

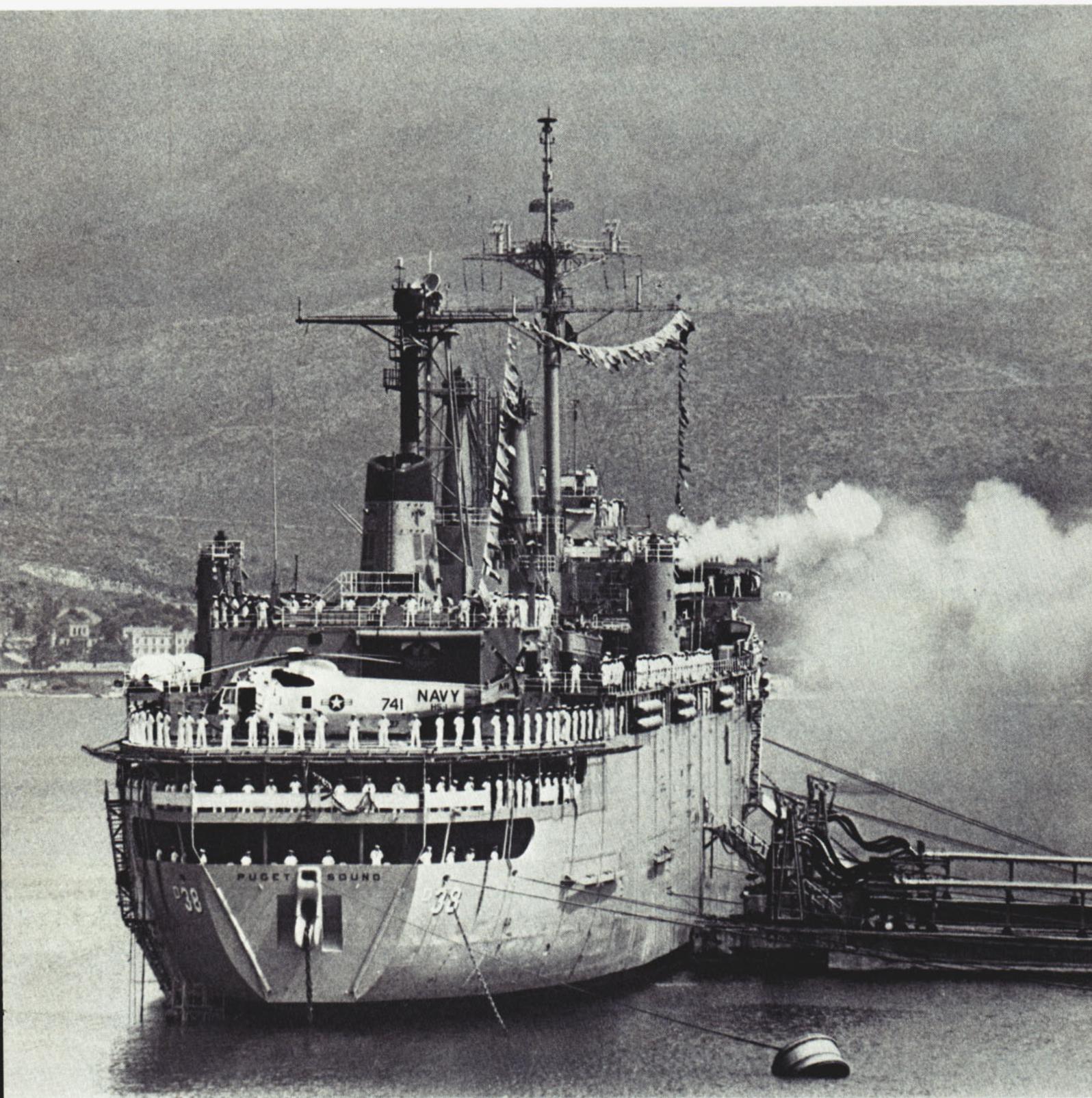


ALL HANDS

OCTOBER 1981

in this issue:

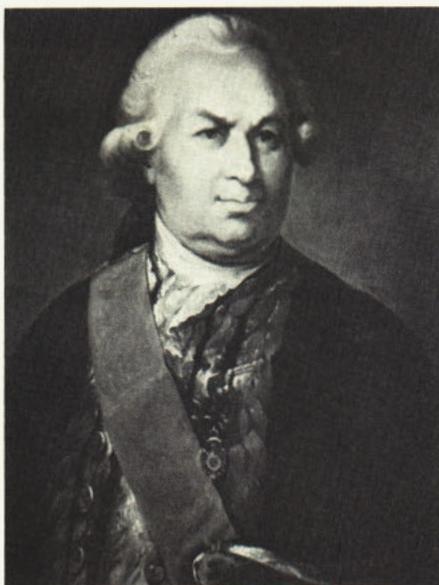
Mothball Fleet
Suez Transit



Sixth Fleet flagship, destroyer tender USS Puget Sound (AD 38), fires a salute during change of command ceremonies at Gaeta, Italy, on June 5. Vice Admiral William N. Small, since promoted to the four-star rank of admiral, was relieved by Vice Admiral William H. Rowden. Adm. Small is now VCNO. Photo by PHI Robert Atkinson.



Page 18



Page 24



Page 42

ALL HANDS

MAGAZINE OF THE U.S. NAVY—59th YEAR OF PUBLICATION
OCTOBER 1981 NUMBER 777

- Chief of Naval Operations: ADM Thomas B. Hayward
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 CO Navy Internal Relations Act: CAPT John A. Georg
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- 2 NEW HOME FOR INTREPID**
 Famous carrier becomes sea-air-space museum in New York City
- 10 SMALL CRAFT DOES BIG JOB**
 YR 85 helps make repair jobs easier in Long Beach
- 12 SHORTCUT THROUGH THE DESERT**
 USS *America* on a historic journey through the Suez Canal
- 18 HERITAGE OF THE SEA**
 Maine Maritime Academy keeps seagoing traditions alive
- 32 BIKING AROUND THE WESTERN PACIFIC**
 USS *Blue Ridge* cyclists venture beyond the port visit
- 34 BREMERTON'S MOTHBALL FLEET**
 New Jersey reactivates; other ships await the call to duty
- 41 NAVY SUNDAY IN LONG BEACH**
 USS *Jouett*'s religious program softens hardships of overhaul
- 42 NORTH TO NORWAY**
 Amphibious assault ships figure in NATO's Cold Winter exercise
- 46 A WAY TO MOVE UP**
 BOOST—an upward mobility path for enlisted people
- 47 SAILORS OF THE YEAR**
 Three Navy men earn recognition and meritorious promotions

22314-
2007

Departments

28 Bearings

44 Currents

48 Mail Buoy/Reunions

Covers

Front: The big guns of USS *New Jersey* will soon gleam with pride when the battleship returns to active service. Photo by PH1 Terry Mitchell.

Back: Residents of an Egyptian city exchange waves with crew members of USS *America* as it travels south through the Suez Canal. Photo by PH1 Jim Preston.

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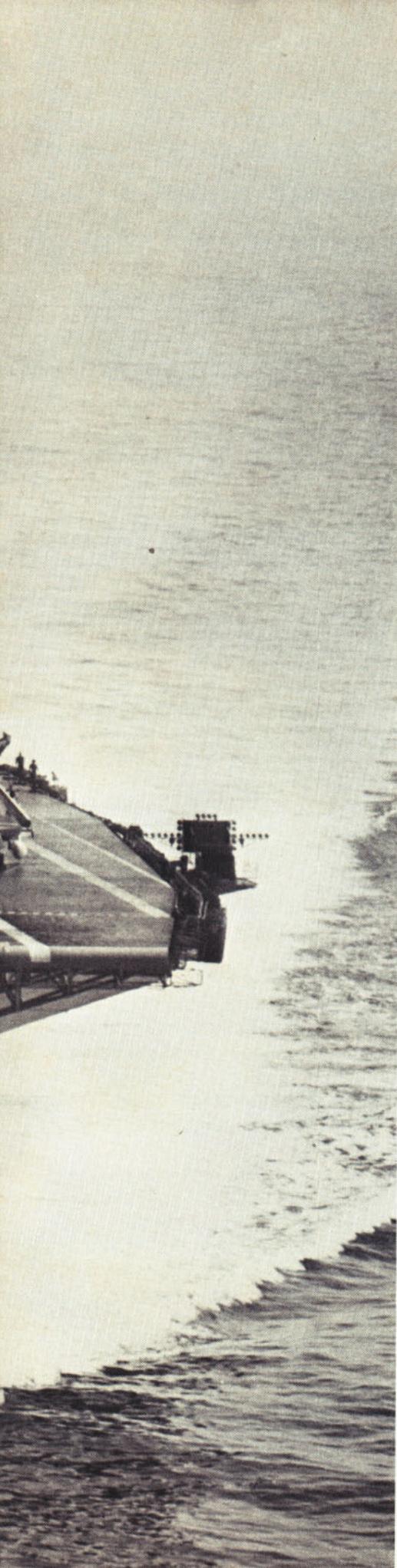
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New Home for Intrepid

Those who think that New York is only for people who seek their future in commercial enterprise and know little of the basics in this life can take heart. There are men residing in Gotham today, the likes of Zachary Fisher, who firmly believe the United States is the greatest nation on earth. They are zealots, fierce in their loyalty and their love of the flag. When the flame of patriotism in this country was reduced to ashes in the late '60s and early '70s, it never stopped flickering in the hearts of this small group of men in New York City. And they back up their patriotism with material things.

* * *

In case you haven't heard, *Intrepid* is going to the Big Apple, not the shipbreaker's yard. The famous aircraft carrier has served the nation for the past 38 years—distinguishing itself in three wars and also acting as the prime recovery ship for the nation's *Mercury* and *Gemini* space missions.

Intrepid's active life spanned the propeller, jet and space ages. Its new role in life will be as a sea-air-space museum, where visitors can actually reach out and touch aviation's past, its present and even its future.

It would seem to be a simple chore to obtain a decommissioned Navy ship, place it alongside a pier in a major city and open it as a museum. Such an evolution is far from simple, however. To accomplish this, it takes people with vision, ready cash and—above all—determination of the first order.

Why, the reader may ask, should New York be the site for such an undertaking? Doesn't that city already have enough attractions to lure visitors?

Intrepid

For one thing, the Navy hasn't been a visible part of New York for the past two decades, ever since the closing of the Brooklyn Navy Yard, St. Albans Naval Hospital and other facilities like Manhattan Beach, the Brooklyn Army Terminal (from which the troop transports operated) and the Bayonne (N.J.) Naval Supply Depot. There was a time—before, during and following World War II and the Korean Conflict—when the Navy was as much at home in the New York area as it is today in Norfolk, Va., Long Beach, Calif., or Bremerton, Wash. Today, a sailor in uniform on the city's streets is a rarity, maybe even an oddity.

Then, along came the nation's Bicentennial in 1976 and the visit of the Tall Ships, accompanied by some of the Navy's newest combatants. New Yorkers took the whole thing to heart. They gawked, they swelled with pride, and they camped out at night in places like Battery Park (at the foot of Manhattan Island) to marvel at the sight of their nation's Navy.

The Bicentennial was a rejuvenation for New Yorkers. Time was—on

almost any summer weekend before World War II—when New York kids hot-footed it to Brooklyn's Narrows to view the battleships and cruisers at their moorings and to watch the liberty parties come ashore in whaleboats at the landing near Fort Hamilton. Those sights were etched in the minds of many youths, and when it came time later to join up, there was only one service for them—the Navy.

Now, with *Intrepid* about to set up shop at Pier 86 South on the city's West Side, some of that old presence will live again in New York. The ship will be a sea-air-space museum primarily, but "Navy" will rebound off neighboring skyscrapers.

West Side traffic will, no doubt, crawl past *Intrepid*. Navy veterans of all ages will be reminded of their youth and that time in their lives when—war or no war—it was great to be in blues, have five bucks in one's wallet and not have a real care in the world. Honking horns, however, will spur them back to the present and the need to pay the rent and get the kids through college.

Besides the veterans—the New York

area has always contributed a massive dose of manpower in all the conflicts in which this nation has been involved—sheer numbers of people is the primary reason why *Intrepid* is becoming New York's own. There are 30 million people in the surrounding area and another 17 million visit Gotham each year. Old CV 11's decks will feel the tread of many feet; its hull will be privy to words of wonderment.

The project began about five years ago when a group of businessmen toyed with the idea of getting an ex-Navy ship as a tourist attraction. The renewal in interest in seapower was one thing; the "cleaning up" of the Times Square area was another. Despite the initial interest, progress was slow indeed.

It was soon discovered that the Navy wasn't going to give one of its ships to just any group. There had to be assurances of positive intent, secure financial planning and—above all—long range plans that would assure that the ship wasn't going to fall into disuse. It was a tall order, and the going, those first couple of years, was anything but smooth.

Then a noted businessman heard of the idea and stepped in to give the project its necessary shot in the arm. Zachary Fisher became the founder and chairman of the Intrepid Museum Foundation. He—with his brother Larry—is one of the leaders in the investment building sector of New York's real estate industry. Their firm has built some of the largest office buildings in the city.

Fisher set to work providing start-up funding for the sea-air-space museum while lining up support from the local business community. Aiding him then, and now, is the project's president, James R. Ean.

Ean, a nervous-energy opposite of the calm, business-like Fisher, has been



Left: A 1965 photo of Intrepid navigating under the Brooklyn Bridge. Right: On March 23, 1965, Intrepid recovers astronaut John Young's Gemini capsule. Upper right: Despite damage from Japanese suicide planes, the mighty carrier continued operations throughout the South Pacific during World War II.



giving 12-hour days to the *Intrepid* idea for several years while holding down a responsible executive job with Luft-hansa. He's a man who is always looking at his watch and is constantly on the go. Nearing 60, he looks 50 and drives himself like he's 40.

The older Fisher and the ever-busy Ean seem to prove that only busy people make things happen; the guy with

time on his hands is usually wasting it somehow.

Here's what they've done to date:

In April 1981, the group finally secured title to the *Intrepid*, which was sitting at the Philadelphia Naval Shipyard since it was decommissioned in 1974. During the Bicentennial, the carrier served as a visitors' center at the Navy yard there and was, after that event, awaiting the wrecker's torch.

Earlier this year, the museum's board of directors secured the use of Pier 86 South at the foot of West 46th Street from New York City. This is the old American Lines' pier that had been used by the liners SS *Constitution* and the SS *United States*. Under agreement, the city was to contribute \$1.8 million toward the cost of restoring the pier, which is to include dredging and building a specific fendering and mooring system to ensure the safe berthing of the carrier.

By last June, the foundation had spent \$670,000 in private funds on the pier alone, but austerity measures caused city financing to lag. Total private money put into the project as a whole was reaching the \$3 million

mark. When planning started some years before, it was felt that such a sum would pay for the entire project. New projections placed it at closer to \$14 million overall.

On July 7, the Intrepid Museum Foundation was able to go public with a \$15.2 million bond issue due Aug. 1, 2011.

Intrepid is slated to soon leave its berth at Philadelphia and be towed to the Bethlehem Steel facility at Bayonne, N.J. Plans call for the hull to be scraped and the ship to receive a coat of paint. Cost of this job alone is \$1 million even though the paint has been donated.

During all this, an intensive recruiting effort has continued. The foundation has actively sought out experts in all fields of shipboard maintenance and upkeep. The majority of those recruited have volunteered their time toward the project, without pay.

An ongoing program continues to actively solicit material to be displayed aboard *Intrepid*—everything from planes to photographs and cruisebooks. A Brooklyn-based professional modelers club, for example, has been working for several years on scale models of ships and planes which eventually will be displayed in the ship.

An intensive campaign also continues to locate and contact former crew members of the *Intrepid* and air squadron personnel, as well, in an effort to gather historical information and artifacts.

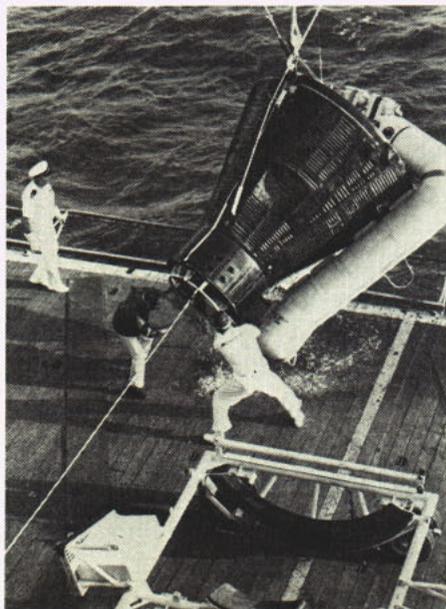
Here's what it all leads to:

The museum plans to ultimately employ 300 people, and it is expected that services in the surrounding area will support more than 1,000 new jobs.

As a "not for profit" museum, the *Intrepid* could be eligible for government as well as private support under a number of programs.

Initially, the museum will consist of 150,000 square feet, open to the public and covering two full decks and the island bridges. Subsequently, several below decks, comprising another 150,000 square feet, will be outfitted to complete the museum.

The museum will feature dramatic



Intrepid

sound, lighting and visual presentations which will create authentic environments tracing back to the turn of the century and looking ahead to the next century.

Exhibits will include:

- An array of aircraft on the Flight Deck which will trace aviation through the years.
- The Intrepid Theatre, which will recapture the sensations of flight and carrier activity through a dramatic visual and sound experience.
- Pioneers Hall, which will feature a re-creation of the ship-borne landing of an aircraft made in 1911.
- Space Hall, which will include reproductions of the lunar landing module and the space shuttle.

It is the desire of the foundation to preserve the *Intrepid* story for those who lived it. More than this, it is hoped that the generations of Americans who have followed can look back, and look forward, through the halls of *Intrepid* to the technological excellence and human courage which are our American heritage.

The visitor will gain a sense of experiencing history as it happens and will take away from *Intrepid* a personal participation in the great tradition it represents.

At opening, the museum will feature two main levels of exhibits: the Flight Deck, "Topside," and the enormous Hangar Deck below. Aircraft from various service and civil sectors will star in the Flight Deck show. The exterior treatment of the ship will create the sights, sounds and excitement of a living, operational Navy carrier.

Below decks, one will enter the first of *Intrepid's* major exhibit areas, the Entry Hall in Hangar Bay One. Aircraft from modern carrier operations, displayed in a contemporary setting, will greet the visitor. Striking graphic centers will orient visitors to *Intrepid* and the various exhibit centers on

board. As in all of *Intrepid's* halls, the exhibits will be of an interpretive nature, allowing visitors hands-on experiences with much of *Intrepid's* exhibit material.

The *Intrepid* Theatre, located forward of the Entry Hall, will immerse visitors in a highly dramatic visual experience of the sensations of flight and carrier activity. Sounds and images will wrap visitors in an authentic operations drama, inviting the free flight of imagination which will carry through the chapters of the *Intrepid* story to follow.

Exiting the theatre, visitors travel back through the service history of the USS *Intrepid*, highlighted by aircraft which flew off its deck during service tours in the 1960s. Gradually one will move back through aircraft and support graphics, until arriving in a starkly realistic re-creation of the combat-fit 1944 *Intrepid* hangar. The central display of the *Intrepid* Hall will be World War II Pacific star—the Long Island-built Grumman F6F *Hellcat*.

Intrepid's harrowing war and peace-keeping record will be traced amid graphic and film depiction of the historic Pacific campaign.

In the after section of *Intrepid's* middle hangar bay, visitors will be able to step back into the early days of the century and the pioneering achievements of naval aviation. The central

setting of this Pioneers Hall will feature the landing of a Curtiss pusher aircraft upon the rough planks of the first ship-borne landing platform in 1911. The scene will be faithful full-size reproductions, and the ambiance of the romance of early aviation will be created.

Moving aft, visitors will enter *Intrepid's* largest hall, the Air and Space Technologies Hall. The bridge to the present will be created by a comparative display of a 1930s Sikorsky *Flying Boat* and an airliner of the 1980s. From here one will move to a wide array of exhibits depicting principles and milestones of flight technology. The fascinating story of space exploration will be told, highlighting *Intrepid's* role as recovery vessel for *Mercury* and *Gemini* missions in the 1960s. The interrelation between military and civilian technological achievements will be illustrated and designed for maximum visitor participation and educational impact.

Finally, the visitor will arrive at an elevated observation deck overlooking the Air and Space Technologies Hall. Here, before moving on to the fantail lounge area, the ship's gift shop, art gallery and up to the flight deck, the visitor will be able to look back through the entire span of the Hangar Deck, a breathtaking perspective on the grace and magnitude of the true at-



The excitement of carrier flight operations will be re-created in the Intrepid museum.

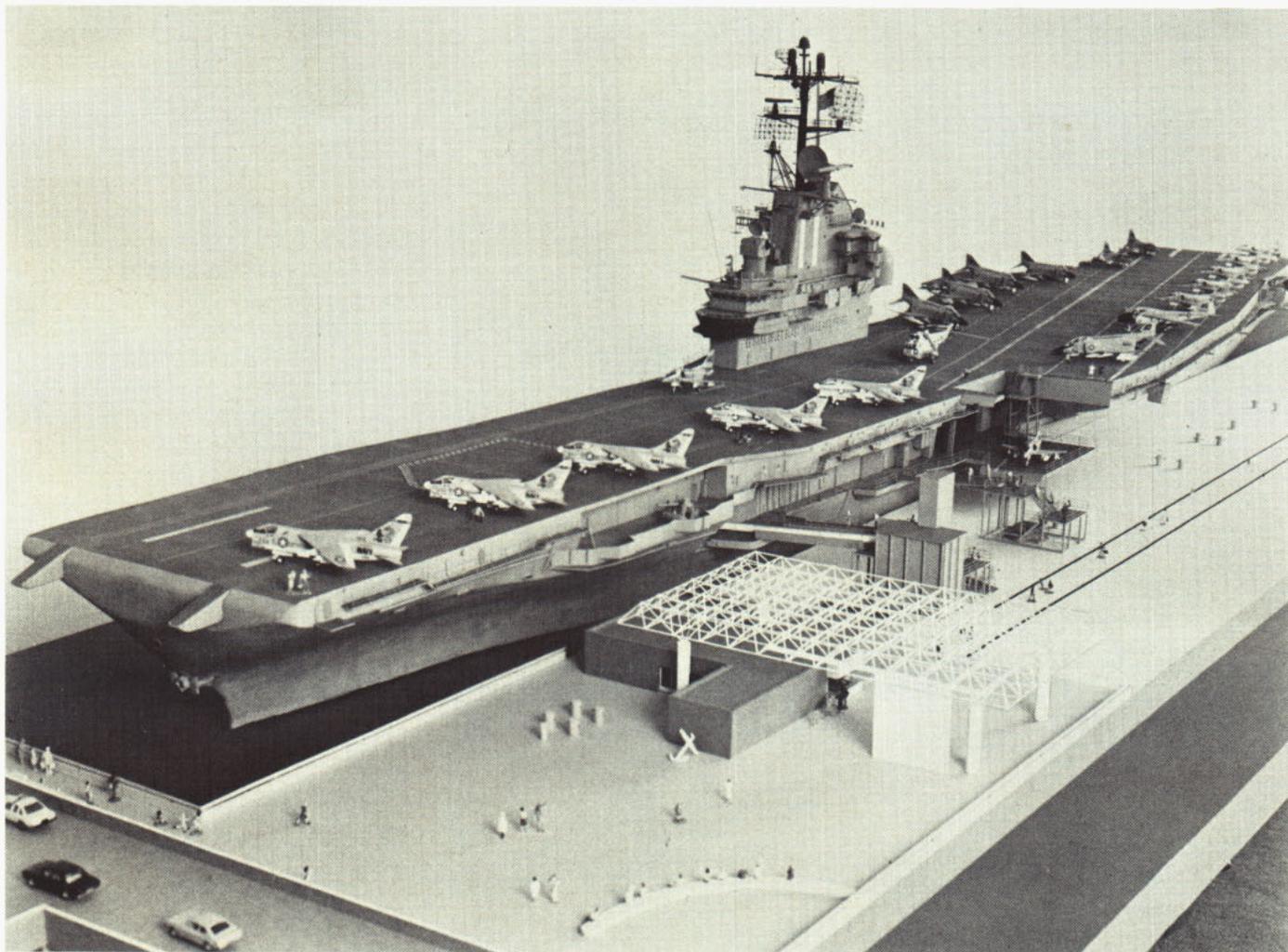


traction of the museum—*Intrepid* itself.

Intrepid should arrive at Pier 86 South late this year when it will be open for limited visiting. Within a year after that, much of its spaces and exhibits will be available to visitors, but it will take approximately 10 years to complete the project.

That's a long time, you may comment. Not for men of vision like Zachary Fisher and James Ean. The schedules and the drive they maintain could well shave years off the milestones. New Yorkers have never been known to do anything slowly.—JFC

Left: Souvenir pens all around when Intrepid was signed over to the museum foundation; (l-r) James R. Ean, Secretary of the Navy John Lehman Jr., Zachary Fisher, Rear Admiral Bruce Newell, Chief of Information. Below: A model of Intrepid Square at Pier 86 in New York City.



A Glorious Past

One of 24 carriers of the *Essex* class, the 27,100-ton *Intrepid* has served in two wars besides acting as the prime recovery ship during the *Mercury* and *Gemini* space programs. Starting its career as a CV upon commissioning in August 1943, *Intrepid* was designated a CVA in 1952 and then a CVS on Dec. 8, 1961.

Its last role, before becoming the sea-air-space museum, was as host ship for the Navy and Marine Corps Bicentennial Exposition at the Philadelphia Navy Yard.

The 872-foot aircraft carrier was built by the Newport News Shipbuild-

ing and Dry Dock Co., Newport News, Va.; it is the fourth ship to bear the name *Intrepid*.

The first *Intrepid* was a 64-ton ketch which figured valiantly in the war with Tripoli early in the 19th century. Built in France in 1798 for Napoleon's Egyptian campaign, the ketch was sold to Tripoli and bore the name *Mastico*. It was one of several Tripolitan vessels which had a hand in the capture of the American frigate *Philadelphia* on Oct. 31, 1803, when it went aground five miles east of Tripoli.

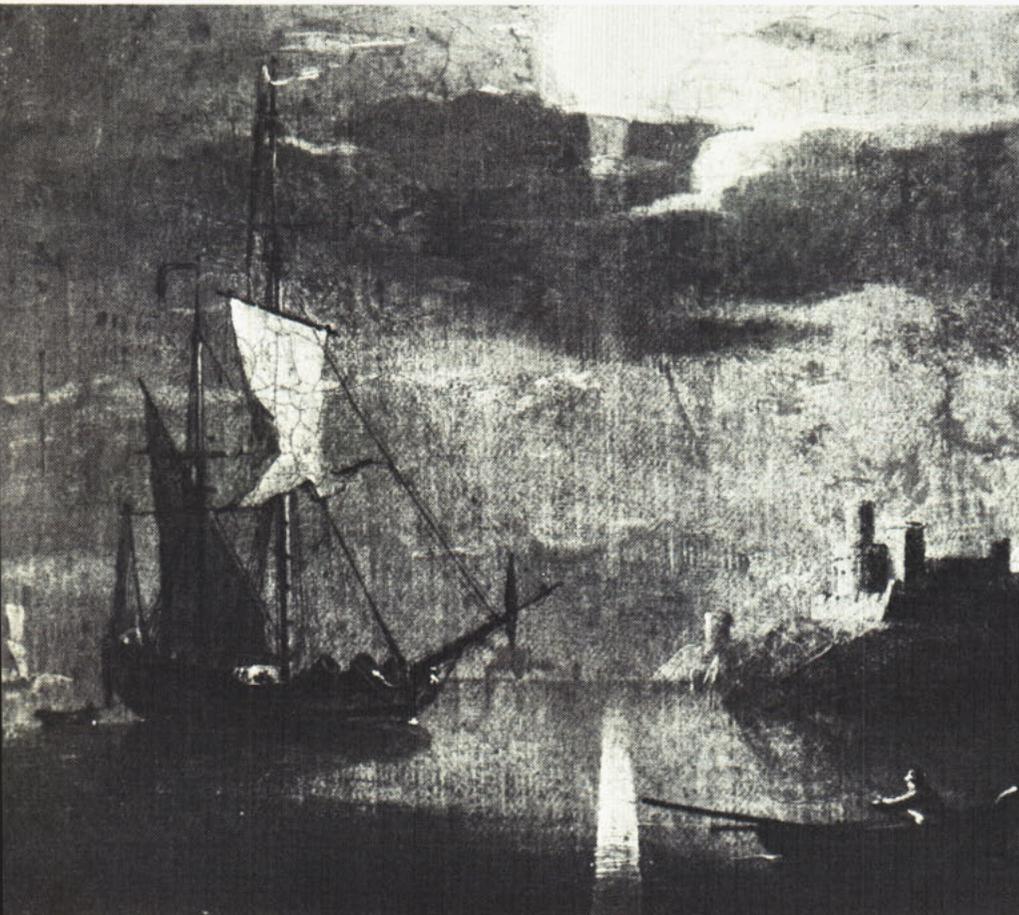
Two months later, along came Lieutenant Stephen Decatur in *Enterprise*

and captured *Mastico*. By then, Commodore Edward Preble had heard of *Mastico's* role in the *Philadelphia* affair and considered it a legitimate prize of war. The ketch was renamed *Intrepid*.

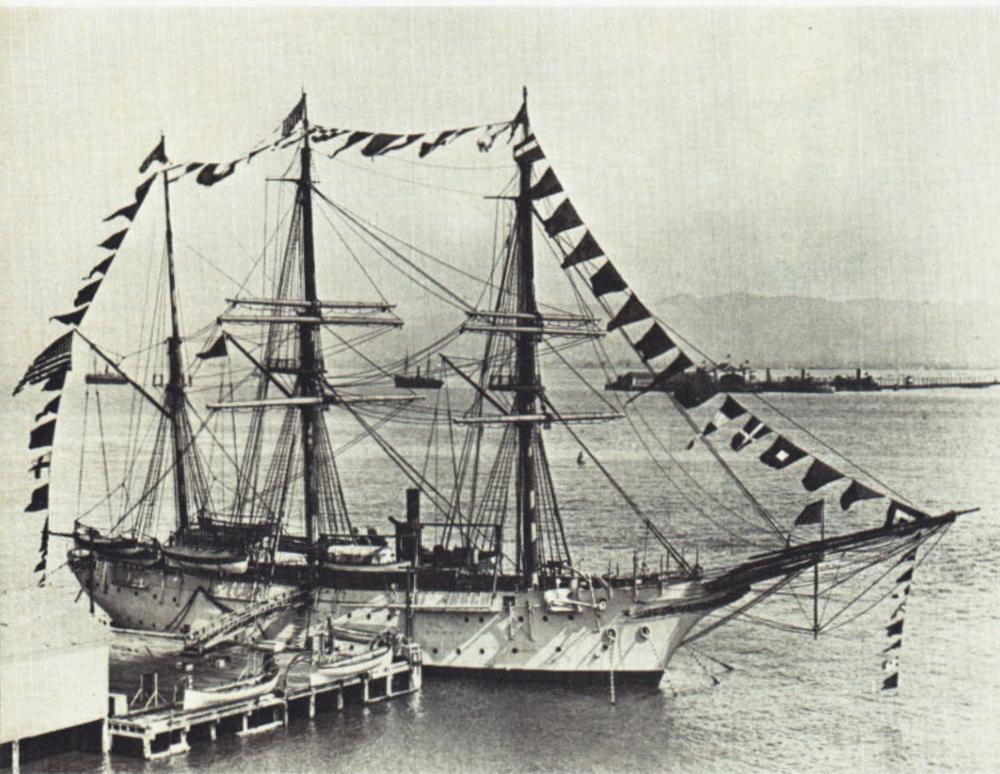
Preble placed Decatur in command of the ketch and shortly afterward—on Feb. 16, 1804—the heroic act of burning the *Philadelphia* in Tripoli harbor took place. A story in itself, the work of Decatur and his 60-man crew drew the praise of England's Admiral Lord Nelson (himself no lover of the Americans), who said the burning of the frigate was "the most bold and daring act of the age."

However, *Intrepid's* hour on the stage of life was not yet over; its final act took place on the evening of Sept. 4, that same year. Trouble was, the American squadron tried to duplicate its earlier feat, but the pirates in Tripoli once burned—so to speak—were on their guard. In command of Lieutenant Richard Somers, *Intrepid* had been fitted out as a "floating volcano" a week before in a plan to blow up the Tripolitan fleet in the harbor. The ketch was loaded up with 100 barrels of powder, 150 shells, and a quantity of shot and broken iron. Ten volunteers joined Somers and his principal assistant, Lieutenant Henry Wadsworth, along with another officer—Midshipman Joseph Israel, who badgered Preble and was allowed to join *Intrepid* at the last minute.

The ketch got under way, to be seen no more. Two signal guns were heard about the time it entered the harbor.



A painting of the first Intrepid in Tripoli harbor.



Then at 9:30 p.m. the waiting American squadron felt the concussion and heard the roar of a violent explosion. It was concluded that *Intrepid* was purposely blown up by its crew rather than let the valuable ammunition fall into enemy hands.

The second *Intrepid* was a 438-ton experimental steam torpedo ram, launched at the Boston Navy Yard in 1874. It saw only limited service before

being decommissioned that same year. It was recommissioned the next year but remained at the Navy yard, except for brief visits to New England ports, before being put out of service in 1882. It was planned to convert this *Intrepid* to a light-draft gunboat, but work was suspended, and it was sold to a private owner in 1892.

An 1,800-ton steel bark was launched as the third *Intrepid* at Mare

Island Navy Yard in 1904. It served as a receiving ship at San Francisco and Mare Island before being decommissioned in 1914. For a brief period, about 1915, it served as a barracks ship for men of the submarines F-1 through F-4 of the Pacific Fleet and, later, as a receiving ship, again at Mare Island. It was taken out of commission and sold in 1921.

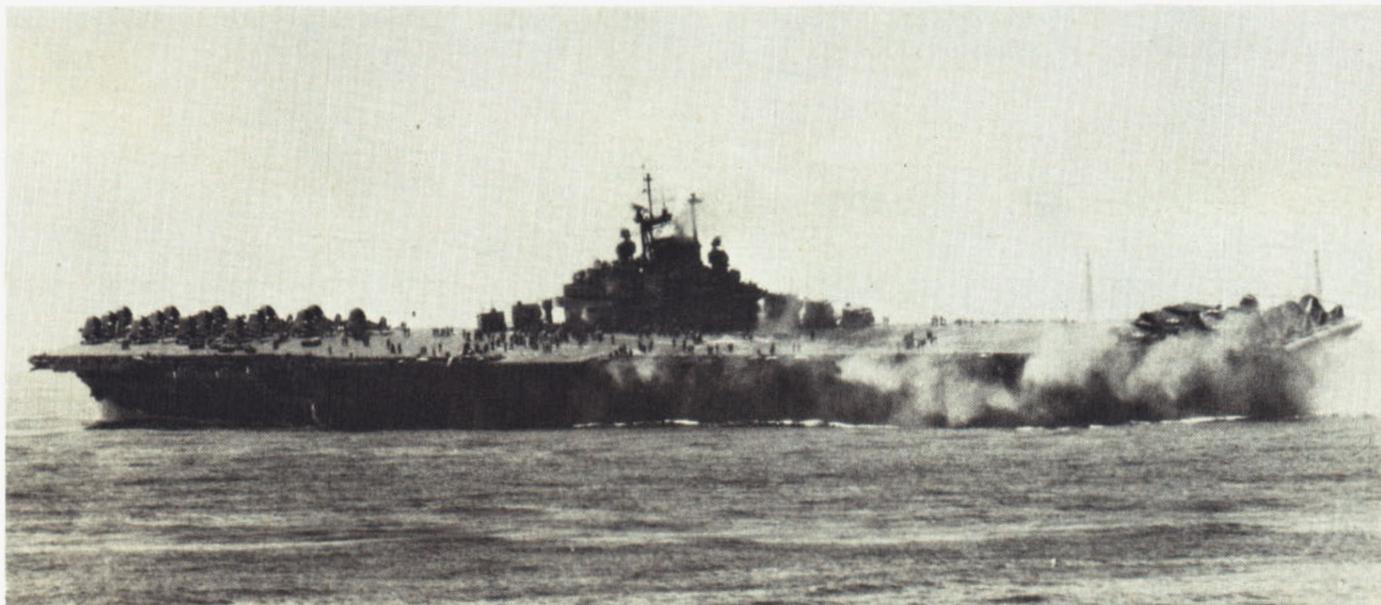
The present *Intrepid* cost \$44 million to build and had a crew of 360 officers and 3,008 men—including its air group. It saw action in the Marshalls, the Carolines and the Palau Group in the South Pacific in World War II. *Intrepid* was on hand at the Battle for Leyte Gulf and at Okinawa; its air wing destroyed 650 enemy planes and sunk or damaged some 289 ships.

At Leyte, *Intrepid's* air group helped sink the Japanese battleship *Musashi* and, six months later, helped send the battleship *Yamato* to the bottom.

During World War II, more than 100 of its men were lost in torpedo and kamikaze attacks, and another 100 of its airmen were killed in action over enemy targets.

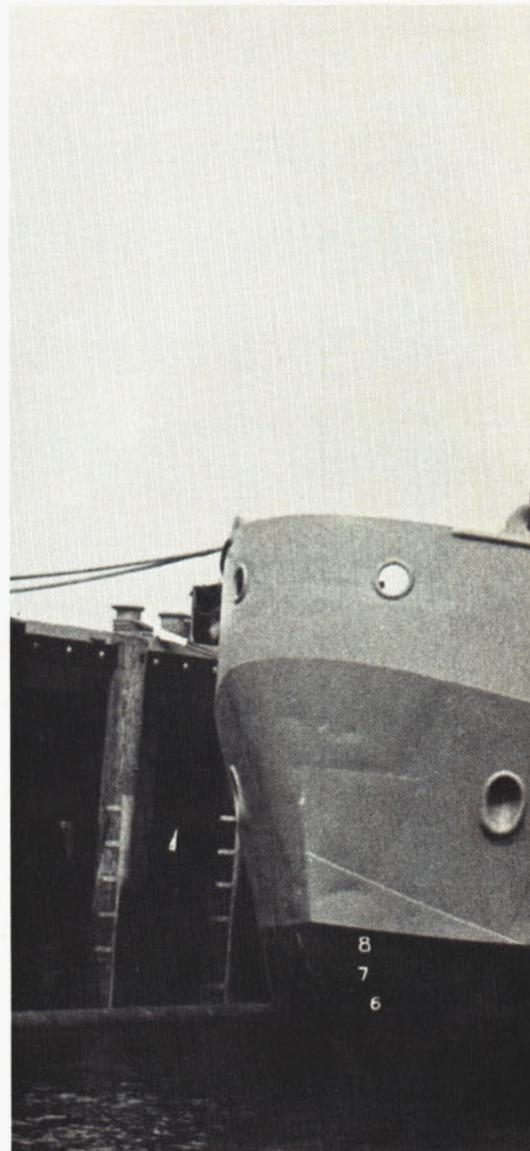
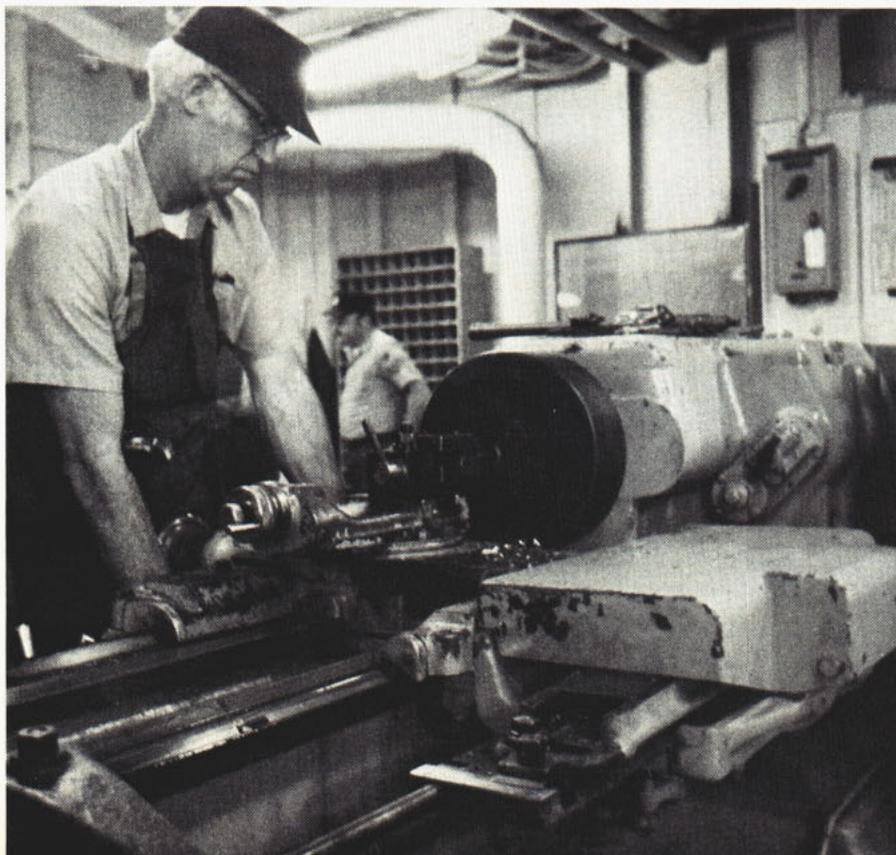
Intrepid served three tours in Vietnam, striking significant targets while deployed in the Gulf of Tonkin.

Above: The third *Intrepid* at Mare Island about 1910. Below: *Intrepid* in 1945 off Okinawa after a kamikaze attack.



Small Craft Does Big Job

Tying up a ship is a fairly routine matter. But when the YR 85, a non-commissioned repair barge, tied up recently at Pier 9, Long Beach, Calif., an unusual program got under way. It was the beginning of SoCalRepairEx '81, the first sustained Naval Reserve Repair and Maintenance Exercise in Southern California.



The program, completed in August, had a three-fold mission: to provide on-the-job rate training for reservists, to train reservists from other readiness commands in an Intermediate Maintenance (IMA) program and to provide repair services for the fleet, including destroyers, frigates and amphibious ships.

The YR 85 is small compared to many Navy ships. Captain C.S. Adoff, commanding officer, has dubbed the 30-year-old repair craft a "floating reserve center" because it is manned and staffed—except for 10 barge-keepers—by reservists. The barge-keepers are active duty Navy people permanently assigned on board.

MRI Phil Wood, a reservist, operates the lathe in YR 85's machine shop.



Affectionately known as "USS Quality," YR 85 has 29 reserve officers and more than 240 reserve enlisted people assigned in five units: a headquarters unit and four attachment units which drill on alternating weekends. With units on board each weekend, the barge is operational seven days a week.

Since the beginning of SoCalRepair Ex '81, the maintenance craft has had a dual development. Reservists have been rebuilding, refurbishing, modifying shops and even adding deck houses or compartments to meet the needs of YR 85's mission. At the same time, the all-important job of maintenance and repairs is being provided for ships of the fleet.

Lieutenant Commander Don Gillis, commanding officer of Detachment Unit 419, pointed with pride to some of

the projects. "This barge represents a lot of dedication on the part of reservists," he said.

YR 85 is outfitted with the basic shops of any repair ship, and its people can perform all manner of jobs from repairing micro-miniature electronic circuitry to machinery that can lift up to 10 tons.

A Navy standard calibration lab with a controlled environment and \$300,000 worth of test equipment has been set up to test equipment for the fleet. A large crane on a monorail lifts and lowers heavy equipment. Also on board is a machine shop and various sheet metal, welding, pipe and electric shops.

At any one time the barge is dealing with more than 400 repair requests. Detachment officers in charge review these requests and determine priorities

Although non-commissioned, YR 85 provides repair services seven days a week.

according to equipment needed.

"SoCalRepair Ex '81 is a test of sustained capabilities to perform the maintenance and repairs for the active Navy," said Adoff. "The exercise will have a marked impact on the future of the Naval Reserve in supporting the active duty Navy." —*Cmdr. Ron Toth*

Shortcut Through the Desert

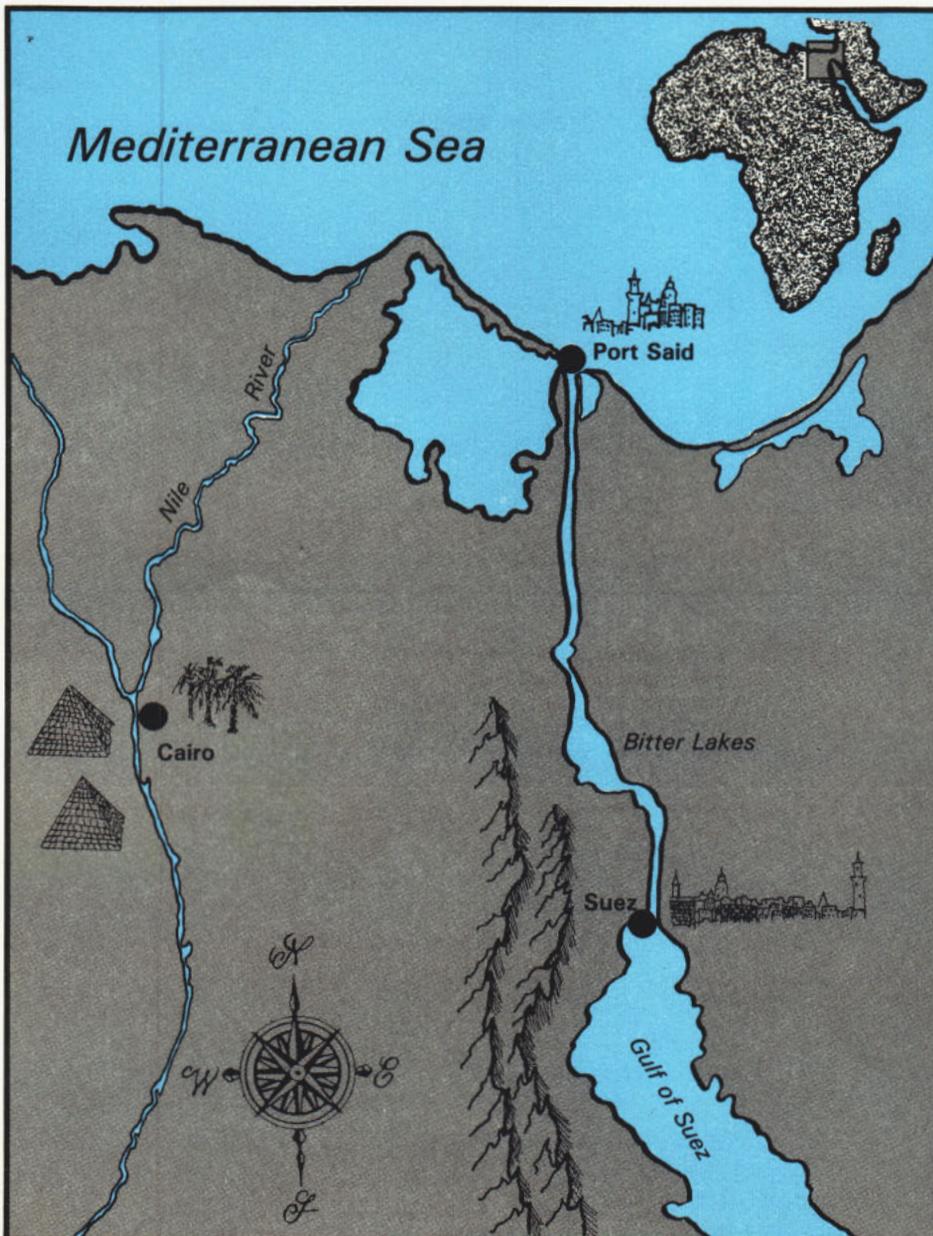


Illustration by DMSN R.M. Henry

Uncertainty darted through Dental Technician Third Class Russel King's mind as he peered through the small opening of an overboard discharge fitting. The limited view through the 3-inch pipe wasn't much of a vantage point for sightseeing, but it would have to do. The captain had ordered all hands below as USS *Intrepid* (CVS 11) made passage south through the Suez Canal en route to Vietnam. It was summer, 1967.

It would perhaps have been of little interest to the men of *Intrepid* to have known that their transit of the canal would be the last for an aircraft carrier for a 14-year span. That same month, June 1967, the vital waterway would be closed because of the Arab-Israeli War.

On May 6, 1981, Dental Technician First Class King once again found himself navigating southward through the Suez. This time he was on USS *America* (CV 66), the first U.S. Navy carrier since 1967 to travel that route. *America* also was the largest warship to have ever entered the canal. The passage, 100 miles instead of thousands of miles around Africa's Cape of Good Hope, became possible in 1980 when the Egyptian Suez Canal Authority completed dredging operations to enable super tankers to steam through the shortcut.

Once again King's mind was filled with uncertainty. But this time it was occupied with different concerns, and he had a better view of the canal and



With the American and Egyptian flags flying from its mast, USS America leaves the waters of the Mediterranean Sea at the city of Port Said and heads south through the Suez Canal.



USS America

the surrounding countryside. This time his thoughts were on a festive event—a marathon relay run on the 4½-acre flight deck as *America* steamed southward under a brilliant desert sun.

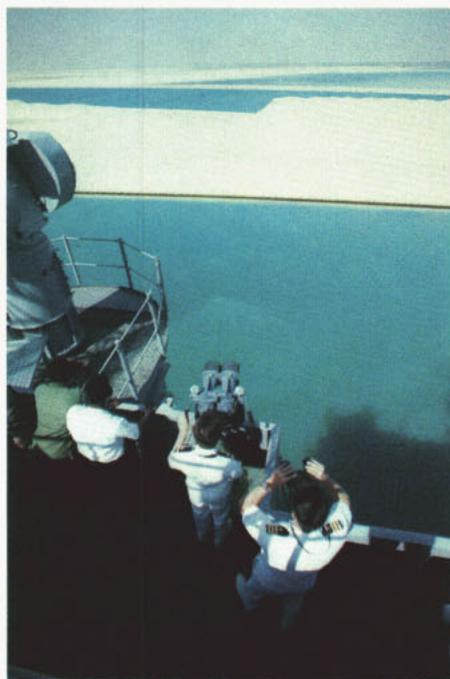
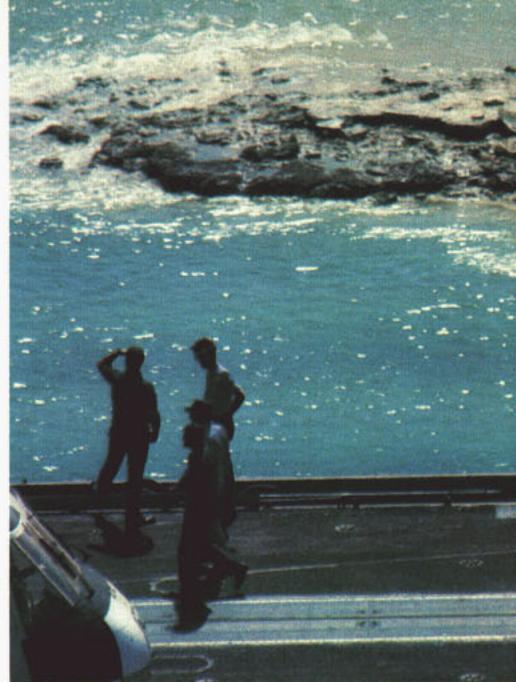
Sweat drenched his body as the sun beat down on him, and the steel deck hammered back at aching feet and tiring legs. He wondered if his energy would hold out for another 10 minutes—the time remaining in the 45-minute run he needed to complete to earn a “USS *America* We Ran the Big Ditch” windbreaker.

The marathon, part of a general atmosphere of relaxation and wonderment, was part of a plan for the day to enable as many crew members as possible to experience as much as they could of the journey through the canal. Elsewhere aboard the carrier, while 1,225 crewmen alternated stints of running during the marathon, 14 crewmen were frocked to senior and master chief petty officer by *America*'s command-

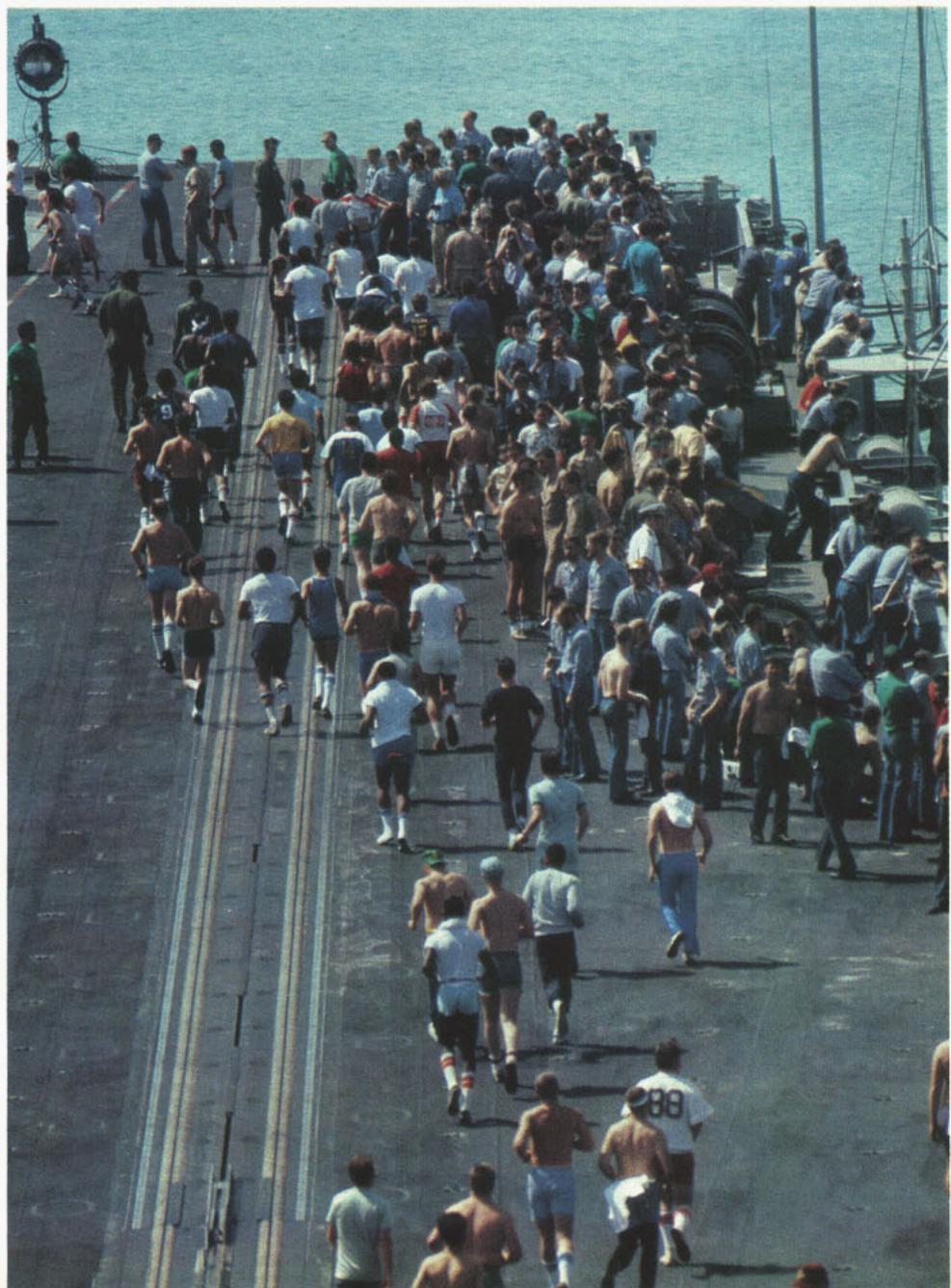
ing officer Captain James F. Dorsey Jr. Another 29 sailors took oaths of re-enlistment on the historic occasion, helping the ship secure a stronger grip on the Golden Anchor award for retention it had earned last year.

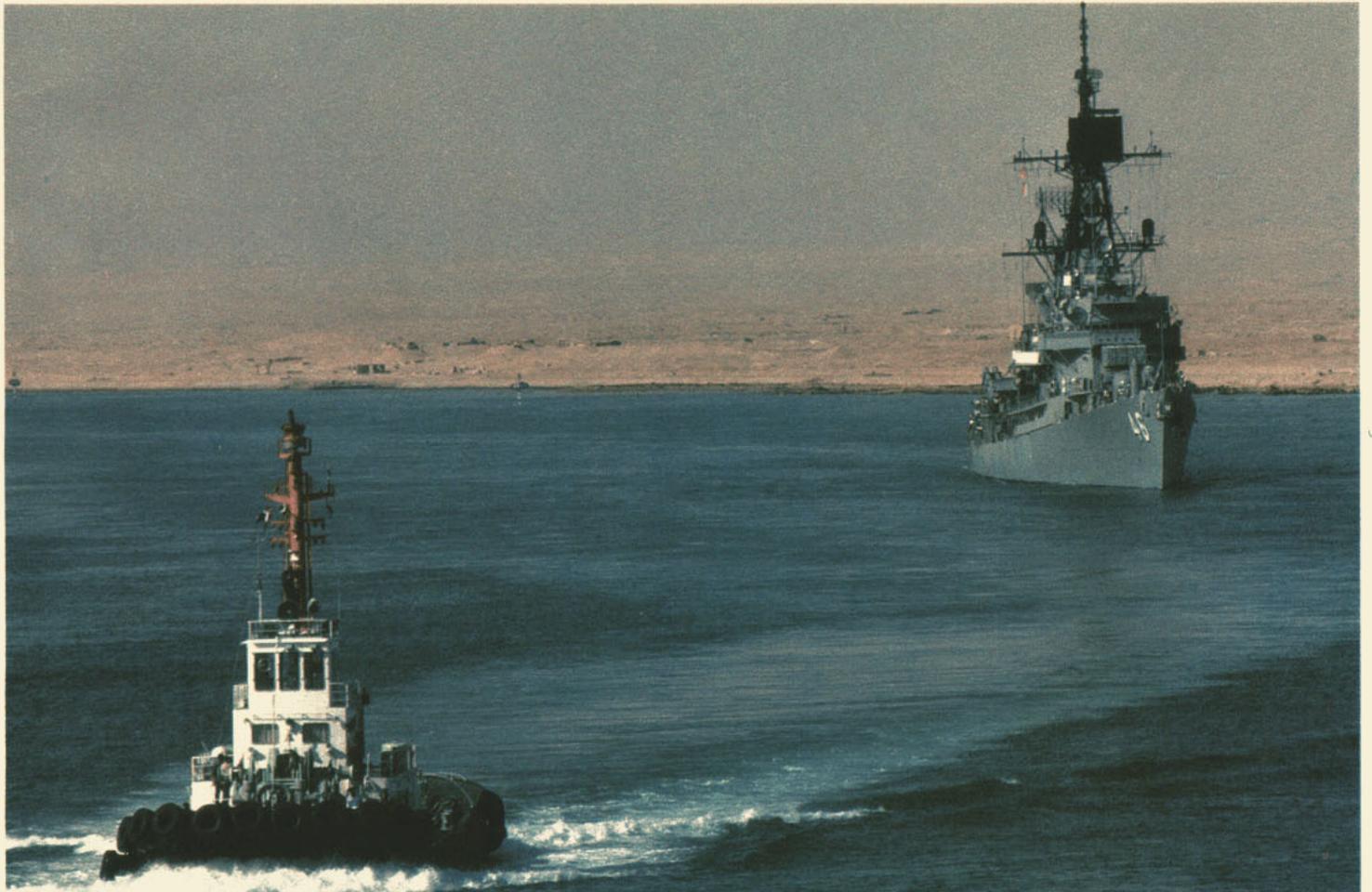
One man, Hospital Corpsman First Class Rodger Hamilton, covered almost all available bases during the transit: re-enlisting for six more years, running a 45-minute leg of the marathon and availing himself of the opportunity to soak up a lot of sunshine while waving to people along the banks of the canal.

Much of the leisure time during the



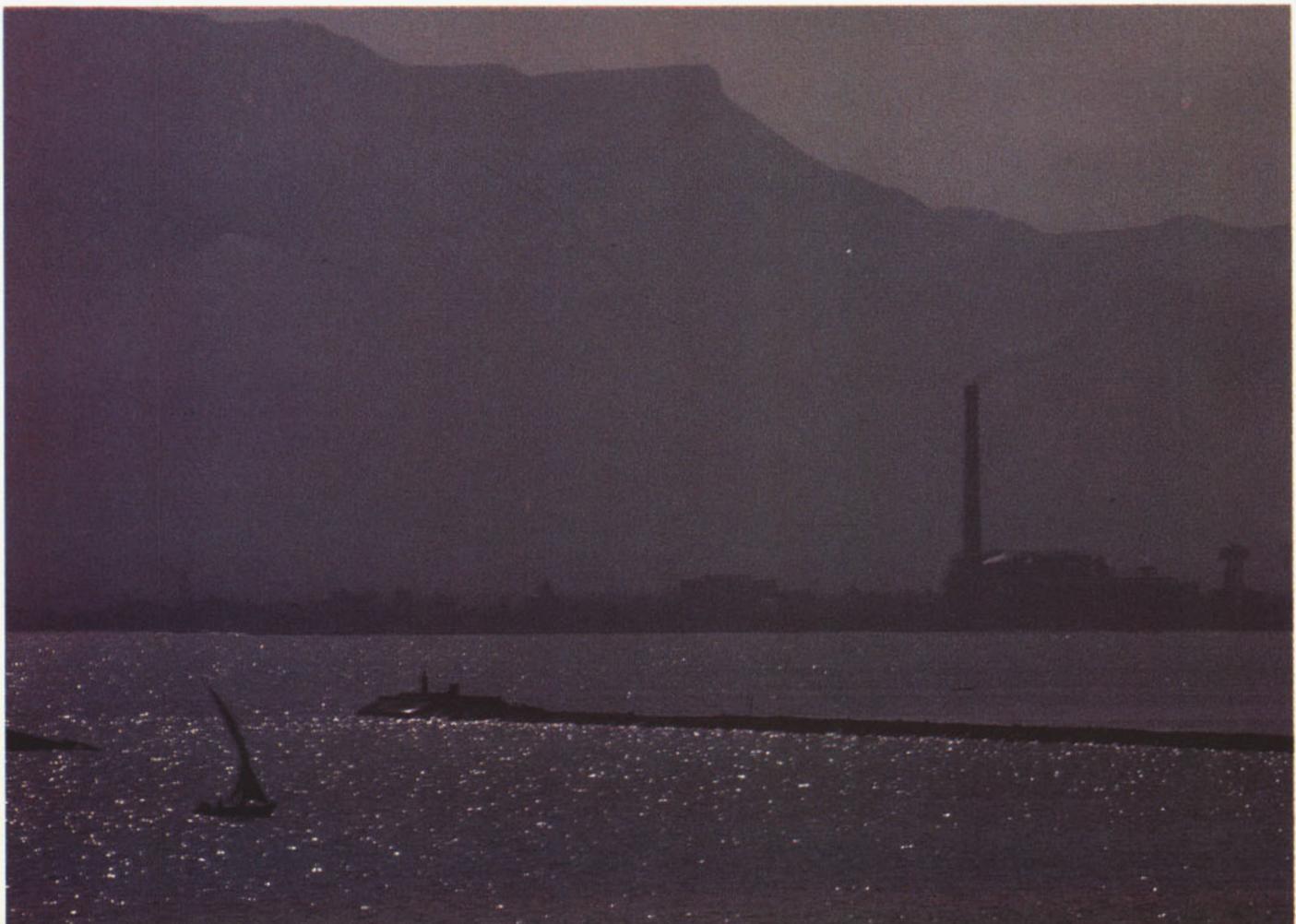
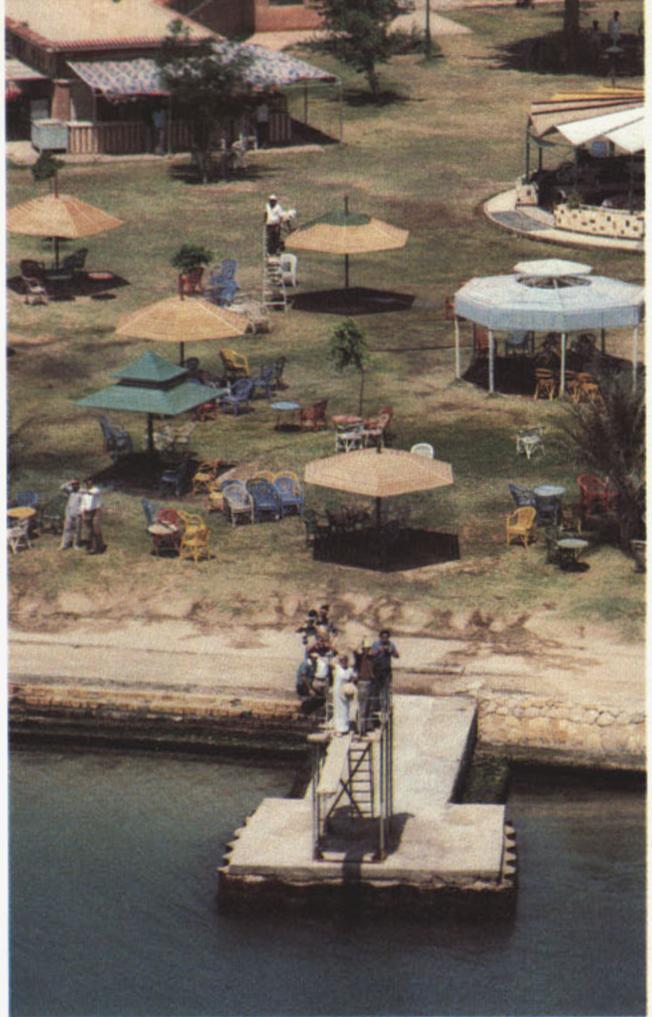
Enduring the desert heat, a wave of joggers (right) circles the flight deck during transit. Sightseers use binoculars to get a better view of the desert region (above), but of greater interest to everyone on board are the dredged edges of the canal (top center).





Onlookers wave from the shore (top right) as America, escorted by USS Preble (DDG 46) and an Egyptian tug (above), makes the 10 hour and 10 minute desert transit. One canal worker points the way south (left).

USS America



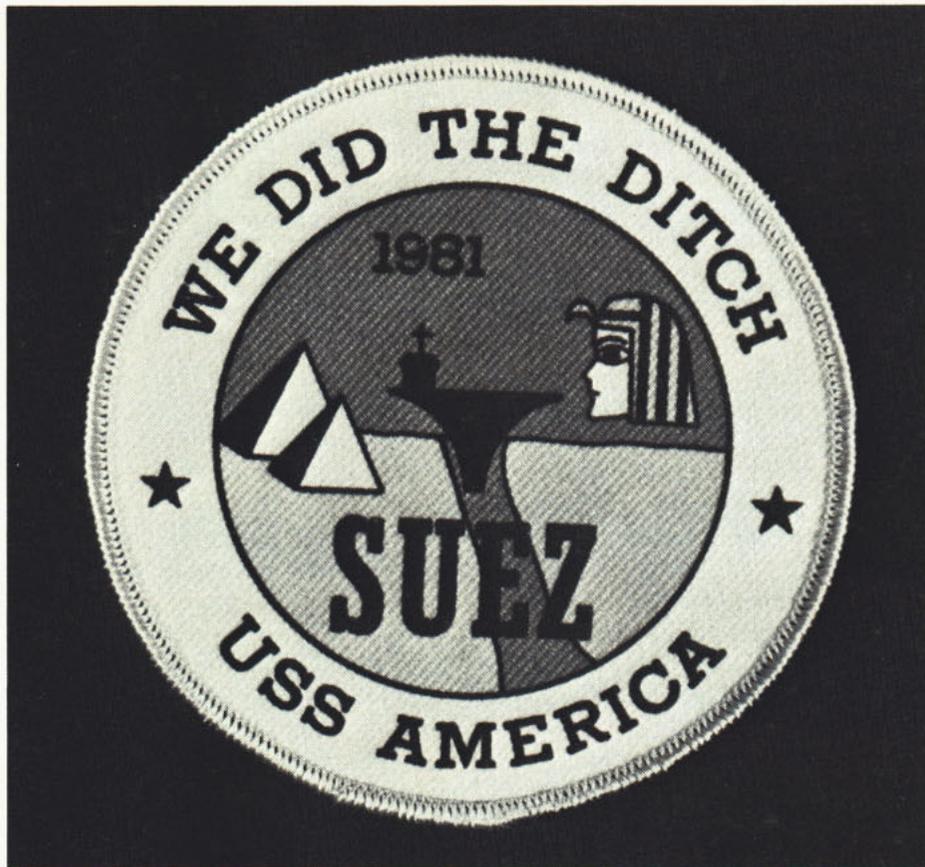
canal transit had been "banked" during previous days. One squadron commanding officer, Commander Ernie Christensen of VF-114, said, "The squadrons were able to get a majority of the maintenance out of the way while we were anchored awaiting transit. That gave most everyone the opportunity to kick back and enjoy the sights. It was a great way to get a hard-earned rest. The whole thing was like being on a tour bus going through the middle of Egypt."

The Suez Canal the men of *America* saw is unlike the Panama Canal or St. Lawrence Seaway closer to home. Running almost in a straight line from north to south between the Mediterranean and Red seas, it is at sea level the entire way. No locks are required to raise and lower ships to compensate for varying water levels. The Great Bitter Lake lies about halfway between Port Said on the north and the city of Suez at the south terminus and acts as a "siding" where convoys can pass each other in opposite directions.

Egyptians living or working near the canal also seemed to enjoy *America's* passage. "It was really interesting seeing the response on the shore as we passed," Hamilton remarked. "Everyone stopped what he was doing and waved and whistled."

Another *America* crewman, Electrician's Mate Fireman Gerald "Red" Glose, took a welcome break from his compartment cleaning duties as the ship steamed south. Glose commented, "I liked watching the people driving down the side roads, honking their horns and waving as they slid to a stop. Then they would jump out to get a better look at us."

While a large percentage of the crew was able to enjoy the historic journey, other crewmen were hard at work in a



team effort to safely pamper the giant ship through this narrow trough in the Egyptian desert.

Dorsey explained, "The technique of piloting a ship through the canal is quite different from operating in open water. The forces here, created as water is pushed ahead of us and then forced through the narrow space between the ship and the canal banks, can actually pull the ship toward the sides."

"This was the most difficult thing I've ever done," said Quartermaster Third Class Kevin Bell. "Sometimes it looked like we were going to need more rudder than the pilot (a civilian employee of the Suez Canal Authority) instructed, but it was always just the right amount to keep us in the middle."

The journey was preceded by much careful preparation. Dorsey and his navigator, Captain Harry Meese, researched the canal during a visit to the offices of the Suez Canal Authority, and Dorsey made the 100-mile trip aboard a large merchant ship to ex-

perience firsthand some of the events awaiting *America*.

The advance work paid off in a smooth trip. Meese commented after *America* was safely back in open water, "You don't really navigate in a canal. Once you're in, you're in. The only concern you have then is to stay in the middle." That concern was considerably lessened by the professionalism of the Egyptian pilots, according to the navigator. "They know this waterway like the backs of their hands," he said.

As *America* steamed through the canal at a steady 8 knots, the panorama of the historic path of world commerce unfolded for all hands to enjoy, savor and remember. But the event was more than a historic one or simply a fond memory. It saved 10 irreplaceable days, conserved 900,000 gallons of valuable and scarce fuel, and demonstrated an enhanced ability to rapidly deploy naval forces throughout the world.

—Story and photos by PHI Jim Preston

It's business as usual on America's bridge (top left), but not so for some tourists at a resort near the Bitter Lakes (top right). America is the first carrier since June 1967 to make the Suez transit (center). Photo by PH3 Bob Bungie. The city of Suez and its gulf (bottom) mark the end of the historic journey.

Maine Maritime Academy

Heritage

The vanguard of seapower is the Navy and the Merchant Marine, and it is logical and good economics for the Navy and the Merchant Marine to operate together during peacetime.

—President Ronald W. Reagan

The U.S. Merchant Marine is a force that represents an integral part of the sealift base . . . and which forms a major element of our ability to deploy and support distant forces in both limited contingencies and major war. Its (the Merchant Marine's) health and vitality should be of keen concern to

anyone interested in the state of our national defense.

—Admiral Thomas B. Hayward,
Chief of Naval Operations

Or as Greek statesman Themistocles said: *He who commands the sea has command of everything.*

In commanding the seas, the Merchant Marine and the Navy go hand-in-hand—essential elements in any nation's seapower. Without a healthy, vigorous merchant force, a country's trade is restricted. Without a large

pliable Merchant Marine, there's little reserve strength to draw on in the event of war.

Point blank, our nation's military mobility would be hindered without a healthy merchant fleet. Consider Vietnam. Most of our forces were airlifted to Vietnam, but about 98 percent of the supplies went by ship. Because each soldier required about five tons of supplies, transportation posed a gargantuan problem.

To meet military requirements and to move our commerce, there was and is a steady need for a continuing line of



of the Sea

Merchant Marine officers. To satisfy that need, the Merchant Marine, like its military counterparts, has established officer training academies.

Nestled mid-state along Eastern Penobscot Bay's rock-ribbed shoreline lies the colonial-style New England town of Castine, home of the Maine Maritime Academy. Created in March 1941 in response to a war that was almost upon the United States, the academy perpetuates Maine's seagoing heritage by producing engine and deck officers to oversee the power plants and bridges of the merchant flag fleet.

The first class of 27 students was graduated in May 1943. Successively larger classes followed until the end of World War II. In 1950 the outbreak of hostilities in Korea increased the demand for merchant officers, a pattern which was repeated in the mid-'60s with U.S. involvement in Vietnam.

At the end of World War II, the 18-month curriculum was extended to three years and graduates were awarded a bachelor of Marine science degree in either marine engineering or nautical science. In the early 1960s the school again broadened its curriculum

and expanded to a four-year college program, and awarded the bachelor of science degree. The academy was accredited by the New England Association of Schools and Colleges in 1971.

Today, the Marine Maritime Academy, with a student body of 650, boasts a yearly graduating class averaging 145 men and women schooled in such subjects as ship's structure, thermodynamics, fluid mechanics, celestial navigation, hydraulics and related disciplines. But the training is far from just totally theoretical.

"We have a good balance here," said one midshipman first class. "We learn how to weld and how to read blueprints of a ship. We work on marlin spike projects and even have a steam lab where we work with valves and fittings." By graduation, an engineering student can tear down a ship's engine, make the repairs and put it all back together.

To help the students along, there are sophisticated training aids such as the \$170,000 computerized diesel simulator—the only one of its kind in the United States. Consisting of a bridge console linked to the engine room panel control board, the simulator closely resembles a ship's bridge and engine room panel. Through the simulator, students gain experience in starting and maneuvering vessels ranging from harbor tugs to 1,000-foot tankers.

Deck cadets operate the bridge console by plugging in as many as 50 diesel engine faults and another 25 electrical faults which are relayed to the engine



Left: Colonial Castine along Penobscot Bay is home of Maine Maritime Academy and the training vessel, the State of Maine.

Maine Maritime Academy

room panel control through a series of flashing lights, sirens and verbal commands. To keep the ship's generator and propulsion plant in operation and the vessel sailing smoothly, engineering middies must respond by punching in a proper sequence of codes.

Recognizing the need for training in tanker operations, the academy—using a faculty-student construction team—built an operating 26-foot scale model of an 80,000-dead-weight-ton tanker. It floats in a wet basin. There, following classroom theory, cadets learn how to load and off-load the unique tanker's liquid cargo.

Perhaps the single most important part of a cadet's college years is the time spent aboard the 534-foot, 13,300-ton training vessel, *State of Maine*. Aboard this "floating laboratory" the more practical aspects of running a merchant vessel come into play.

Rear Admiral Edward A. Rodgers, the academy's superintendent and a

retired Navy captain, said, "The tradition in this state is that maritime students would rather go down to the ship in overalls than sit in classrooms. What they're receiving on the ship is a second course in adversity because things don't always work out according to the books."

Originally designed as a luxury liner, the *State of Maine* (ex-USNS *Upshur*) was completed as a troop transport during the Korean War and saw service in the European theater and Vietnam. In 1973, the ship was transferred to Maine Maritime Academy.

Each spring after final exams, the *State of Maine* takes aboard sophomores and seniors and steams out to sea for two months. At sea the middies participate in virtually all aspects of ship's operation and maintenance.

"The students run the ship while the ship's officers act only as supervisors," said Captain M.C. Hill, *Maine's* skipper and a 44-year veteran of the merchant fleet. "The cadets man the en-

gine room boilers, work the radar, clean bilges, plot courses and do everything else that pertains to the profession. When they get into the real world of this business, they're expected to know it all."

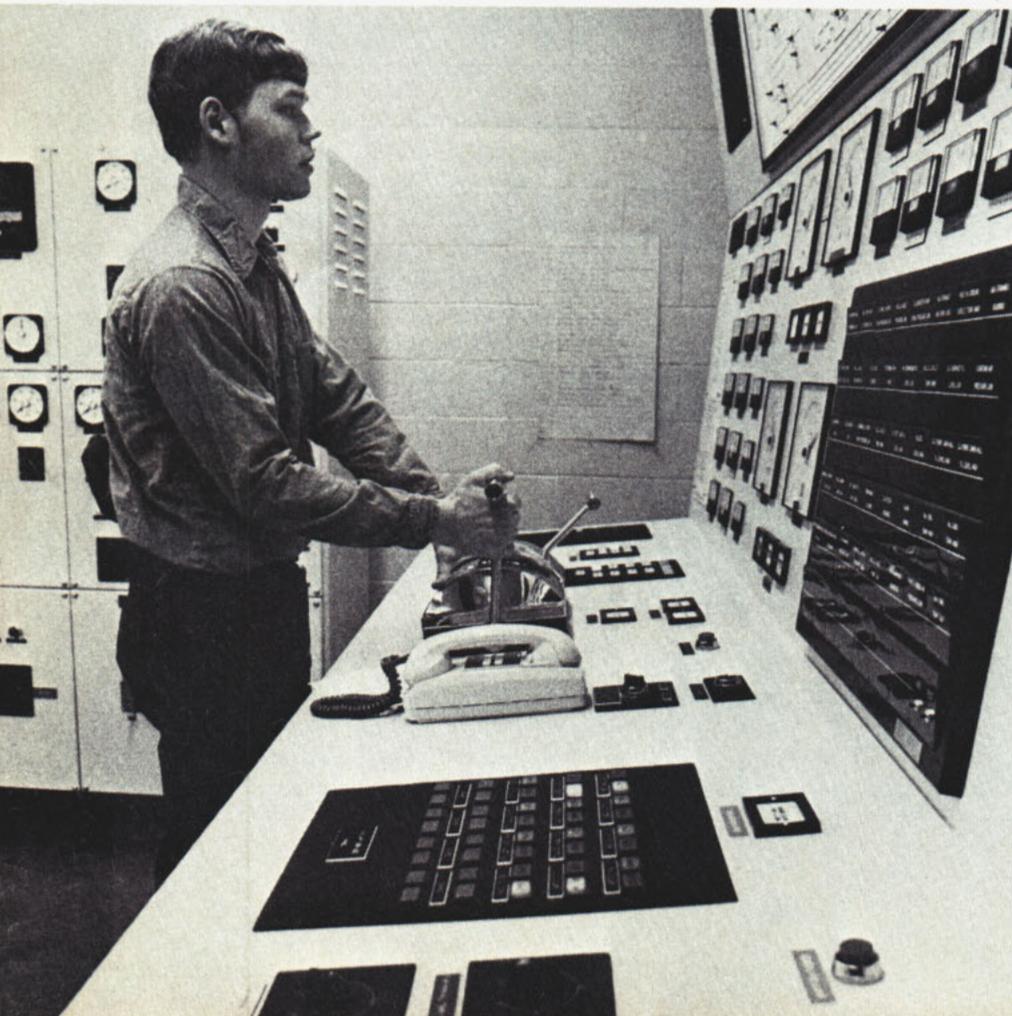
With that thought in mind, the academy in 1967 became the first state maritime school in the country to establish a cadet shipping program. Upon completion of the sophomore year, middies may elect assignment to merchant vessels for further familiarization in shipboard procedures and responsibilities.

The more than 50 companies that voluntarily provide training billets to more than 150 cadets are under no legal obligation to do so. However, their interest is keen—it's an investment (more than \$250,000 each year) in officers who will be manning their ships in the future.

Only after finishing degree requirements and the mandatory three cruises—180 days of seagoing training—are cadets eligible to sit for the three and one-half day U.S. Coast Guard Exam for Deck and Engine Officers. If they make the grade, the federal government confers upon them unlimited maritime licenses as third mates or third assistant engineers. The new graduates can then serve aboard oil and liquid natural gas (LNG) tankers, dry cargo ships, ocean tugs, tows and barges, and, in some cases, luxury cruisers. As third mates and third assistant engineers who can earn as much as \$30,000 for six months work, most grads are understandably eager to begin the climb to ship's masters and chief engineers in the commercial shipping industry.

Admittedly, most of the graduates sail with private industry. Others, however, may go in the Coast Guard Reserve, the Navy or the Marine Corps.

"Salary isn't all that important," said Franz J. Ritt, a junior deck stu-



At the diesel simulator's engine room panel control (left) an engineering student corrects problems which are punched in by a student at the bridge console (right).

dent. "I'd rather do more than drive a ship and stand watches, though, so I joined the Naval ROTC. I think there's a wider field of responsibility open to me now."

Senior Thomas S. Lyons—a Professor of Naval Science scholar, an NROTC college program student and the NROTC midshipman battalion commanding officer—feels the same, except for him, there never was a choice between joining the flag fleet or the Navy.

"I always wanted to be in the Navy," he said. "I think it's more organizational and versatile. I expect to learn other jobs and increase my leadership capabilities."

Junior Tim P. Jennings' seat at MMA came about in another fashion. As a Navy machinist's mate third class,

he was wrapping up a phase of nuclear power school in Orlando, Fla., when he heard the happy news of his acceptance through the competitive NROTC scholarship program.

"I was all set to attend the second six-month phase in Idaho when the orders came through to report here. I hope to go surface line, small combatant after graduation. I just see a lot of opportunity in the Navy."

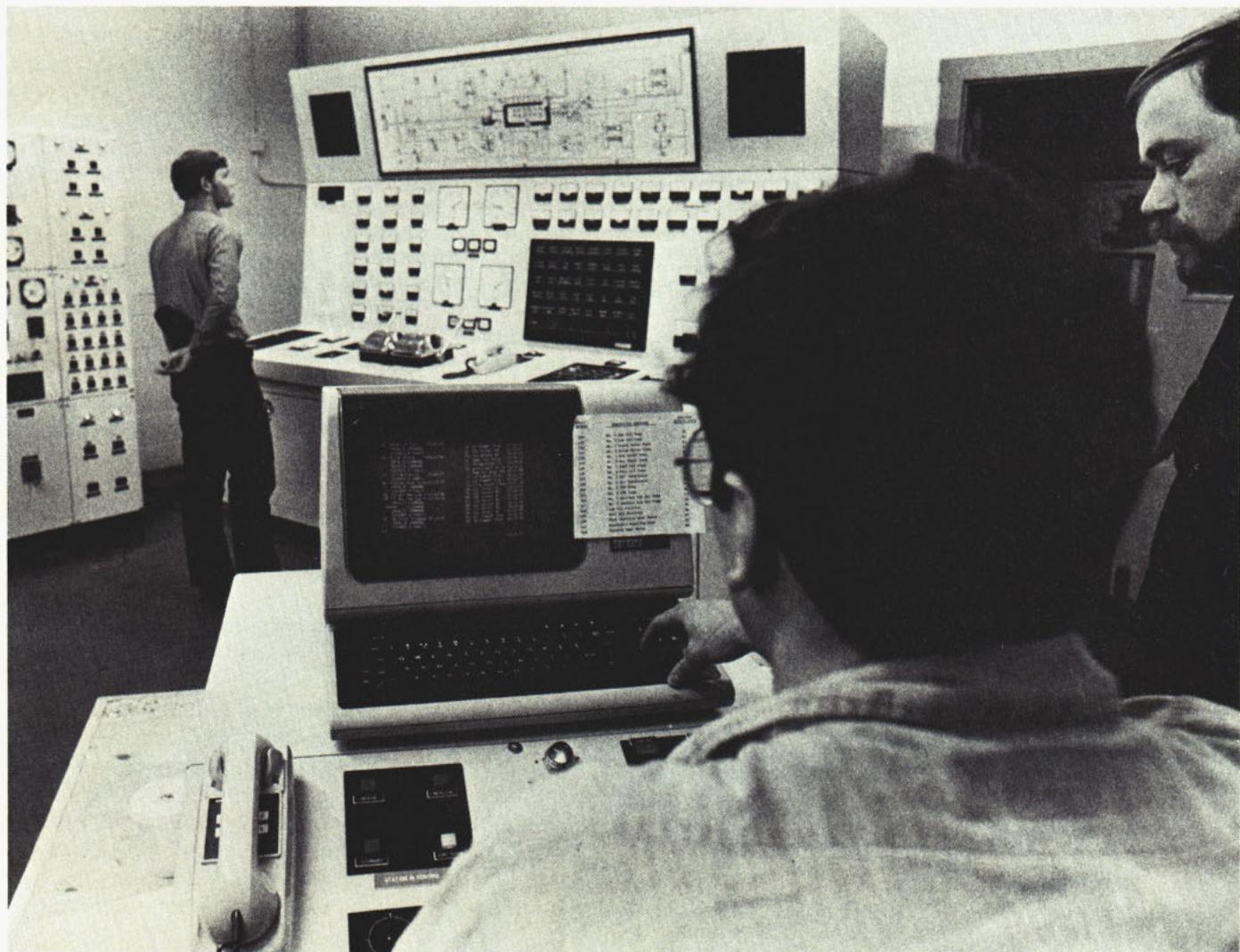
The promise of a versatile career is perhaps one reason why some students join NROTC. Unlike the Merchant Marine officer who is usually found aboard ship or at a shipyard, the NROTC graduate isn't limited solely to the haze gray and under way version of the Navy. Besides surface warfare billets, slots are open in special warfare, the supply corps, naval intel-

ligence, the Marine Corps and even aviation. Four NROTC grads from the 1981 class were selected for flight school.

In the NROTC graduate who has a degree from a maritime academy, the Navy is getting a ship's officer of superb quality, according to Navy Commander Richard G. McHugh, the academy's NROTC commanding officer.

"Our NROTC graduates can go right into the Navy as Coast Guard qualified officers to stand bridge and engine watches," he said. "If necessary these engineering officers can dismantle a power plant, solve the problem and put the plant back in working order."

MMA offers the two primary Naval Reserve Officer Training Corps pro-



Maine Maritime Academy

grams: college and scholarship. They differ only in monetary allowances and service obligations. In either case, students aren't obligated to serve in the Navy until they enter the advanced program in the junior year.

Most of MMA's NROTC freshmen begin as college program members. They receive \$200 for uniforms during the freshman and sophomore years. If they choose to continue NROTC as juniors, they pick up a \$100 per month allowance and a total uniform entitlement of \$600. NROTC college program graduates receive reserve commissions and are required to serve on active duty at least three years.

The other way of gaining a naval commission is through the two scholarship programs: the NROTC Navy-Marine Corps Scholarship or the Pro-

fessor of Naval Science scholarship.

Though the typical applicant for the Navy-Marine Corps scholarship is a high school senior, freshmen in the college program are also eligible. Acceptance is based on the Scholastic Aptitude Test, high school academic scores and extracurricular performance, and personal recommendations.

The Professor of Naval Science scholarship is open exclusively to college program students and is not heavily dependent on SAT scores. It is based more on proven academic and military performance. Students accepted on either scholarship at Maine Maritime Academy receive benefits amounting to as much as \$18,365 in four years. This covers uniforms, allowance, tuition, textbooks and associated fees. Scholarship graduates then receive regular commissions in the Navy or the Marine Corps and serve on active duty for four years.

All degree students at MMA must meet the same requirements for marine engineering or nautical science degrees,



but NROTC midshipmen must go a step further and earn an academic minor in naval science.

The Navy minors program consists of the standard Naval ROTC training curriculum, including courses in weapons, operations, leadership and management. Weekly laboratory and drill periods complete the required activities. Field trips to naval installations, summer cruises and special guest visits introduce the Naval ROTC midshipmen to Navy opportunities.

Recently, the unit became one of only five NROTC units nationwide to participate in the Navy sail training program when it acquired a 41-foot ketch named *Santee*. The sail training program provides an opportunity to instruct the NROTC students in the basics of seamanship and navigation and is an extension of their classroom training at sea.

MMA's objective is to train men and women in the operation of merchant vessels and to establish a fraternity of men and women schooled in naval organization and administrative and operational procedures.

Whether Maine Maritime Academy graduates become officers in the Navy or Merchant Marine is not the prime concern. It is more important that they all share equally in the responsibilities of maintaining our seapower and work together to safeguard that seapower in peace, war and national emergency.

—Story and photos by JO2 J.D. Leipold

Below: At MMA classes are small, allowing for more individualized attention. Here students receive instruction in theory.

Right: A cadet performs maintenance below deck aboard the State of Maine. Photo courtesy MMA.



Center for Advanced Maritime Studies

In 1981, after several years of assessing the needs of the maritime industry, the Maine Maritime Academy opened the Center for Advanced Maritime Studies. It was the first maritime educational institution to develop a post-graduate program designed to meet specific license upgrade and refresher training requirements.

CAMS got its start based on the results of a 1978 symposium when representatives from shipping corporations, the federal government and various other organizations met with academy faculty and staff to discuss a training program to improve safety, productivity and professionalism in the merchant flag fleet. MMA also recognized the need for recertifying and upgrading skills required of maritime officers.

"As ships become larger and more sophisticated, the merchant officer will be expected to keep pace with the industry," said Captain George M. Marshall, director of the center. "Going back to school is becoming a way of life with these mariners."

Maine Maritime noted in the meeting that there were a few union-operated schools for the purpose of upgrading licenses; but not all mariners are union members, such as those in tanker, off-shore and Great Lakes industries, and thus do not have access to union schools. With creation of the CAMS, the academy felt it could provide advanced training to those non-union mariners as well as supplement the schooling of union members.

On the day after the academy's 40th anniversary, the CAMS program was kicked off with a four-day seminar in human factors. "We are concerned that 85 percent of maritime casualties are attributed to human error," said

Marshall. "In the past we have not addressed adequately the human element of the industry."

An illustration of the effectiveness of the CAMS program was made clear when the academy received a cablegram from a former participant in the ship's medicine course. The ship's officer had assisted in a birth aboard his ship—the mother was with a group of refugee boat people. Though there were complications, the birth was successful thanks to instructions received by radio and from the knowledge the ship's officer had gained at MMA.

Besides the ship's medicine course,

other seminars have been slated in deck and engine license upgrading and radar recertification. Future agendas include short courses in oil spill prevention, inert-gas systems and crude-oil washing, tanker safety, diesel training, and computer-oriented management.

The Center for Advanced Maritime Studies was an important step in the evolutionary process of MMA and the growing maritime industry. Marshall has a vision, one in which Maine Maritime Academy will offer an advanced degree: "We like to be very much involved in maritime studies. We want to be leaders—not followers."



Right: Graduation day and the traditional toss of hats.

Seapower Made the Difference

“And so, cut off from escape by an overpowering French fleet, Lord Cornwallis had no alternative but to surrender his forces to General Washington.”

End of Revolutionary War text.

It took a long time to arrange that final showdown at Yorktown, Va., in October 1781; it was anything but easy. Washington’s correspondence during the summer and fall of that year reads like one long and fervent plea: Please send more men, more supplies, more water transport. I can’t march my troops without shoes; I can’t feed them without flour. I can’t close in on Cornwallis unless I have artillery, and I can’t make him surrender unless I have French ships controlling the Chesapeake.

“Please don’t quit on me too soon, everybody,” is what the father of our country was saying.

The road to Yorktown actually began on May 22, 1781, with a conference between Washington and French General Count Jean Baptiste de Rochambeau at Wethersfield, Conn.

Rochambeau, with an army of 5,000 French regulars under his command at Newport, R.I., told Washington that he could count on the arrival of a French fleet off the American coast sometime in the summer. It would be commanded by Admiral (Comte) Francois J.P. de Grasse.

This was good news to Washington, who knew that seapower was the key to victory over the British. But the two generals disagreed as to where the joint land and sea operations should take place.

Washington wanted to attack New York, where British General Henry Clinton had lately reduced his own forces by sending detachments elsewhere in the colonies. Rochambeau, however, favored a campaign against the enemy in Virginia. But Washington held out for New York as the objective, and the count agreed to march his troops from Newport to New York and join with Washington’s forces outside the city.

This didn’t mean Rochambeau was convinced that New York was the better choice for operations. In a letter to Admiral de Grasse, he indicated quite the opposite:

“There are two points at which to act offensively against the enemy: the Chesapeake and New York. The southeast winds and the distress of Virginia will probably cause you to prefer the Chesapeake Bay, and it is there where we think you can render the greatest service; besides, it would take you only two days to come to New York (from there).”

Washington had agreed to a southern operation only if the odds went against him in New York. They did.

First, several states failed to send Washington the quotas of militia they had promised; as a result, American force levels were less than anticipated. Then, the Comte de Grasse sent word that he would indeed be making for the Chesapeake instead of New York with his fleet of 28 warships. To top things off, Clinton’s forces in the city were suddenly strengthened by the unexpected arrival by sea of about 2,500 Hessian recruits.

Washington still had a lot of promises from various state legislatures, but “. . . with little appearance of their fulfillment, I could scarce see a ground upon which to continue my preparations against New York . . . therefore I turned my views more seriously (than I had done before) to an operation to the southward”

Just before hearing of de Grasse’s move from the West Indies to the Chesapeake, Washington received word from the Marquis de Lafayette that more than 7,000 British troops were digging in at Yorktown on the Virginia Peninsula. Their commanding officer, Lord Charles Cornwallis, had been ordered by Clinton to occupy the area. Lafayette, with a force of 4,500, was standing by at West Point; he and General Anthony Wayne had been chased around eastern Virginia by Cornwallis for most of the summer.

The tables were about to turn. Washington immediately recognized that if de Grasse could keep British ships out of the Chesapeake, then the British at Yorktown could be cut off from reinforcements and destroyed. Not surprisingly, Count Rochambeau agreed. Their combined force of nearly 15,000 men marched south from New York on Aug. 21. It would be a month before their forces and Lafayette’s army joined at Williamsburg, Va.

As that month passed, some very interesting events were taking place at sea.

Two days after Washington and Rochambeau went south, a smaller French fleet commanded by the Count de Barras pulled out of Newport and

also headed south to join de Grasse.

Two days after *that*, on Aug. 25, a British naval squadron led by Admiral Samuel Hood arrived off the Virginia Capes from the West Indies. Hood, finding no sign of the enemy in Chesapeake Bay, continued north to join up with the fleet of Admiral Thomas Graves anchored in New York.

Hood was too early. Five days later, undetected by the British, the Comte de Grasse entered Chesapeake Bay with 28 French warships. He landed 3,000 French troops to reinforce Lafayette's army.

Back in New York, the combined fleets of Graves and Hood—19 warships—weighed anchor on Sept. 1,

under way for Virginia. The whereabouts of de Grasse's fleet remained unknown to the British until they stumbled across it in Chesapeake Bay on Sept. 5.

Washington knew nothing of all this activity at sea; only a few vague reports had reached him, none of which had been verified. Marching into Philadelphia with his troops on Sept. 2, the leader of the Continental Army fired off a volley of correspondence to several parties, in search of information. A letter he wrote to Lafayette reflects his anxiety:

"But my dear Marquis, I am distressed beyond expression, to know what is become of the Count de Grasse, and for fear the English fleet,

by occupying the Chesapeake (towards which my last accounts say they were steering) should frustrate all our flattering prospects in that quarter. I am also not a little solicitous for the Count de Barras, who was to have sailed from Rhode Island on the 23rd and from whom I have heard nothing since that time.

"Should the retreat of Lord Cornwallis by water, be cut off by the arrival of either of the French fleets, I am persuaded you will do all in your power to prevent his escape by land. May that great felicity be reserved for you!"

"You see, how critically important the present moment is: For my own part, I am determined still to persist with unremitting ardour in my present plan, unless some inevitable and insuperable obstacles are thrown in our way."

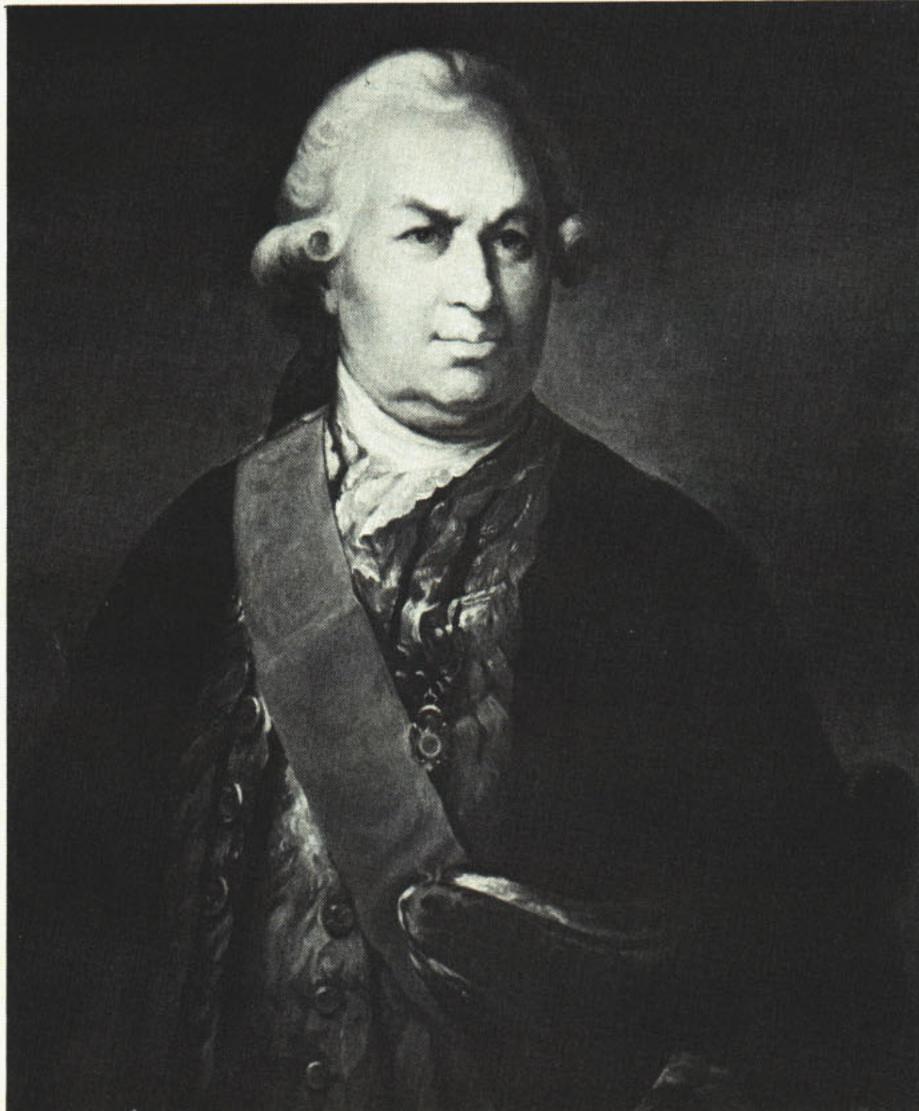
In spite of his uncertainty as to whether French or British ships would greet him in the Chesapeake, Washington left Philadelphia on Sept. 4 and continued the march south.

The next day, Admiral Graves had a golden opportunity to throw an "insuperable obstacle" in Washington's way; he would defeat the French fleet. As a tactician, however, Graves was weak, and he let the moment slip away.

Situation: The British fleet came across the French fleet as it lay at anchor in Chesapeake Bay. De Grasse prepared for battle and ordered his ships out of the bay, through a narrow passage and into the Virginia Capes.

Graves could have lined his 19 warships (which included the 98-gun flagship *HMS London*) across the bay entrance and raked the bows of the French vessels with lethal broadsides as they sailed out.

But the British admiral was too formal for that. Not being particularly innovative, he followed the Royal Navy's "Fighting Instructions" to the letter. These somewhat outdated battle direc-



Comte de Grasse, in charge of the French fleet at Yorktown, almost left Chesapeake Bay too soon. He was persuaded by General Washington to remain with his ships in the bay until Cornwallis was forced to surrender.

Grains of Salt

tives called for opposing fleets to square off in parallel lines and “slug it out” ship against ship—broadside for broadside. Thus, he stood off the Capes and waited while the Comte de Grasse cleared his vessels from the bay and drew them into a line of battle.

The Battle off the Virginia Capes lasted about two and one-half hours, one of the most decisive but least exciting naval actions in history. The lines of battle weren't exactly parallel; they were closer to a “V” pattern. As a

result, the only vessels to fight were the ones in the front of each line. The other ships more or less sat back and watched. One significant loss resulted from the engagement. The British 74-gun *Terrible* was cut up so badly by French gunfire that Graves was obliged to burn it.

De Grasse trailed the enemy fleet for two days without further combat as it withdrew to the southeast, then came about and returned to the Chesapeake. Waiting for him there was the Count de Barras who had arrived from Newport with eight warships. Now the French fleet was stronger than ever.

With great relief, General Washing-

ton and Count Rochambeau finally heard the news of de Grasse's arrival in Chesapeake Bay and his subsequent “victory” over the British. Joining Lafayette's forces at Williamsburg on Sept. 14, an ecstatic Washington promptly wrote the French admiral:

“I am at a loss to express the pleasure which I have in congratulating your Excellency on your return to your former station in the bay, and the happy circumstances of forming a junction with the squadron of the Count de Barras. I take particular satisfaction in felicitating your Excellency on the glory of having driven the British fleet from the coasts . . . these happy

Battle off the Virginia Capes is depicted in the painting. The action took place Sept. 5, 1781.



events and the decided superiority of your fleet, give us the happiest presages of the most complete success, in our combined operations on this bay.”

Only a few days later, Washington’s joy faded into consternation.

De Grasse wanted to leave the Chesapeake and sail for New York, where he thought his warships would better serve the common cause. Apparently, de Grasse was missing the point of the whole operation—namely, surrounding Cornwallis and forcing him to surrender. The French admiral’s suggestion of taking his fleet elsewhere and leaving the bay wide open for any British ship that chose to

enter had an extremely adverse effect on George Washington.

So he wrote de Grasse a letter on Sept. 25:

“Sir: I cannot conceal from your Excellency the painful anxiety under which I have labored since the receipt of (your) letter on the 23rd.

“Give me leave in the first place to repeat to your Excellency that the enterprise against York under the protection of your ships, is as certain as any military operation can be rendered by a decisive superiority of strength and means; that it is in fact reducible to calculation, and that the surrender of the British garrison will be so important in itself and its consequences, that it must necessarily go a great way towards terminating the war, and securing the invaluable objects of it to the Allies.

“Your Excellency’s departure from the Chesapeake by affording an opening for the succour of York, which the enemy would instantly avail himself of, would frustrate these brilliant prospects, and the consequence would be not only the disgrace and loss of renouncing an enterprise, upon which the fairest expectations of the Allies have been founded, after the most expensive preparations and uncommon exertions and fatigues; but disbanding perhaps the whole army for want of provisions.

“I most earnestly entreat your Excellency farther to consider that if the present opportunity should be missed; that if you should withdraw your maritime force from the position agreed upon, that no future day can restore us a similar occasion for striking a decisive blow; that the British will be indefatigable in strengthening their most important maritime points, and that the epoch of an honorable peace will be more remote than ever.”

Washington’s letter took effect; de Grasse canceled his plans for a New York visit and kept his fleet in the Chesapeake.

Cornwallis, surrounded by more than 17,000 Allied troops, withdrew his own forces to their inner defenses on Sept. 30. Washington began the

siege of Yorktown Oct. 9, using heavy artillery brought from Newport by de Barras’ fleet. Cornwallis made a couple of desperate attempts to break free from the American-French noose, but he couldn’t stop the world from turning upside down. On Oct. 19 he surrendered more than 7,000 British troops to Washington, Rochambeau and Lafayette.

Admiral Graves showed up five days later off the Virginia coast, his ships carrying 7,000 British reinforcements from New York. In his case, the maxim “better late than never” did not apply. He learned of the British defeat and returned once more to New York. Besides, with de Grasse’s fleet still in the bay, Graves would have had a tough time landing reinforcements.

Washington’s victory at Yorktown can be explained in part by many circumstances, strokes of luck, ironic events and less-than-competent decisions.

But one factor outweighs them all: Admiral de Grasse and the French fleet.

—Story by JOI P.M. Callaghan

Vessels named de Grasse

Three U.S. Navy ships have been named after Comte Francois de Grasse (1722-88), the French admiral who helped with Lord Cornwallis’ defeat at Yorktown 200 years ago this month.

The first *De Grasse* (No. 1217), a yacht, was carried on the Navy List from July to November 1918.

The second, AP 164, was a converted transport acquired by the Navy on Oct. 28, 1943. It landed troops during the Marianas and Okinawa invasions, receiving three battle stars for World War II service.

USS *Comte de Grasse* (DD 974) is a *Spruance*-class destroyer commissioned in May 1976. It was christened by the wife of then-President Valery Giscard D’Estaing of France. For a story on its recent visit to the French admiral’s hometown, see the March 1981 issue of *All Hands*.



Bearings

Home Study

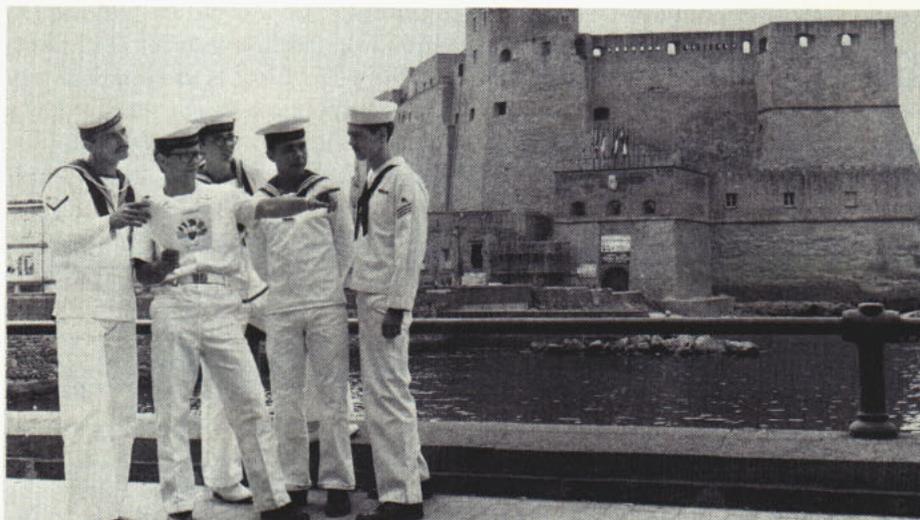
The National Defense University is offering a National Security Management correspondence course based on the resident curricula of the Industrial College of the Armed Forces and the National War College. The six-unit course covers the economic and industrial aspects of national security, the policy making process, and the allocation and employment of resources. Other factors affecting national security are also included.

The program may be completed through independent study or through participation in seminar groups which are available in many major cities and at Department of Defense installations. Course material is presented in a series of books, anthologies, monographs, case studies and other readings. Eligible reserve component officers can earn 120 points in the independent study program and 150 points in the seminar program. Com-

pletion time for the entire course is 18 months to two years.

Admission to the program is limited to officers and senior government civilians. For further information and

enrollment criteria, contact the National Defense University, Extension Programs Directorate, Operations and Support Branch, Fort McNair, Washington, D.C. 20319.

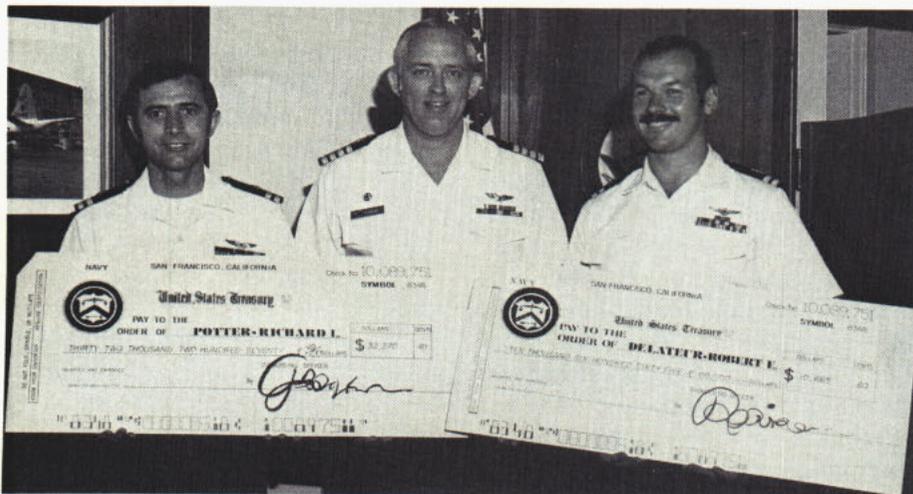


Five sailors from ships of the 22nd Naval On-Call Force Mediterranean, NATO's Allied Forces Southern Europe, sightsee in Naples, Italy. In the background is Naples' historic Castel dell'Ovo. Allied Forces South-

ern Europe celebrated its 30th anniversary recently, and ships from Greece, Turkey, Italy, the United Kingdom and the United States held open house as part of the celebration.

—Photo by MSgt. Tony Magnotta

Continuation Pay



Two P-3 *Orion* instructors, Lieutenant Richard Potter (left) and Lieutenant Robert DeLateur (right), flying with Patrol Squadron 31, are believed to be the first in the naval aviation community to receive aviation officer continuation pay. Potter will receive

\$32,270.47; DeLateur will receive \$10,665.60. In return, they have obligated for four and three years, respectively, of active aviation service. VP-31 commanding officer Captain R.M. Howard shares their pride.

—Photo by PHAN Doug Matthews

'Blues' in the Mail

The 35th anniversary of the Navy's Flight Demonstration Squadron, the Blue Angels, is being commemorated with a special postal marking to be in use until Dec. 15.

The commemorative cancellation marking was issued by the U.S. Postal Service to Pensacola, Fla., the squadron's home base, and Palm Springs, Calif., near the squadron's winter training home at El Centro.

If you would like to have this commemorative cancellation, send a self-addressed, stamped envelope to Postmaster, Pensacola, Fla. 32501 or to Postmaster, Palm Springs, Calif. 92263. In the left-hand, bottom corner of the envelope to the postmaster, print "For special Blue Angels cancellation."

Ceremony at Rhone

More than 600 French citizens, Americans and French army personnel recently paid honor to American military members buried at Rhone American Military Cemetery in Draguignan, France.

In the 12-acre American cemetery, 861 U.S. military dead rest beneath straight rows of white marble crosses and Stars of David. Most gave their lives in the liberation of Southern France in August 1944. The names of an additional 293 missing members are inscribed on a wall nearby. Rhone is one of 14 U.S. overseas military cemeteries for the dead of World War II.

Chaplain (Commander) John M. Wright of the Sixth Fleet staff participated in the ceremony along with a Marine color guard and a rifle squad. The Sixth Fleet Navy Band provided a bugler; a two-member flag-raising team came from USS *Puget Sound* (AD 38).

The ceremony included the playing of the French and U.S. national an-



them by a French military band, which was followed by speakers, prayers and the traditional firing of volleys and the sounding of taps. Captain R.G. Tolg Jr., Commander Serv-

ice Force Sixth Fleet, spoke briefly of the Allied invasion of Normandy and the meaning of America's Memorial Day.

—Photo by PH1 Douglas P. Tesner

Business Booms in Long Beach

The Navy's plan to reactivate operations at the Naval Station Long Beach, Calif., after five years of idleness came as no surprise after release of the environmental impact report in January 1979. The report was required as part of the Department of Defense "Realignment, Reduction, and Closure Studies" of April 1978.

Upon completion of reactivation in 1985, Long Beach will be home port for a destroyer squadron, a fleet introduction squadron, a naval reserve squadron and other associated support ships. Some of the ships will be newly commissioned while others will be transferred from other home ports.

For the past five years the Long Beach facility has been designated a support activity and, under Navy regulations, could not serve as a home

port. All but a few reserve training ships had been sent to San Diego and other bases, leaving the former Long Beach Naval Station with only a skeleton crew.

Under the new plan, and because of crowded conditions at the San Diego base, the first of the ships to be permanently homeported in Long Beach began to arrive early in 1980. Approximately 6,000 military and civilians and more than 3,000 family members are expected to be shifted to Long Beach.

Ships already transferred to Long Beach include the guided missile frigates USS *Duncan* (FFG 10), USS *George Philip* (FFG 12) and USS *Wadsworth* (FFG 9), the amphibious cargo ship USS *Mobile* (LKA 115), and the fleet tugs USS *Moctobi* (ATF 105)

and USS *Takelma* (ATF 113).

With the infusion of business at the naval station, the neighboring Long Beach Naval Shipyard also will experience a change in plans and schedules. As one of the Navy's most modern facilities for overhauling ships, the Long Beach yard is capable of completing work on the newer classes of ships such as *Spruance*-class destroyers and the amphibious assault giants USS *Peleliu* (LHA 5) and USS *Tarawa* (LHA 1).

As the 1985 countdown to completion continues, the community of Long Beach will not slacken the pace of welcoming all the ship's crews along with each dependent. It's a mutual relationship that has worked well in the past and promises to work in the future.

—Cmdr. Ron Toth

Bearings

On the Racing Circuit

Radioman Second Class Brian A. Morrical of Operation Deep Freeze Detachment in Christchurch, New Zealand, found something a little different from your ordinary, everyday hobby to occupy his spare time. He took up formula sports car racing.

"I've watched racing all my life," he said, "and it's always been one of my favorite sports. When I got to New Zealand, I had the time and the opportunity, so I jumped into it."

His first entry into the New Zealand racing circuit was a Datsun 200SX. He raced the Grand Prix circuit in the Open Salon Car Class. Then, last year, he bought a Titan MK6C Formula Ford and has competed in 12 races with it.

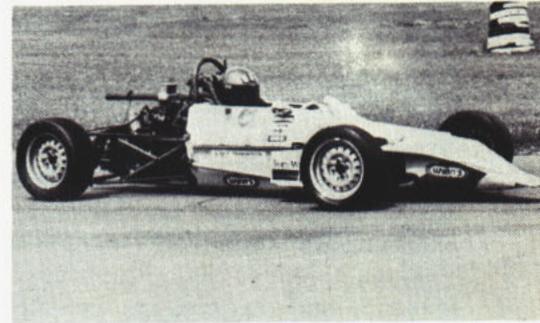
Holder of a New Zealand profes-

sional racing competition license, Morrical will qualify for an international competition license after the next racing season. That will qualify him to race in any country in the world as a professional driver.

"It has been a real experience," said Morrical. "It's something I'm going to pursue. My next tour of duty will be in the states, and I'll bring my car back with me."

Competing in a formula race car is not without its hazards, and Morrical has received his share of bumps and bruises. In one race at New Zealand's Wigram Air Force Base, the steering column on his car broke when he was taking a curve at 130 mph. He went through the side of a hangar next to the course but was unharmed.

"I got the 'Hangar Award' for that one," he said. "But I'm not the first



RM2 Brian A. Morrical at the wheel of his Titan MK6C Formula Ford.

driver who's done that. In fact, they added my name to a list of names on a plaque that hangs inside that hangar."

So far, Morrical's racing career has been successful. He has won one race and placed in several others. His name is mentioned regularly in New Zealand's racing tabloids.

—By JOCS Dan Hansen

Vulcan Stays In

The Norfolk-based repair ship USS *Vulcan* (AR 5), the oldest ship in the Atlantic Fleet, celebrated its 40th birthday on June 16.

Vulcan, a miniature floating shipyard, was launched Dec. 14, 1940, when Mrs. James Forrestal broke the traditional bottle of champagne across the bow. It was formally commissioned on June 16, 1941, as the first of a new class of repair ships.

During World War II, *Vulcan* served in both the Atlantic and Pacific theaters, from Iceland to Okinawa to Algeria, earning several campaign stars. After the war, *Vulcan* returned to the Atlantic Fleet where it has remained since.

In November 1978, *Vulcan* was the first Navy ship other than a hospital or transport to receive women as crew members. In September 1979, it was the first ship to deploy to the Mediterranean with women crew members.

Of the ships in the Atlantic Fleet, only the Revolutionary War frigate USS *Constitution* is older than *Vulcan*, and

of the ships in active naval service, only USS *Dixie* (AD 14) of the Pacific Fleet has served longer. *Vulcan* will undergo an extensive year-long overhaul beginning early next year, which will extend its service life for several more years.

Vulcan celebrated this significant milestone with a group re-enlistment of 14 sailors for a total of 56 years obligated service and re-enlistment bonuses amounting to more than \$82,000.



Double 37s: Two San Diego-based tenders are moored side by side in the lagoon of another Diego—British-owned atoll Diego Garcia. After a 60-day deployment, submarine tender USS Dixon (AS 37) turned over the job of Indian Ocean fleet repairs to destroyer tender USS Samuel Gompers (AD 37). The two Seventh Fleet vessels not only have the same hull number, but also have 12 decks apiece, beams of 85 feet, and only one foot of difference between their lengths—all of which could add up to the "double vision." (Photo by PH3 Book.)

Bake Shop

When that indescribable urge for a big, creamy pastry hits, most people head for the corner bakery or supermarket. That can be rather difficult when you're in the middle of the Pacific Ocean.

For the men of the aircraft carrier USS *Ranger* (CV 61), the "corner bakery" is just a few feet away—the ship's bakery.

Pastries, however, are but a small part of what is turned out each day in the bake shop. The orders can get tall at times, considering all that they produce, especially at sea. Bread, hamburger buns, hot dog rolls, dinner rolls, pastries, pies and cakes head the list of daily fare.

"We bake 24 hours a day," said Mess Management Specialist Third Class David L. Robb of *Ranger's* bake shop. "It didn't help any when the doughnut maker broke down—the doughnuts had to be made by hand."

Robb knows how hectic life in such a shop can become. He worked for a short time as a baker before enlisting in the Navy five years ago. His specialty then was doughnuts and pastries, just as it is now on *Ranger*.

The major difference between making doughnuts as a civilian and as a member of the Navy, Robb pointed out, is that as a civilian he didn't have to make 800 dozen doughnuts a day, seven days a week—with or without the aid of a doughnut-making machine.

Quality mass production is a *Ranger* bake shop trademark. In addition to baking thousands of doughnuts daily and producing dinner rolls as fast as the crew can eat them, the bake shop turns out 500 loaves of white bread, 4,000 hamburger rolls and 1,000 hot dog rolls per day while deployed.

A lot of thought goes into meals on *Ranger*, and the bake shop has an important part in each meal. "The menus are planned so the crew gets a proper diet; the crew is always kept in mind," said Robb.



For those times when a little celebrating is in order, the shop prepares cakes with its own style of decoration.



"We bake a lot of cakes during a deployment," said Robb. "We once had orders for six cakes at one time, all to be decorated differently, on real short notice. We had to work four hours extra on that shift, but we got the job done on time."

That four hours extra was in addition to the regular 12-hour work day *Ranger's* bakers put in while deployed. When the *Ranger* is in port, the work days get shortened to eight or nine hours, but there is still a lot of work to be done.

"Robb and my other bakers work less hours when we are in port because there are less people to feed, but we work just as hard," said Mess Specialist First Class Nestor S. Sioson, *Ranger's* bake shop supervisor. "The crew still wants those pastries."

—Story by JO3 James P. Woodworth
—Photos by PH1 John Sheppard

Peach pies, specially prepared by MS3 Thomas Ronning (above), and dinner rolls, being put through a press in the dough stage by MS3 Jim Harkins (left), help keep Ranger sailors happy at mealtime.

Biking Around the Western Pacific

Whether by sail, steam or nuclear power, sailors have always navigated the globe in ships. Although that won't change, a group of Navy men has added a twist to tradition.

Their twist begins when the Seventh Fleet flagship, USS *Blue Ridge* (LCC 19), arrives in port, but its crew continues to navigate the globe—on bicycles. These men are members of Cycle Touring International, a shipboard cycling club, and they have rolled up thousands of miles by pedaling their way through Western Pacific countries.

Chief Hull Maintenance Technician Greg Kibble, the club's founder and sponsor, began cycling in 1953 when he and his family biked through Europe. He was then 10 years old.

"I was a bit apprehensive about starting the club on *Blue Ridge*," said Kibble. "I originally formed a club on USS *Chicago* (CG 11—now decommissioned) in 1974, but it was disappointing at times.

"You just can't force someone to enjoy bicycling. People who want to ride, do. The club's purpose is to bring those people together. We want to enjoy liberty more by getting out into the country, meeting people, and seeing things most sailors and tourists miss."

Cycle Touring International was formed aboard *Blue Ridge* in July 1979, just before departure from San Diego to Yokosuka, Japan, to relieve USS *Oklahoma City* (CG 5).

"Outings are tailored to members' varied abilities," said the club's former president, Lithographer Second Class Jeff Gardner. "Sometimes we'll have a group that can go a hundred miles in a day, and the next ride we set up for only 10 or so miles. We never go any faster than the slowest rider."

Although most of the club's activities now deal with touring, a five-man racing team has evolved quite by accident.

Last year when the ship was scheduled to visit Singapore, a message was sent listing the athletic teams aboard *Blue Ridge* and requesting events to accommodate those teams. The bicycling club was listed as a team; however, Cycle Touring International was looking for information about bicycle touring in Singapore—not a race.

When *Blue Ridge* arrived in Singapore, about four hours late, a bus was waiting at the pier. It took the bikers to a site where a 75-mile race around an outdoor course was under way. When the bus stopped, the club members knew what was happening and tried to decline.

The next thing the sailors knew, they were unloading bikes from the bus—in the pouring rain—and stripping touring gear and other excess equipment from them. Minutes later, *Blue Ridge* racers were on the course trying to catch up in a race which had already gone three laps. Although Kibble finished second, he was unable to make

up the lost laps and so could not claim his place officially.

A similar situation happened last January when the ship visited Hong Kong. The Amateur Cycling Association there arranged a 50-mile invitational race, expecting a high-powered American racing team to be aboard the flagship.

"They assumed we were top-notch racers," said Kibble, "and to be honest, we got smoked. In an effort to please us by making the race more challenging, 10 of their Olympic-class racers took part in the event, along with 180 other local racers."

Kibble admits the group was neither physically nor mentally prepared for a serious race, but he was proud of his shipmates, especially Fireman Eddy Edwards, who finished 10th out of more than 200 racers. Although the bikers never really had a chance in the race as a team, they had a good time and made many friends. They also were well publicized in local newspapers.

Since those races, the club's morale and membership have reached new heights. The command also is enthusiastic. Members hope to get new uniforms, racing wheels and tires. Kibble says all that should make the *Blue Ridge's* cycling team even more competitive.

—Story by JOC Gary L. Martin
—Photos by ET2 Dan Sandoval



Blue Ridge's Cycle Touring International is not only for crew members interested in countryside touring but also for those who want to race. Fine tuning the bikes and transporting them to race sites is part of the routine.

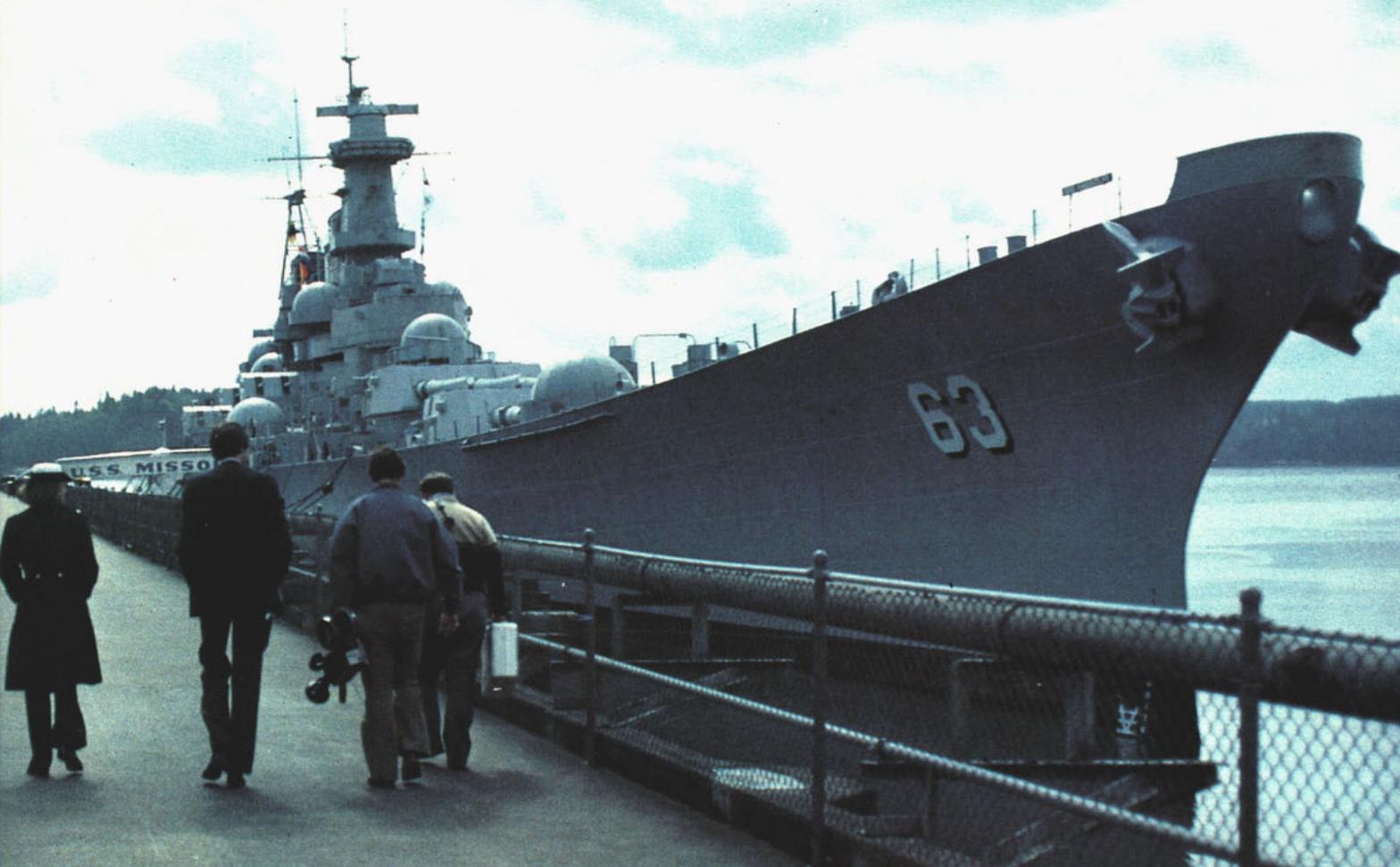


Bremerton's



Mothball Fleet

Battleship *New Jersey* (BB 62), recently called out of retirement, once again will join the active ships of the U.S. Navy. Other great ships in Bremerton's mothball fleet wait for the call to action.



Bring back the *New Jersey*.

It's been done twice before—once for the Korean War and once for Vietnam. Now, BB 62 is going into action a third time to strengthen the Navy's operational forces.

Reactivating the huge vessel (nearly 900 feet long) has always been a big event with plenty of media coverage. This time was no different, and when the ship was towed from Bremerton, Wash., on July 27 to go to Long Beach, Calif., it grabbed front-page headlines nationwide. But what hap-

pens to *New Jersey* when it's not in active service?

Since 1969, when the veteran battlewagon was retired from Vietnam service, *New Jersey* has been held in suspended animation at the Inactive Ship Maintenance Facility in Bremerton. Preservation methods used by that command have kept the battleship in good condition over the past dozen years, making it possible to bring the

45,000-ton combatant back to life for a third time.

According to the facility's former skipper, Captain Jack Bowen (he was

Mothball Fleet

relieved by Captain E. J. Covey on June 29), reactivating any of the 56 ships and craft laid up at Bremerton would present no insurmountable problem. The big variable is purpose: Does the Navy want to use a vessel for the mission it was originally designed for or for something else? The answer to that question determines how much

modification work needs to be done.

"In a basic sense," Bowen said, "all these ships are seaworthy. Their hulls are sound because cathodic protection systems have succeeded in stopping salt water corrosion.

"I'm confident that if *Missouri* (BB 63) were reactivated tomorrow, her propulsion machinery could be put in-

to operating condition with minimum effort. Also, I have no doubt that most of her armament would be highly functional."

But many considerations are involved in the reactivation of a ship: electronics, communications equipment, sanitation standards, operational compatibility and the type of



fuel used. Yes, the hulls of the ships at Bremerton are sound, but most of their insides would have to undergo massive modification similar to work being done in *New Jersey* at Long Beach.

In 1945, the Navy got rid of most of its older warships: 50 aircraft carriers, seven battleships, 15 heavy cruisers, 22 light cruisers, 12 destroyers and numerous landing craft. But more than 2,000 vessels were put away in reserve fleets, "mothballed" for possible use in the years ahead.

By the end of 1946, the Bremerton Group, Pacific Reserve Fleet (or 19th Fleet) had inactivated all major units assigned to it after the war: 11 carriers, five battleships and 12 cruisers. During the post-war years, Bremerton was the "rest home" for an array of famous fighting ships like *Lexington*, *Yorktown* and *Alabama*.

When the Korean War broke out in 1950, the mothball fleet stood at its numerical peak of 2,283 vessels. For the conflict in Asia, the Navy reactivated more than 500 ships, including the battleships *Iowa*, *Missouri*, *Wisconsin* and *New Jersey*.

Thirty years later, the number of preserved vessels has shrunk dramatically. Besides the 56 at Bremerton, 28 ships and craft are mothballed at Philadelphia (the carrier *Shangri-La* and heavy cruisers *Des Moines* and *Salem* among them) with another three combatants laid up in Portsmouth, Va.

Deciding how many and what type of vessels to retain at Bremerton is a highly subjective procedure and, as Bowen put it, "...not in my line of business. Our primary purpose is to maintain the ones that are sent to us."

The art of ship preservation and maintenance has evolved by leaps and bounds since the days following the attack on Pearl Harbor, when Reserve Fleet ships weren't much more than rusted hulks. By the time warships were being inactivated after the 1953

truce in Korea, dehumidification had become a key part of the mothballing process. Dry air is a great preservative, and dehumidification systems installed aboard mothballed vessels keep the relative humidity below decks down to an arid 25-35 percent.

Above decks, guns, winches and other pieces of immovable equipment are covered with air-tight metal "igloos."

Until 1976, ships being turned over to the Inactive Ship Maintenance Facility went through a complete inactivation. Dehumidification and cathodic protection systems were installed. Preservatives were placed inside machinery and pumps; electric motors were thoroughly cleaned. Out-of-order equipment was repaired, and all rust was removed. Any opening where water might enter the ship was sealed.

According to Commander Everett Sears, former maintenance officer at Bremerton, the complete inactivation package was done away with five years ago. Inoperable machinery wasn't repaired; its condition was simply documented in the ship's records for future reference. Vessels still received the all-important cathodic protection systems.

These systems reverse the normal electrolytic action that occurs on a ship's hull by creating a current around the ship. Essentially, a plating effect is created that stops corrosion. This advance in mothball technology has

helped to reduce the cost of ship maintenance at Bremerton.

"Before we started using cathodic protection," Sears explained, "these ships had to be drydocked every five years; for ships as big as battleships and aircraft carriers, that involves spending a lot of money.

"But with cathodic protection, they need to be drydocked only once every 15 years. And that period can be extended if underwater hull surveys indicate there's no deterioration of the bottom. The *Missouri* hasn't been drydocked in 21 years, and it's in good shape."

Money allocated for the vessels at Bremerton is spent strictly on maintenance. The command isn't responsible for improving the material state of the ships. Its responsibility is to maintain vessels in the condition they're received, and that, as Sears pointed out, is written right into the command's mission.

Since 1979, the condition in which vessels are received at Bremerton has depended almost entirely on each ship's last crew. They do all the work and get no help from a shipyard.

That work supposedly includes the removal of any rust and painting over all bare metal. Piping systems are drained, fuel is pumped off and any flammables are removed. External openings are covered by wood or metal to prevent water entrance and hatch covers are sealed.



Opposite page: Battleship *New Jersey* begins journey to Long Beach for reactivation; destroyers ex-Hollister and Southerland laid up at Bremerton; anchor chains. Right: Submarines ex-Sailfish, ex-Salmon and Growler.

Mothball Fleet

“When the cruisers *Chicago* and *Oklahoma City* arrived here,” Bowen said, “about the only thing we did was to tie them up.” Letting the crew do all the work isn’t mothballing in the classic, pre-1976 sense. It’s a procedure known as “safe storage.”

By and large, maintaining the Navy’s ships at Bremerton isn’t any more difficult now than it was 30 years ago. “The *Missouri*’s been here longer than any of the other ships at this facility,” Bowen said. “And it doesn’t require any more work now than it did in the past.

“They did an extremely good job when they laid the ship up in 1955, and it’s been pretty trouble-free since. But on some of the later vessels, the job of properly laying them up and preserving them wasn’t done as well. Under those circumstances, stopping the deterioration becomes tougher because one of the key elements of preservation is to

New Jersey (BB 62) lets go with a nine-gun salvo off the shores of Vietnam in the '60s. One of the 16-inch projectiles is visible at extreme right of photo.

seal these ships completely from the outside.”

Poor preparation seems to be the mothball fleet’s main enemy right now. Budget cuts in previous years mean that less care is taken to prepare ships for inactivation. The cruisers *Chicago* and *Oklahoma City*, as well as the destroyer *Southerland*, have only been afforded the benefits of safe storage.

The difference between that and complete mothballing, maintenance officer Sears noted, is significant. “The *Missouri*, essentially because of the dehumidification system on board, is in the same shape internally as the day it was brought here. There is no rust, no deterioration of the piping. The electrical motors are in fine condition, just like the day they were shut down. The same applies to *New Jersey*, and we can maintain that condition here indefinitely.

“Under the safe storage policy, the ships brought to us in that status begin to deteriorate in about six months. Both internal and external machinery start to rust. Moisture loosens the lag-

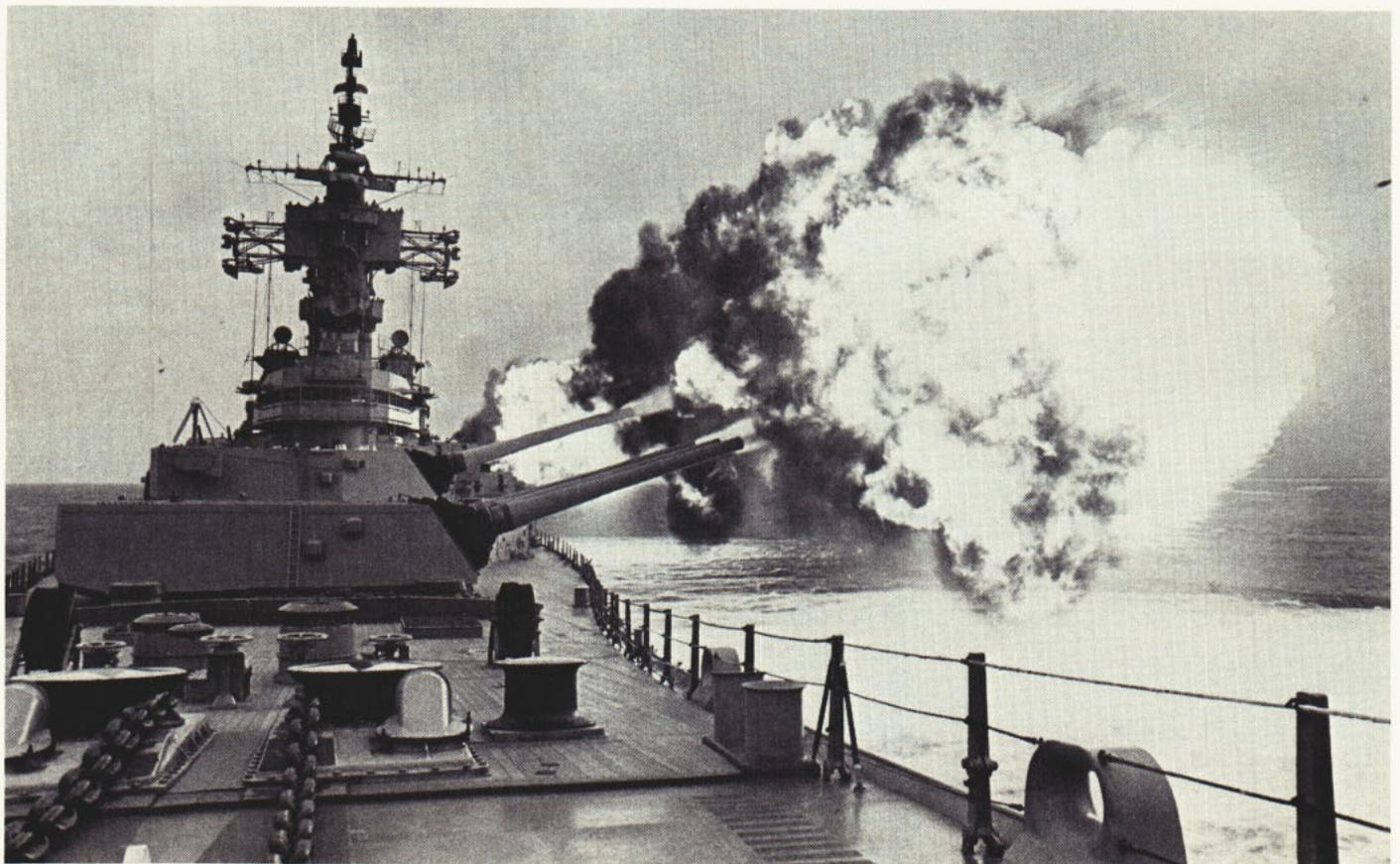
ging on piping systems. You can’t see the electrical equipment, but it’s also probably deteriorating because of the high humidity levels in the air.”

Regardless of current mothballing policies, Bowen made it plain that “There is a definite need for every ship that’s here. Otherwise, we wouldn’t be keeping them around.”

That need has been demonstrated most recently by the reactivation of battleship *New Jersey* (BB 62)—its third since being decommissioned in 1948. More than any other combatant, *New Jersey* has proven its value as part of the inactive fleet.

But for operational requirements, modernization is as important as preservation. The battlewagon is getting updated weapons, propulsion, electronics, sewage treatment and communications systems in an 18-month, \$326-million overhaul that began this month.

By way of understatement, *New Jersey* will also have additional firepower. Besides its 16-inch guns and five-inch guns, BB 62 will carry



32 *Tomahawk* cruise missiles, 16 *Harpoon* missiles and four *Phalanx* close-in defense weapons systems. As Sears put it, "Battleships are highly flexible platforms. There is nothing available to replace them as an outstanding gun-fire support platform. The beams are wide and stable enough for any kind of weapons system."

Contrary to earlier reports, none of the three 16-inch turrets will be removed from *New Jersey* during this overhaul. However, four of its 10 twin 5-inch mounts are being taken off to make room for missile launchers. The aft 16-inch turret may be removed during a future update of *New Jersey* to accommodate expanded aviation capabilities.

Chief of Naval Operations Admiral Thomas Hayward has concluded that with such armament the battleship "will complicate an enemy's targeting problem by adding a new dimension of survivability and firepower to the battle force," and that it should "perform

an even more useful role for the Navy for 15 to 20 years in the future."

New Jersey is scheduled to join the fleet in early 1983; by that time, sister ship *Iowa* (BB 61) should be starting its own reactivation. The Navy also has plans to reactivate *Wisconsin* and *Missouri*. These four vessels represent the largest, fastest and most powerful class of battleship ever constructed by the U.S. Navy.

Bowen doesn't think the length of time these combat veterans have spent in mothballs has had much effect on their actual structural soundness. As Secretary of the Navy John Lehman Jr., has said, "Chronologically, they're old, but they don't have much use on them." The average steaming time is about 12 years.

The phenomenon of a 38-year-old ship that is structurally only about 12 years old has been brought about largely by the people assigned to the inactive ship facility at Bremerton. They are the ones who watch out for vandalism,

fires and floods. They make underwater repairs and inspections, check the draft of each vessel in the water, and make sure the dehumidification and cathodic protection systems are functioning properly.

Otherwise, there would have been no *New Jersey* to bring back. It would have grown too old long ago.

"As far as we're concerned," Sears said, "there's really no ceiling as to how many ships we can keep here. But every ship reaches the point where it would be cheaper to build a new one than it would be to convert the old one to meet present-day standards. Once that point is reached, a vessel is usually disposed of."

The battleships haven't reached that point yet. The way things are going, it looks as though they might last into the next century as still-operational veterans of World War II.

—Story by JO1 P.M. Callaghan
—Photos by PH1 Terry Mitchell
and JO1 Callaghan

Major Ships in Storage

The names of many of the ships at Bremerton's Inactive Ship Facility are well-known by fleet sailors. Some of the major combatants still in mothballs are listed here. Use of the prefix "ex-" before a ship's name indicates that it has been stricken from the Naval Vessel Register.

Missouri (BB 63). Commissioned June 11, 1944-Decommissioned Feb. 26, 1955. World War II ended with Japanese surrender aboard this battleship Sept. 2, 1945. Reactivated for combat operations in Korean War.

Hornet (CV 12, CVA 12, CVS 12). Nov. 29, 1943-June 30, 1970. Its planes began the Battle of the Philippine Sea, June 19-20, 1944, in which 395 of 430 Japanese aircraft were destroyed. Assisted in sinking of Japanese dreadnought *Yamato*, in April 1945. Korean and Vietnam service. Recovered unmanned *Apollo* spacecraft Aug. 25, 1966.

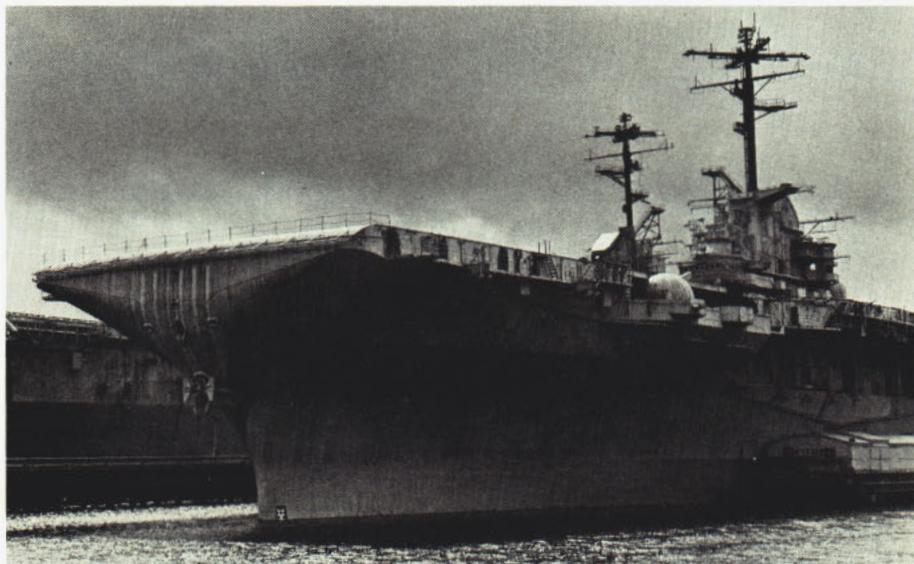
Bennington (CV 20). August 6,

1944-January 15, 1970. This flattop's planes also helped to sink the *Yamato*. Disaster at sea killed 103 crewmen May 26, 1954. Rebuilt 1954-55.

Bon Homme Richard (CV 31, CVA 31). Nov. 26, 1944-July 2, 1971. "*Bon-*

nie Dick" has launched air strikes against Japanese, Korean and Viet-

USS Bennington (CV 20) is one of four flattops preserved at InacShipFac Bremerton. One problem still being worked out is how to best preserve a carrier's flight deck.



Mothball Fleet

name forces in its lengthy career.

Oriskany (CVA 34). Sept. 25, 1950-Sept. 30, 1976. Extensive air operations during Korean War. First carrier to receive Naval Tactical Data System.

Oklahoma City (CL 91, CLG 5). Dec. 22, 1944-Dec. 15, 1979. With Third Fleet during Okinawa campaign. Converted to guided missile cruiser in 1957. First Pacific Fleet combatant to successfully fire *Talos* missile. Served in Vietnam as Seventh Fleet flagship for two and one-half years.

Chicago (CA 136, CG 11). Jan. 10, 1945-March 1, 1980. Steamed with battleship *North Carolina* (BB 55) from Pearl Harbor to Far East for shore bombardment against Japan until cease-fire of Aug. 15, 1945. Placed out of commission 1947-1958. Converted to guided missile cruiser, 1958.

Ex-Comstock (LSD 19). July 2, 1945-April 7, 1970. Took part in "Operation Sandstone," atomic weapons test at Eniwetok, 1947-1948. Received 10 battle stars for Korean War service.

Ex-Delta (AK 29, AR 9). June 16,

1941-Oct. 1, 1977. This fleet repair ship saw duty in both the Atlantic and Pacific during World War II. It now serves as headquarters for the Inactive Ship Facility.

Nereus (AS 17). Oct. 27, 1945-Oct. 27, 1971. Early in 1946, the sub tender towed 39 Japanese submarines out to sea and sank them.

Southerland (DD 743, DDR 743). Dec. 22, 1944-Feb. 26, 1981. Sailed with Task Force 38 in its final raids against Japan; took part in the shelling of Inchon during the Korean War. Provided emergency relief to flood victims in Ceylon, December 1957. Earned 19 battle stars in three Pacific wars.

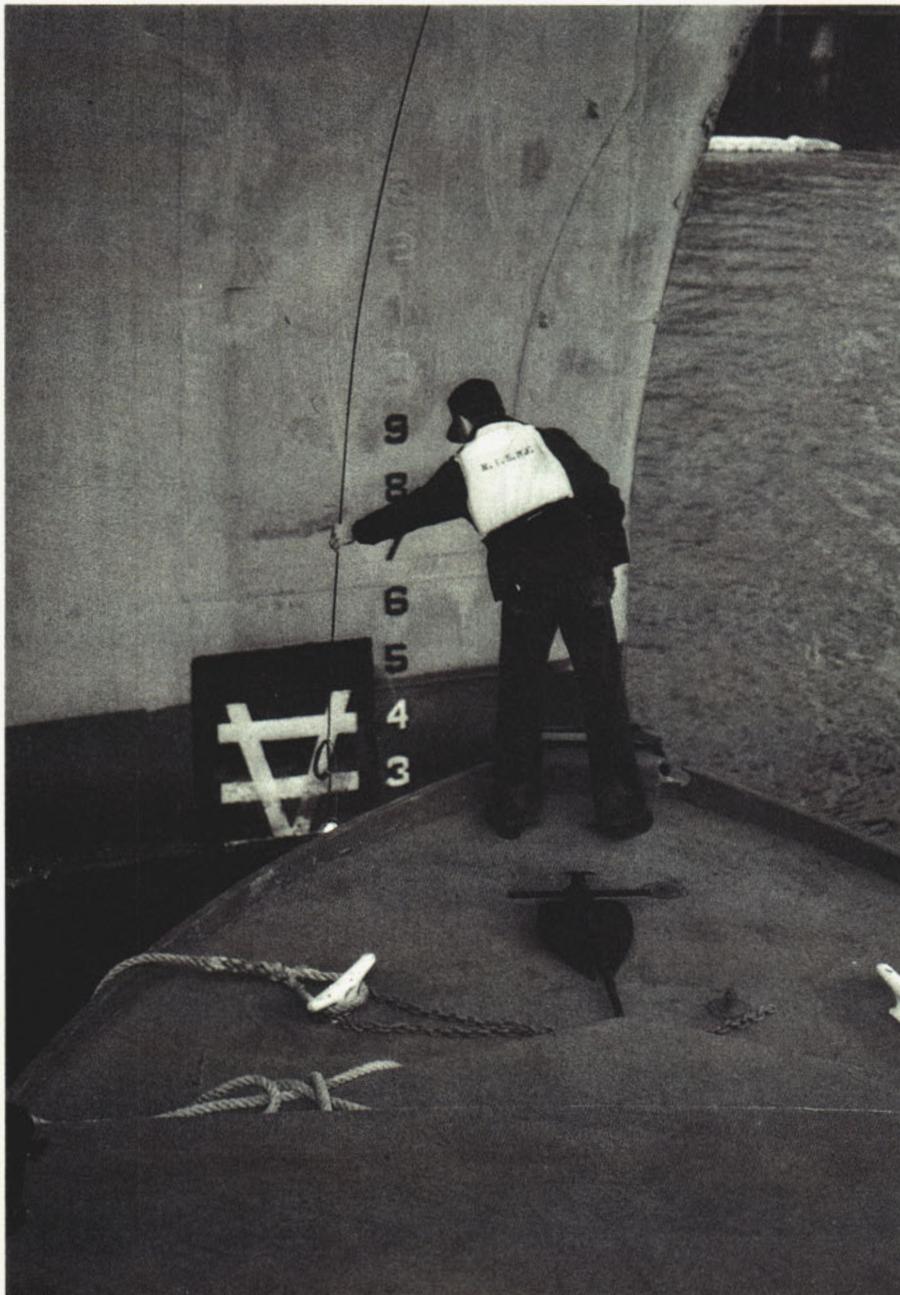
Ex-Hollister (DD 788). March 29, 1946-Aug. 31, 1979. Named after three brothers killed in World War II. One of first naval reinforcements to arrive off Korea; supported Inchon landing. Covered evacuation of Chinese Nationalists from Tachen Islands in January 1955.

Ex-Sailfish (SSR 572, SS 572). April 14, 1956-Sept. 30, 1978. First sub built for radar picket service; later reclassified as attack sub.

Ex-Salmon (SSR 573, SS 573, AGSS 573). Aug. 25, 1956-Oct. 1, 1977. Sister ship of *Sailfish*. Became first sub to earn Golden "E" Award for excellence in battle efficiency, December 1962.

Growler (SSG 577). Aug. 30, 1958-May 24, 1964. Second of the *Regulus II* guided missile subs.

Theodore Roosevelt (SSBN 600). Feb. 13, 1961, and *Abraham Lincoln* (SSBN 602), March 11, 1961. Two *George Washington*-class fleet ballistic missile submarines, both decommissioned on Feb. 28, 1981. Each was armed with 16 *Polaris* missiles and had six torpedo tubes.



Gunner's Mate (Guns) First Class Greg Richardson, assigned to the Inactive Ship Maintenance Facility at Bremerton, Wash., checks perimeter lights on a mothballed ship. Vessels are frequently inspected from the outside; alarms on the inside guard against fire, flood and vandalism.

Navy Sunday in Long Beach

The schedule for USS *Jouett* (CG 29) called for overhaul at Long Beach (Calif.) Naval Shipyard from April 1980 to June 1981. The crew faced 15 months of pressing deadlines, deafening noise, endless dust and countless other frustrations.

Could *Jouett's* crew find a way to counter the physical and emotional

stresses of overhaul? Could the crew and families who moved to Long Beach establish a rapport with the community? *Jouett's* active religious program helped meet these needs.

Crew members and families were encouraged to get involved with local churches and synagogues in addition to their participation in shipboard re-

ligious activities. Regular participation by *Jouett's* people, in uniform, in community religious programs reminded the people of Long Beach that the Navy is a part of their community and wants their support. To further the process, *Jouett* invited groups ashore to become involved with the Navy.

The Catholic Church in the Los Angeles area responded with a listing of local parish programs while the mayor of Long Beach, Eunice Sato, provided contact with the local Methodists. Priests and ministers came aboard *Jouett* to see first hand what an overhaul was like. Out of such efforts blossomed a special relationship between *Jouett* and the California Heights United Methodist Church.

To commemorate the friendship, Dr. William H. Hobbs of that church, and *Jouett's* chaplain, Lieutenant Gary R. Pollitt, planned and conducted a Navy Sunday Service in March. *Jouett* provided a color guard, and other crew members participated in the worship services. Commanding officer Captain Gerald A. Fulk and Chaplain Pollitt took part in the service.

The relationship has continued. On Easter Sunday, for example, *Jouett* sailors attended shipboard services and then services at California Heights. Church members, in turn, have visited the ship.

Jouett's friendship with Dr. Hobbs and his congregation has enhanced crew morale and religious interest and eased community adjustment. When the overhaul was complete, many *Jouett* crew members and families could say, "We got something out of overhaul besides dirty hands!"



—By Ensign David P. Baker



North to Norway



The scene was a landscape in whites and blues. It was a simple setting: dark blue water and snow-blanketed mountains with wispy clouds between peaks and sky.

Tiny gray specks rippled the water. A closer look showed the specks as more defined shapes—actually, U.S. Navy ships pulling into Sorreisa, Norway.

Making their debut in the land of the Arctic Circle were the amphibious assault ship, USS *Guam* (LPH 9); the amphibious transport dock, USS *Austin* (LPD 4); and the tank landing ship USS *Barnstable County* (LST 1197). They would travel the icy fjords into Norway, farther than any other U.S. Navy ships.

The trio from Amphibious Squadron Two had left Norfolk, Va., and

Top and center: Clearing snow and ice from the deck of USS Guam was almost routine during ColdEx-FlotEx 81. Left: Troops and vehicles offload from USS Barnstable County.

pulled into Morehead City, N.C., to pick up 1,500 men of the 36th Marine Amphibious Unit. Then they headed for the wind-whipped northern reaches of Europe to participate in NATO's Cold Winter exercise and ColdEx-FlotEx 81.

For 40 hours, troops and equipment poured from the ships into the below-freezing temperatures of a land where gale force winds blow nearly every day and "arctic smoke" drastically reduces visibility.

While *Guam* headed for Narvik to offload the aviation segment of the 36th, the *Austin* steamed to Trondheim for port visits. The Marines debarked in Sorreisa and began training with the First Battalion, Brigade North of the Norwegian army.

Earlier cold weather training state-side, in Minnesota, had prepared the Marines for the sub-zero temperatures that greeted them in Norway. They already knew how to adapt to the inhospitable, forbidding environment. Working on snow shoes and skis, they constructed emergency shelters; they tested arctic rations along with various means of light transport.

Later, the Navy ships returned for the Marines. From Sorreisa the ships

sailed toward Balsfjorden, where Marines would debark again—this time to test their ability to redeploy rapidly.

At Balsfjorden, bobbing through the icy 30- to 35-degree fjord waters in a rubber boat, *Barnstable County's*



underwater demolition team headed for shore to survey and mark the beach for landing.

Early the next morning, the assault began. Troop and equipment-laden landing craft left *Austin*, *Barnstable County* off-loaded amtracks and *Guam* transported troops by helicopter.

Upon conclusion of Cold Winter, the Marines, choppers and amtracks scurried back to the ships, heading for the far northern city of Tromso.

In the exercise's later stage—ColdEx-FlotEx—Norwegian ships escorted the three American ships to Malangen Fjord as other forces "opposed" their movement. ColdEx-FlotEx tested the allies' coordinated operations in air, surface and sub-surface warfare. Marines took the beach for a final time.

When the combined exercises ended, the ships loaded up and got under way. No signs of an amphibious landing were evident. The "artist" had painted the tracks with a fresh coat of snow.

—Story and photos by JO1 Gary Miller

An amphibious armored personnel carrier (left) lands on Kjerkevik Beach in northern Norway while members of the 36th Marine Amphibious Unit (below) come ashore from LCU 1655.



Currents

Navy Controllers Aid During Air Traffic Crisis

Navy and Marine Corps air traffic controllers are among the nearly 600 military people working in civilian airport towers since Aug. 7, when union members of the Professional Air Traffic Controllers Organization went on strike. As of Aug. 14, a total of 77 controllers—57 Navy and 20 Marine Corps—were participating in the augmentation. The controllers are from USS *Enterprise* (CVN 65), *Carl Vinson* (CVN 70), NavSta Mayport, Fla., TacRon 22, Little Creek, Va., FacFacs Pearl Harbor, Hawaii, three Marine Corps and 10 naval air stations. Sea service controllers were being used to route air traffic in Philadelphia, Miami, Fort Lauderdale, Fla., Los Angeles, Oakland, Calif., and Honolulu. Secretary of Defense Caspar W. Weinberger designated the Air Force the coordinator for providing air traffic control support during the strike.

Rescue at Sea

Two A-7 *Corsairs* from Attack Squadron 113 (VA-113) recently participated in a dramatic at-sea rescue of an Air Force F-106 pilot who was forced to eject from his crippled aircraft off the coast of California. VA-113 executive officer Commander W. W. Pickavance and Lieutenant Junior Grade H. H. Holman, his wingman, immediately assumed the duties of on-scene commander and vectored in a Navy RH-53 helicopter for the pickup of the downed pilot. The helicopter flew the pilot to Tyndall Air Force Base, Fla., for medical treatment. He sustained only minor injuries. The helicopter, from the Naval Coastal Systems Center, was on a routine training mission in the area when it received the calls for assistance from the *Corsairs*. Helicopter crew members were Lieutenant B. E. Dewey (pilot), Lieutenant R. D. Colenda (co-pilot), and Aviation Structural Mechanic (Structures) Second Class S. A. Sooy. The Navy aircraft were participating in defensive air combat training with the Air Force at the Tyndall Air Force Base Air Combat Maneuvering Instrumentation Range. VA-113 is commanded by Commander W. C. Trafton and is homebased at NAS Lemoore, Calif. The squadron is assigned to *USS Ranger* (CV 61).

Keel Laying Ceremony for New Amphibious Ship Class

Speaking at keel laying ceremonies for LSD 41 in Seattle, Secretary of the Navy John Lehman Jr. said, "The amphibious forces will be at the very front of the Navy in the decade ahead." LSD 41 is the lead ship of a new class. Lehman said this new class represents a large step in the revitalization of our key national asset—the U. S. Navy. The ship will be 609 feet long with a beam of 84 feet. It will displace 15,774 tons and have a draft of 20 feet. The new class will be powered by four diesel engines producing about 35,000 horsepower which will enable it to operate economically at about 20 knots. LSD 41 is designed to carry four air-cushioned LCAC landing craft in addition to jeeps, tanks and other equipment for amphibious assault operations. The complement of the crew will include 22 officers, 391 enlisted people and 340 troops. The Secretary said the Navy has established a firm policy to develop sufficient amphibious lift to transport simultaneously the assault echelon of a Marine amphibious force and a Marine amphibious brigade. "Thus we shall have the capability to undertake major amphibious operations to secure our maritime security simultaneously in two separate areas of the world," Lehman said.

Navy Takes Care of its Own

Eleven Navy families who recently experienced personal tragedy now know the meaning of the phrase, "The Navy takes care of its own." The families were among 19 service families who lost all their household goods when the merchant ship transporting the effects sunk. The Navy families, along with seven Air Force families and one Marine Corps family, had recently been assigned to NavSta Keflavik, Iceland, and were awaiting the delivery of their household effects. The Icelandic steamship carrying their belongings, the MS *Bergland*, collided on July 19 with a Danish merchant ship, the MS *Charm*, 17 miles from Sidney, Nova Scotia. MS *Bergland* was taken in tow by a Canadian coast guard ship with the intent of effecting repairs in Nova Scotia. On the way, the steamship sank, taking with it all the belongings of the 19 military families, including three automobiles. Navy reaction was immediate. NavSta Keflavik requested a flight to Norfolk, Va., so that all the families could shop to replace the goods they had lost. Arrangements were made for an immediate partial cash settlement of \$5,000 per family for the shopping trip. Officials in Norfolk are planning to expedite the remainder of the claims. A Military Airlift Command plane brought the families to Norfolk Aug. 12 for a week of shopping and later returned them to Iceland. The Navy will arrange for shipment of the new household goods to Keflavik.

Positive Results Reported in Ready Reserve Force Test

Initial reports after a recent no-notice Ready Reserve Force test were positive and built confidence in the RRF concept. The test involved activating three randomly selected military transport ships on the East, Gulf and West coasts. The test this year was the most ambitious yet scheduled with simultaneous activation of the SS *Washington*, SS *President* and SS *Catawba Victory*. The tests are conducted annually to verify the response capability of ships in the RRF. The Military Sealift Command, which would take operational control of these ships in a national emergency, or for military tests and exercises, observed tests of the cargo handling gear of the ships and participated in the 24-hour sea trials. Reports of the test indicated high confidence in the ability to activate ships of the RRF in short periods of time. *President* and *Catawba Victory* were made ready within the 10-day readiness requirement. *Washington* was to be readied in five days and missed its goal by only 12 hours, 52 minutes. *Washington* was activated at Port Arthur, Texas, *President* at San Francisco and *Catawba Victory* at Norfolk, Va. The RRF was established by a memorandum of understanding between the Department of the Navy and the Department of Commerce on Nov. 2, 1976. The agreement provides for annual activation testing and specifies that the test will be both no-notice and random. The test program commenced in 1978 with the single test activation of SS *Pride* on the East Coast. Since then, two additional single-ship test activations have been completed—one on the Gulf Coast and one on the West Coast. Results of these tests were also favorable.

A Way to Move Up

With 15 months of physical and academic training behind them, 185 Navy, Coast Guard and Marine men and women were graduated June 5 from the Broadened Opportunity for Officer Selection and Training (BOOST) program. It was their initial step in seeking to become military officers.

Guest speaker Rear Admiral Gerald E. Thomas, Commander Pacific Training Command, praised the graduates for their achievements and their fortitude in seeing the program through.

There also were three student speakers: Navy Cryptologic Technician Third Class Lynne M. Bever (see page 22, April 1981 All Hands), Marine Corps Sergeant Tracy L. Martin and Coast Guard Seaman Russel R. Waller. They all credited the instructors and the BOOST staff for providing guidance and unselfishly devoting their time. They also thanked their fellow graduates for providing needed encouragement when things were rough.

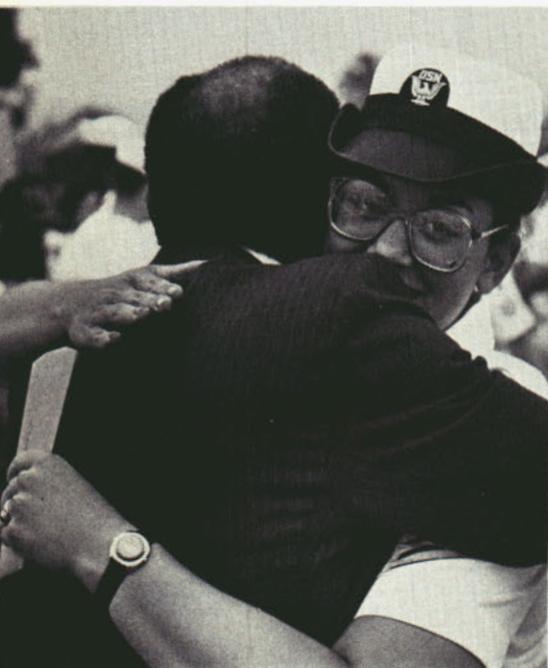
From this year's class—the largest in the program's 11-year history—11 Navy people were selected to attend the Naval Academy. One of these is Bever, who maintained a perfect 4.0 average throughout the program. Two Coast Guardsmen will attend the Coast Guard Academy; the 14 Marines will attend college under the Marine En-

listed Commissioning Education Program. The remaining graduates are scheduled to attend colleges and universities throughout the United States under the Naval Reserve Officers Training Corps program.

BOOST is a college preparatory program which provides an avenue for upward mobility to enlisted people in spite of educational deficiencies. During the program, participants are assisted in acquiring the scholastic skills and academic credentials needed to pursue a naval commission through the Naval Academy or the Naval Reserve Officers Training Corps.

Applications for the June 1982 class must be submitted by Dec. 1, 1981. See BUPERS Manual Article 1020360 and OPNAV Notice 1500 July 1981 for details.

—By PH1 James H. Wallace



Above: Seaman Lisa D. Cook gets a hug from her proud father. Right: Rear Adm. G.E. Thomas, Commander Training Command Pacific, awards Seaman Derrick Mills his diploma.



Sailors of the Year



Dedication to their jobs and a sense of pride in the Navy have brought more than a small measure of success to Chief Aviation Boatswain's Mate Nelson C. Tabinga, Chief Electrician's Mate Albert M. Brown and Photographer's Mate First Class Charles U. Muller Jr. Evidence of this is their selection as 1981 Sailors of the Year.

"I work very hard at my job, and it's really good to be recognized by my seniors and my peers," said Brown.

In addition to the official recognition, the three men were meritoriously promoted—an action which means more in the way of pay. They also were treated to five days of R&R, plus a visit

Sailors of the Year (l-r) ABEC Nelson C. Tabinga, PH1 Charles U. Muller Jr. and EMC Albert M. Brown with the plaques they received from the Fleet Reserve Association. PH1 Muller, a second class when nominated, had already passed the examination for first class but cannot be moved immediately to chief. His meritorious promotion to chief will come in July 1982. Photo by PH2 Phil Wiggins.

to Washington, D.C., as guests of the Fleet Reserve Association, which traditionally picks up the tab for the R&R and the Washington visit.

As representatives of the very best enlisted people in the Navy, the Sailors of the Year agreed that senior enlisted people must set a proper example for new sailors. And for others who aspire to a satisfying career in the Navy and the possibility of one day being honored as sailors of the year, this

year's winners offered some advice:

"Set your goals all the way through your career and do the best you can at your job."—Muller.

"Make good use of your time."—Tabinga.

"Be proud and be professional. The Navy's pride and professionalism program is the best thing to happen this year. It will teach young sailors that privileges are earned by advancing through the ranks."—Brown.

Mail Buoy

Long Beach Quake

DEAR SIR:

Our grandson recently sent us a copy of the April *All Hands*, in which there was an article on the work of the U.S. Navy and their wonderful help to people left homeless from the 1906 San Francisco earthquake and fire. It brought back to me the horror and chaos following the quake of 1933 which left Long Beach in a shambles with many injured and some dead.

I just wanted to tell you a little of what Long Beach owes the Navy for the wonderful help we received at that time.

Our shake came, fortunately, at 6:05 p.m. Had it come during school hours, a whole generation would have been wiped out.

Within 30 minutes, Long Beach was completely under the care of armed sailors. Every block had a sailor on guard, so there was no looting.

They had large tents in the parks for peo-

ple whose apartments were destroyed, and in no time food was being served to people who would have gone hungry and cold but for the Navy and the Red Cross.

The sailors on the streets showed us how to set up little places to cook in front of the houses. We had no electricity, no gas and even the water was shut off for a short time. The city laid down a small pile of bricks in front of every house, and the sailors showed us how to make little grills out of them. For *three weeks*, that is how I cooked.

Our grandson is in the Navy—a BT1. There is no more enthusiastic supporter of the Navy than he is.

I wanted you to know there are some people in this world who really appreciate what the Navy did for us in 1933.—Mrs. C.V. Jones, Long Beach, Calif.

• *The above proves the Navy has been a long time in the business of helping people—it's not something that happens only now and then.*—ED.

USS Briscoe

SIR: Although that certainly is Admiral Harry D. Train II, Commander in Chief U.S. Atlantic Fleet, on page 42 of the July 1981 *All Hands*, that is not Captain Richard G. Murphy on the left. The gentleman accepting the Battenberg Cup from Admiral Train is Captain Geoffrey L. Chesbrough, CO of USS *Briscoe* (DD 977).—Several sharp-eyed *All Hands* readers

• *You are all correct—the photo caption should have credited Captain Chesbrough and the crew of Briscoe for their very fine effort in winning this year's Battenberg Cup. We received the misleading information in a caption attached to the photo we published. Interestingly enough, Captain Richard G. Murphy, then CO of USS Saipan (LHA 2), received the Flatley Award for aviation safety at about the same time from Admiral Train. Our congratulations to the splendid crews of both fine ships.*—ED.

Reunions

• **USS Nicholas (DD 449)**—Proposed reunion for shipmates. Contact Rich Callard, 4310 Staunton Ave., S.E., Charleston, W. Va. 25304; telephone (304) 925-0582.

• **USS Sproston (DD 577)**—Proposed reunion for World War II crew. Contact George Ress, 35 Briarwood Drive, Poughkeepsie, N.Y. 12601.

• **USS Keokuk (AKN 4)**—Anyone from 1944-1945 interested in a reunion, contact Kenneth Adair, Box 34, Sutter, Ill. 62373; telephone (217) 658-4931.

• **USS LST 277**—Proposed reunion. For newsletter, contact W.S. Irwin, 5509 Panorama Drive, Huntsville, Ala. 35801; telephone (205) 539-8560.

• **USS Arizona**—Reunion sponsored by USS *Arizona* Reunion Association, Inc. and USS *Arizona* Crew-Kin, Inc., Dec. 2-6, 1981, in Tucson, Ariz. Contact J.K. Langdell, 2372 Butte House Road, Yuba City, Calif. 95991; telephone (916) 674-3343.



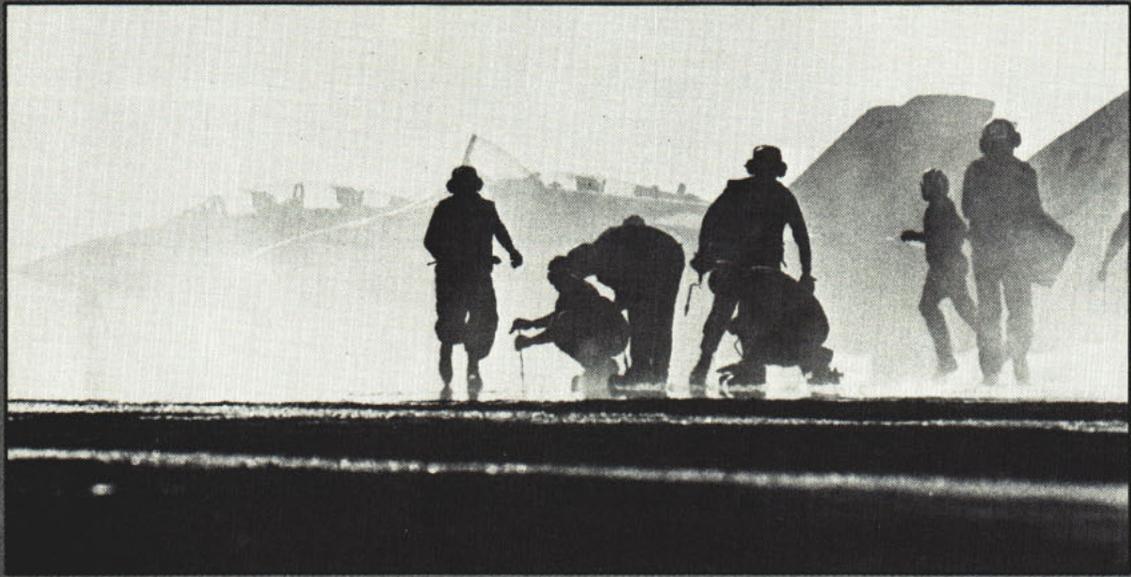
"It'll get much worse after we leave the harbor, sir."

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The United States
NAVY

206 years of
TEAMWORK

