Everyone who goes down there enjoys it. The apprentice training department guys are just out of boot camp and find it a relief to help with a community project. Some have even formed new friendships there."

The volunteers are different each month. The apprentice training department has a four-week training program and SHARE/food happens once a month.

SHARE/food is an outreach of the Catholic Archdiocese of Chicago. Its purpose is to make certain that everyone in the community has enough food. SHARE/food is not a charity, but a self-help program.

The SHARE/food program connects with several local communities such as Wadsworth, Zion and Waukegan. Other national SHARE/food centers are located in San Diego and Christiansburg, Va. ■

A jester to cure the blues

He's 6-foot-6 and weighs 229 pounds, wears size 23 quadruple E shoes, and has orange hair. He paints his face and uses an alias—and he loves doing it.

That's Construction Electrician 1st Class David Porter: Krackles the clown.

Assigned to Naval Support Force Antarctica public works department at the Naval Construction Battalion Center, Port

Hueneme, Calif., Porter began his "second life" in 1976, when his church in Annapolis, Md., needed a clown to entertain children on a bus. It was all new to him then, and he didn't know what he was doing. When the costume off the church rack didn't fit, he bought his own and he used different colors of soapstone to paint his face.

"I didn't impress the kids a bit, but I sure felt good in that costume," he said.

Porter began to look at different clown faces in books and movies and started designing his own face. He experimented until he found one that he liked. Then he met "Freddie the Fire Chief."

"He looked at me and told me that I was all wet," said Porter. Under Freddie's wing, Porter learned how to put on a good face—to use powder to keep his makeup from smearing or running.

Porter has performed around the world while deployed with the Seabees. One time, when he was stationed in Sicily at Christmas, he performed for an hour and a half at a Sicilian orphanage.

"It was my first time with a large group of kids," he said. "They didn't speak English, and I didn't speak Italian, but fun and laughter seem to be a universal language. We had a great time."

Porter performs for hospitals, church functions, special olympics and parties.

Last year, the 37-year-old Porter at-



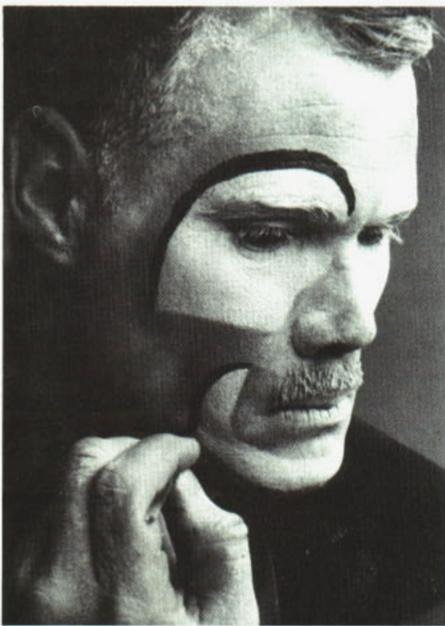
tended a Midwest clown convention in northern Indiana. "It got me more involved because I found there are a lot of people who are just like me," he said. He learned makeup techniques, skit routines, and the art of blowing up and tying balloons.

He is a member of Clown Alley, a clown club that meets in different locations around the country, and he hopes to attend the Ringling Brothers Barnum and Bailey Clown College one day.

It isn't easy being a clown, though. It is often hard work putting a smile on an unhappy face or reacting to different situations cheerfully, he said. But that doesn't stop him.

"If there is a frown that needs to be turned upside down, then that is where I want to be. I love being a clown." ■

—Story by PH2 Jim Horst,
NCBC Port Hueneme, Calif.



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The Grass Is Not Always Greener

I was surprised to read in "Aviation Week" and "Space Technology" that the Navy expects aviator retention to decrease a little bit this year as more pilots leave to take a look at airline careers. I say surprised, because the airlines look a lot less attractive now than they did a few years ago. It's possible that those on active duty don't realize this. I left active duty in 1977 and was hired by an airlines company in 1978. The first two years were upbeat. But then deregulation and poor economic conditions started a slide in airline pilot pay and working conditions that is accelerating even now.

As mature airlines fall on hard times and low salary new-entrant airlines proliferate, average airline pilot pay has tumbled. My airline has avoided some of that, so my present salary is 15% above what I'd be making on active duty right now. But that's not good, considering the earning power I've lost putting up with nine months of no work while trying to land an airline job, one year of poverty-level probationary salary, a two-month mechanics' strike, a 2½-year layoff in 1981-83. My company is demanding a 24% pay cut of all present pilots, and wants to pay all pilots hired after this date at only one half of the present pay scale, for the rest of their careers (the so-called two-tier pay scale concept). One of the largest airlines in the country is already paying all pilots hired after 1983 on a permanent "C" pay scale—roughly half of that of the other pilots working on the airline. It is apparent that

my company plans further cuts in all pilots pay in the future.

But pay isn't the only difference between an airline job and a Navy career. On active duty I was an officer and a leader. Here we are labor, and simply considered as "costs," to be controlled and minimized as much as possible by management. We wear three-piece suits but are looked down upon as hourly laborers. The aviating is boring compared to my active-duty F-4 and reserve P-3 flying. And if you're a flight engineer, it's excruciating. Many airline domiciles can't compare to Miramar, Jax, Moffett, Whidbey Island, etc. It's a lonely career, with little of the camaraderie or sense of community found in Navy organizations. There are no six-month cruises, but families grow tired of the two- to seven-day absences that continue throughout your 30-year career, and the inability to plan ahead on family activities. And there are two- to three-month separations every several years for training.

Layoffs, bankruptcies, and strikes are a fact of life. It's interesting to open the pages of "The Hook" and see pictures of former airline friends happy to be on active duty again after unpleasant experiences with bankrupt airlines.

What I'm trying to say is that anyone contemplating leaving active duty should take a long, realistic look at what he can expect to find in the airlines. He might be surprised. Airline piloting's salad days are over; time off is decreasing, salaries are tumbling, and so is morale.

—Cmdr. Scott R. Baumann, USNR-R,
Seattle, Wash.

Reunions

• **USS Quillback (SS 424)**—Reunion planned for fall 1985. Contact Walt Brown, 10 Summit Ave., Goose Creek, S.C. 29445; telephone (803) 553-7544.

• **USS Ross (DD 563)**—Planning a reunion. Contact John Cooney, 12612 82nd Ave., Palos Park, Ill. 60464; telephone (314) 361-0561.

• **VF-143**—Planning a reunion. All former members of VF-871, VF-123, VF-53 and VF-143 are invited. Contact Lt. Scott Grundmeier, VF-143, FPO New York, N.Y. 09501-6121; telephone (804) 433-5166.

• **USS Brush (DD 745)**—Planning a re-

union for all shipmates who have served since April 17, 1944. Contact Ted J. Dvorak, 8418 15th Ave., Kenosha, Wis. 53140; telephone (414) 658-1997.

• **USS Dayton (CL 105)**—Planning a reunion. Contact Edwin Chapman, 36 Rossen Place, Bloomfield, N.J. 07003; telephone (201) 338-8410.

• **USS Henrico (APA 45), 1943 crew and officers**—To receive USS Henrico APA Newsletter, contact Don Soper, Editor, P.O. Box 627, Platte City, Mo. 64079.

• **Carrier Air Group 14 (VF/VFN/VBT/VF/VB) 1943-45 Squadrons**—Reunion Sept. 12-15, 1985, Denver. Contact CAG 14 Reunion, P.O. Box 6242, McLean, VA. 22106.

• **USS Hope (AH 7)**—Reunion Sept. 13-15, 1985, Long Beach, Calif. Contact Rew A. Wilson, P.O. Box 3613, Eureka, Calif. 95502.

• **USS Saratoga (CV 3)**—Reunion Sept. 13-15, San Diego. Contact P.R. Tonelli, 6382 Cantiles Ave., Cypress, Calif. 90630.

• **FASRON 118**—Reunion Sept. 13-15, 1985. Contact Warren J. Kuhn, 3605 N.E. 48th St., Kansas City, Mo. 64119; telephone (816) 454-8376.

• **USS Osterhaus (DE 164)**—Reunion Sept. 13-15, 1985, Laramie, Wyo. Contact Melvin Frels, 18428 2nd Ave., Barstow, Ill. 61236; telephone (309) 496-2312.

• **USS Bennion (DD 662)**—Reunion Sept. 13-15, 1985, Buffalo, N.Y. Contact Thomas J. Gaughan, 4717 Springbrook Dr., Annandale, Va. 22003; telephone (703) 978-5088.

• **USS Rodman (DD 456/DMS 21)**—Reunion Sept. 13-15, 1985, Clifton, N.J. Contact Edwin Chapman, 36 Rossen Place, Bloomfield, N.J. 07003; telephone (201) 338-8410.

• **USS LST 851**—Reunion Sept. 13-15, 1985, Springfield, Ill. Contact Sidney Zeilstra, 18906 Wildwood Ave., Lansing, Ill. 60438; telephone (312) 895-6253.

• **Navy Bombing Squadron VPB 117**—Reunion Sept. 18-21, 1985, St. Louis. Contact R.J. Mallett, 7340 Granbury Circle, St. Louis, Mo. 63123; telephone (314) 843-5527.

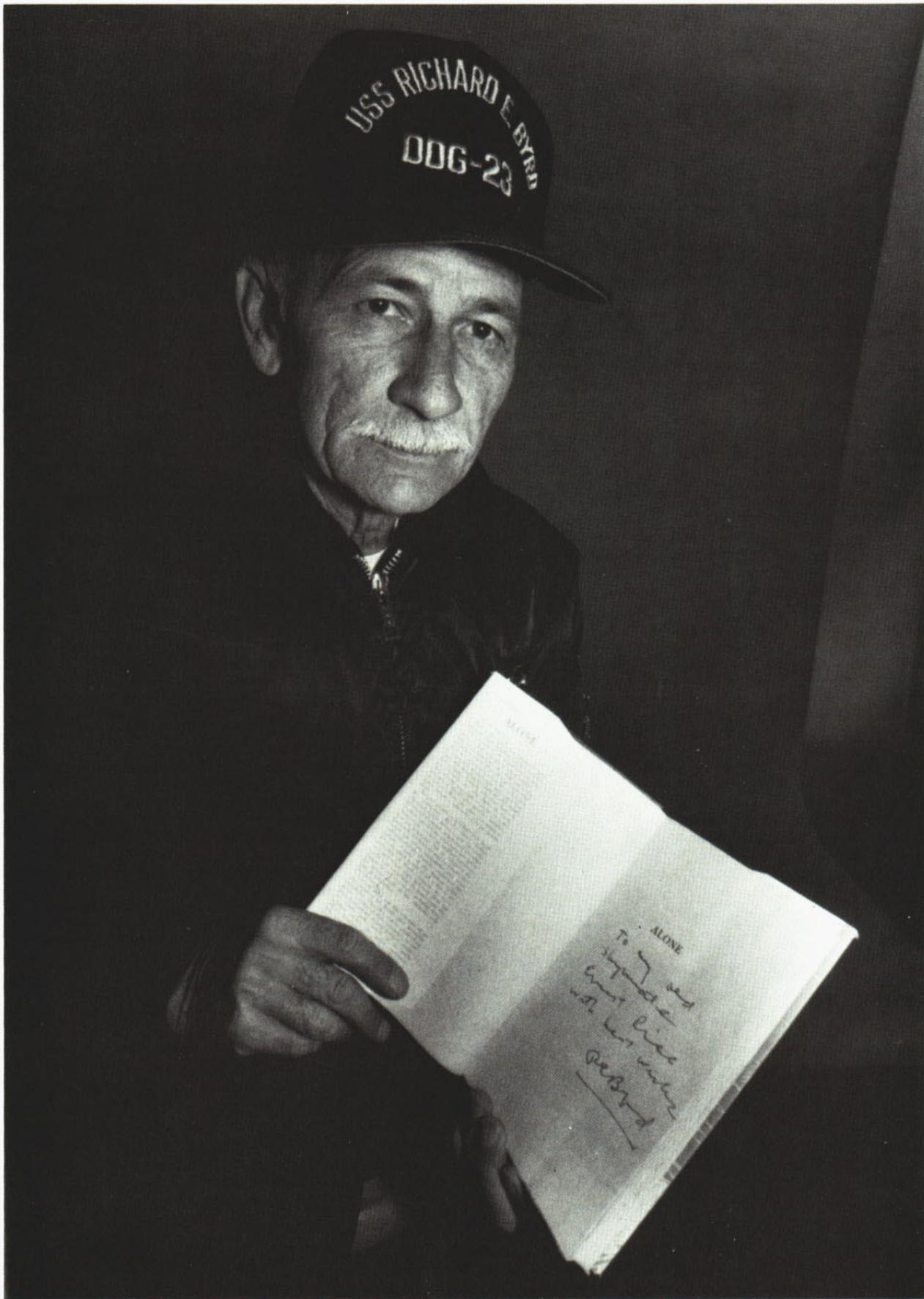
• **USS Fanning (DD 385)**—Reunion Sept. 18-22, 1985, Bakersfield, Calif. Contact Fred Winger, 712 Hewlett St., Bakersfield, Calif. 93309; telephone (805) 323-7013.

• **USS Stephen Potter (DD 538)**—Reunion Sept. 19-22, 1985, St. Louis. Contact USS Stephen Potter Assn., Don Huston, 19202 20th N.W., Seattle, Wash. 98177; telephone (206) 542-3495.

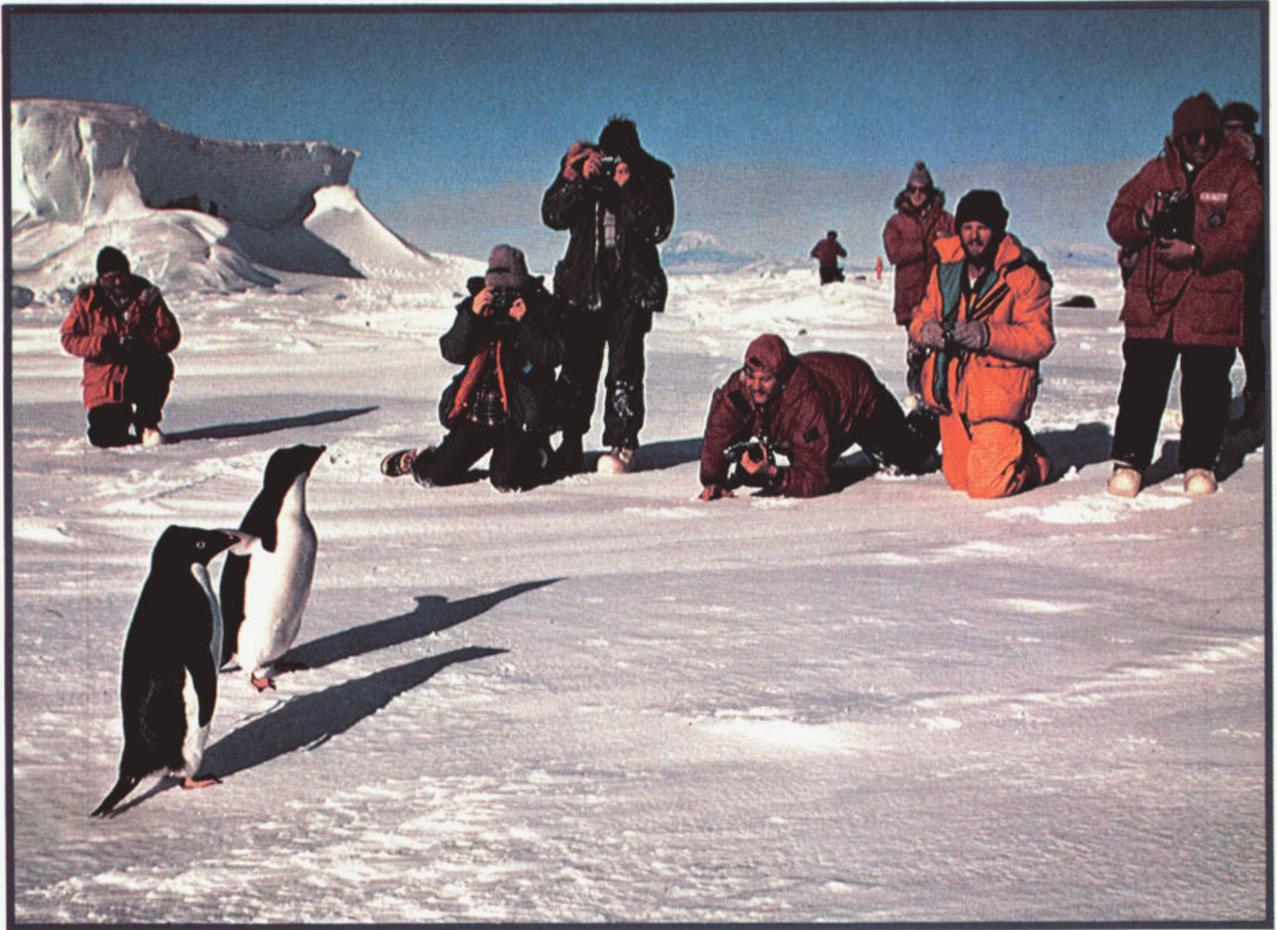
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Ernest A. Price holds a copy of Rear Adm. Richard E. Byrd's book, "Alone", which Byrd autographed for Price. Price sailed with Byrd in 1946-47 during "Operation High Jump," the largest Navy expedition to go to the Antarctic. A security officer at U.S. Naval Weapons Station, Corona, Calif., Price has been named an honorary crew member of the USS Richard E. Byrd (DDG 23).



A trip to Antarctica ● Page 18