Features

An Interview With Your CNO .......................... 2
It’s Always That Season: Helping Hands ........ 10
Operation Shipmate .................................... 14
Two-Pronged Navy Project: Tinian Combo ..... 16
Ice Islands: Drifting Stations in the Arctic .... 18
Underwater Sound: The Not-So-Silent Ocean World .............................................. 24
FLIP, and the NORPAX Experiment ............ 28
In Search of Cyclops .................................... 32
University of Health Services ..................... 34
Getting There is Half the Fun ...................... 50
25th Anniversary: USS Recruit .................... 52

Departments

Profiles of the Fleet ................................. 38
Navy News Briefs ..................................... 44
From the Desk of MCPON ......................... 48
Navy Humor ............................................ 63
Taffrail Talk ............................................ 64

Historical Supplement

Blacks in the Union Navy ........................... 54

John A. Oudine, Editor

Associate Editors
John Coleman, News
Ann Hanabury, Research
Michael Tuffli, Art
E. L. Fast, Layout

Writers: JOC Marc Whetstone, USN; JO1 Tom Jansing, USN; JO2 Jim Stovall, USN; RESEARCH: Edward Jenkins; ART AND LAYOUT: JOC Davida J. Matthews, USN.

FRONT COVER: Candid photo of Chief of Naval Operations, Vice Admiral James L. Holloway III, USN, who is interviewed in this issue. Cover and photos of CNO in lead story by PH1 Rich Pendergist.

INSIDE FRONT: An F-14 Tomcat carrier-based multimission fighter aircraft is seen performing “touch and go” landings from USS Forrestal (CVA 59). The Navy’s first two deploying Tomcat squadrons have successfully completed operational readiness exercises. See page 3.
AN INTERVIEW WITH YOUR CNO
When Admiral James L. Holloway III took the helm as the Chief of Naval Operations in July of this year, he became the 20th in a line of naval leaders who have served the nation in this capacity since that office was established some six decades ago.

The highest ranking officer in the Navy, except when another naval officer holds the office of the Chairman of the Joint Chiefs of Staff, the Chief of Naval Operations is the President's principal naval advisor and the chief naval executive to the Secretary of the Navy. He is also a member of the Joint Chiefs of Staff and, as such, a principal advisor to the Secretary of Defense. His responsibilities reach out into the area of ships, aircraft and hardware, and even more important, the manpower to operate them.

Admiral Holloway has come to his new duties with a background that exemplifies those qualities the Navy demands of its top leaders, and as an example of the opportunities that the Navy has to offer. He has been a gunnery officer on a destroyer, a dive-bomber and jet fighter pilot flying from the decks of carriers, a squadron commander, a student of military science at the National War College, a commanding officer of ships, as well as a task force and fleet commander. Among his other qualifications is that of being one of the first nuclear-trained surface ship skippers—with assignment to the command of USS Enterprise (CVAN 65), he commanded the largest Navy ship in the world.

Admiral Holloway agreed to this interview with ALL HANDS in order to share his views with all those men and women now in the naval service, active and reserve alike.

The range of subjects is broad, and there is much of interest and significance to all components of the Navy family. So herewith—a look at the Navy, today and tomorrow, with the CNO.

**ALL-VOLUNTEER FORCE**

Admiral Holloway, in the era of the all-volunteer force, the Navy has been relatively successful in meeting its manpower requirements. What plans for maintaining required manpower strength do you have?

CNO: Our plans are focused in the areas of retention of qualified personnel now in the service, plus recruiting. We hope the recently approved Selective Reenlistment Bonus will assist our retention efforts in the critical skills. On a continuing basis we are examining other avenues such as increased training, shorter family separations, improved operating proficiency, and the concept of flexible deployments.

The recruiters have been doing a great job in their area, and I fully anticipate they will continue to do so. The new Reenlistment Bonus, which has just been authorized for use by the Navy, will allow us an added dimension in that we can now offer a bonus to those enlisting and qualifying in skills we have experienced difficulty in manning.

Retention involves everyone in the Navy—it is an all-hands project. Our aim: quality people in the necessary numbers.

What do you believe are the greatest incentives for a young person to remain in the Navy?

CNO: The incentives and opportunities in today's Navy are numerous. For those individuals who have determined their goals before the end of their first enlistment, the opportunities for continued professional development and training in specialized fields, as a careerist, are unlimited. Training varies from the Navy's own vocational schools to on-the-job training and off-duty education opportunities encompassed in the "Navy Campus for Achievement" Program.

Tuition aid is available to members to achieve night school and college level credit through correspondence courses, formal classroom instruction, and attendance at accredited colleges and universities. In addition, numerous paths to a commission are available through the Naval Academy, NROTC, NESEP and many other programs.

The Navy offers careerists, and their families, the opportunity to build a solid foundation for the future in terms of job security, job specialization, advancement, and financial security through insurance, medical and health care, survivors and retirement plans and benefits.

One of the most important incentives is that of job satisfaction. The degree of job satisfaction, of course, is proportionate to the effort applied. In this regard, I should like to point out that the Navy provides a way
of life that has no parallel in the civilian community. The opportunity to lead and make important decisions concerning the defense of our Nation, and to influence the professional development of subordinates is an integral part of the careerist's responsibilities. This aspect of what the Navy has to offer, I consider to be the most rewarding, because it is a challenge that requires the development of good leadership qualities and a real dedication to the principles and tradition for which our Navy stands.

It has been said that the popularity of the Armed Services has diminished somewhat in recent years. If true, what is the Navy doing to alleviate this situation?

CNO: Popularity is indeed an illusive quality to analyze. However, a public opinion poll conducted last fall by the University of Michigan indicated the Armed Services ranked first among some 15 public and private institutions when the question was asked, "How well do they serve the country?" Does that surprise you? True, it may not present the entire picture, but it does give some measure of improvement in the general mood of the public toward the military. Therefore, I would submit that the popularity of the Armed Forces is on the rise.

EQUAL OPPORTUNITY

The Navy's continuing campaign against racial discrimination and its program of equal opportunity has been widely publicized and praised. How do you rate its success and what additional steps, if any, do you feel need to be taken?

CNO: Our program has been quite effective. It has increased personnel awareness of such elements as personal worth and racial dignity, inequities in opportunity for women and minority personnel, and personal and institutional racism. Our basic goal remains the same—one Navy, a Navy family that places no artificial barriers of race, color, sex or religion. We are moving firmly and steadily toward making that a reality by implementing changes within the framework of disciplined, efficient, orderly and ethical naval operations.

Our success thus far should not lull us into thinking the Navy has fully achieved equal opportunity. It is my intention to continue affirmative action plans and to implement those policies and procedures geared to guarantee equal opportunity in the Navy with the understanding that our programs are not oriented toward one race or culture—but toward the Navy.

Continuing on the subject of personnel, can you tell us if the percentages of Navy women on active duty will be changed or expanded?

CNO: Both the overall numbers and the percentage of women in the Navy are increasing significantly. The number of enlisted women in the Navy at the
CNO: As you well know, the Navy is unique among the services because of sea/shore rotation requirements and the need to maintain required numbers of personnel assigned to the fleets. Nevertheless, we hope to be able to provide more personal stability than in the past. One of the more significant concepts which should assist us in this effort is “Homesteading,” that is, a concentrated effort is made to assign personnel (who so desire) to repetitive tours in the same geographic area.

One of the aspects of Navy life that many career Navy men and women eventually object to is having to move so often—not being able to put down roots. Do you think it will be possible for an individual to be stationed for longer periods in one area during his career, or to return to that same area after service afloat?

OFFICER PROGRAMS

One of the problems in the officer corps is retention of surface officers. Are there any specific plans for dealing with the situation?

CNO: I am personally concerned with the retention rate of surface warfare officers and committed to its improvement. One of the achievements of the Surface Warfare Officer Study, completed last year, was the detailed examination of every 1110 billet in the Navy to ensure that it did in fact require a qualified SWO. As a result of this study, I can now say that the SWO community is accurately defined, with hard core billets, clear-cut experience requirements and an attainable sea/shore rotation goal. Our basic aim is to enhance the sense of pride and identity within the SWO community.

Another result of the study was the expanded course of instruction at the Surface Warfare Officer School (SWOS). Commencing this year, nearly half of the newly commissioned officers ordered to sea in surface ships will attend this school either in Newport, R.I., or in San Diego, Calif. SWOS will provide these officers with practical training in division and watch officer duties as well as a practical foundation for attaining the demanding SWO qualification. Next year I expect 75 percent of the SWO candidates will attend a swos course, with an even higher percentage the following year.

I expect the recently approved Surface Warfare Insignia to serve as a bond for the entire SWO community. This insignia is now available to officers who are qualified.

I am an advocate of building a professionally strong surface warfare community which will attract and hold well qualified, highly competent naval officers and I will continue to support efforts in this direction.

Another retention problem in the officer corps involves aviators, especially those no longer eligible to receive flight pay. Are there any specific plans under consideration for dealing with this situation?

CNO: Yes. The enactment of the new Aviation Career Incentive Pay legislation has treated directly the problems of junior and senior officer retention. To attract and retain the junior officers, the system of
payment has been "front loaded." This places the higher rates in the earlier years and offers a large increase at the time the junior aviators are thinking about making the Navy a career.

For the senior officers, there will be no abrupt loss in pay. Flight pay will be reduced gradually as the amount of actual flying decreases until the 26th year when payment stops. A transition period of 36 months has been authorized to compensate senior officers who participated in a different program which was designed to provide flight pay for a full career.

Are the current facilities for officer input—the Naval Academy, NROTC and OCS—providing sufficient officers for the Navy? If not, what plans are being considered for increasing this input?

CNO: The Naval Academy and NROTC programs are the primary sources of our Regular Navy Unrestricted Line officers each year. The Officer Candidate, Naval Flight Officer Candidate and Aviation Officer Candidate programs provide the majority of our Reserve Unrestricted Line officer input. The sizes of the Naval Academy and NROTC enrollments are limited by law. Both are approaching the statutory enrollment ceiling, have long training pipelines, and provide a steady output. Output from the Officer Candidate programs fluctuates from year to year, depending on total officer requirements. The combined output from these programs is meeting current Unrestricted Line Officer requirements; we expect that we will meet future Unrestricted Line Officer requirements as well.

HABITABILITY

What steps are being taken to improve habitability in ships now being built and those planned for the future?

CNO: In ships currently under construction we are concentrating on:
- The use of newer, fire-retardant materials.
- Bulkhead sheathing and false overheads of the suspended ceiling type, to reduce maintenance as well as improve the appearance of the surroundings.
- Food service and food preparation facilities. Modifications presently being installed in active ships are a forerunner of the type of equipment being designed into new construction and future design ships. This is a rapidly changing area and NavSea and NavSup will be keeping abreast of improvements to ensure that ship specifications will reflect the latest and best equipment for shipboard use.
- Crew sanitary spaces. This includes countertop lavatories, mirrors with adequate lighting, water closet and shower doors and shower drying areas.

Future ship designs will emphasize functional grouping of living spaces. This approach organizes berthing, dressing, lounges and sanitary spaces into an efficient, integrated living system. Berthing spaces are planned to be separate from dressing spaces and lounges to
allow the individual to sleep, relax, shave and shower, or change clothes in separately assigned areas. Examples of new ship designs include two-man modular officer staterooms with built-in furniture, three- and six-man CPO berthing spaces and six- and nine-man modules employing the crew multipurpose functional concept.

While improvements are ongoing, much still remains to be done. Our intent in new ships is to provide installations that are contemporary with current shore-side commercial practices insofar as equipment, facilities and decor are concerned. We are paying particular attention to the individual need for privacy in the shipboard community.

CONSTRUCTION ASHORE

Where will the emphasis be in new construction programs ashore during your tenure?

CNO: For the last few years, we have been emphasizing facilities construction associated with an All-Volunteer Force, such as bachelor housing, community support facilities, medical facilities and essential operational facilities needed to improve fleet readiness. I will continue to give my total support to construction in these areas.

In addition to the vital "people" areas, we need to move ahead in modernizing our training facilities to accommodate the operational and maintenance trainers and simulators being procured for new weapons systems. At the same time, it is essential that we provide new or modernized facilities in our shipyards and naval air rework facilities that will provide a quick return on the capital investment by savings in other expenses. We will also continue our already sizable construction program to comply with air and water pollution abatement standards and laws.

Finally, we must concentrate on the more basic Navy missions in ships and aircraft while maintaining the delicate balance required in advancing that which is essential and urgent in "facilities" construction. I will make every effort during my tenure to achieve a proper and equitable balance.

There have been a number of base closings and consolidations in the recent past and others are now in the process. How will Navy be affected by these actions?

CNO: The objective of the past and ongoing realignments of shore installations has been to bring about reductions of a too-large shore establishment which would be commensurate with reductions of the operating fleet. The aim of course, is to improve efficiency and economy of operation.

During the past 10 years, the Navy experienced active fleet force level reductions on the order of 42 per cent for ships (941 to 523) and 21 per cent for aircraft (5014 to 3956). With force reductions of this magnitude, there must be a corresponding reduction and rescaling of the supporting establishment.

In this era of constrained defense funding and escalating costs, the economies achieved by the Navy's shore establishment realignment effort have allowed us to move forward with fleet modernization, new construction, and to replenish depleted inventories within limited budget resources. In achieving this objective, the Navy will benefit in the long term.

SPECIAL FORCES

The Special Forces that did such an effective job in Vietnam—how are we going to be able to hold on to this expertise?

CNO: Our UDT/SEAL and Coastal River forces provide the Navy with a high degree of operational flexibility and effectiveness. Experience has shown that this type of expertise is invaluable for "contingency response"—and nearly impossible to recreate if allowed to deteriorate significantly. Since the Navy has had to reduce in force across the board, the Special Warfare community has not been excepted. To lessen the impact of force reductions, Coastal River Squadrons/Divisions, for instance, have been taken into the Naval Reserve program with 45 per cent active duty personnel and 55 per cent Reserve personnel. (This equates to 570 active and 708 Reserve personnel.) Squadrons are located in Coronado and Little Creek, with the divisions homeported in Mare Island, Great Lakes and New Orleans. Action has also been taken to reestablish Naval Special Warfare Groups in each fleet as a definitive organization with a stabilized billet structure.

A recent NavOp stated that volunteers were being sought for explosive ordnance disposal training. Is this a result of current operations in Suez Canal?

CNO: The current vacancies in the EOD program are a result of a fleetwide post-Vietnam phase-down. The Navy EOD community is a small, but highly trained and unique, corps of munitions experts. The vast majority of these personnel are career oriented and many of them became eligible for retirement during the Vietnam conflict, creating a significant shortage with the end of hostilities.

Although Navy EOD forces are heavily committed to aiding in the reopening of the Suez Canal, there is an ongoing requirement for their expertise in support of Navy operations, projects and objectives for the foreseeable future.

In the area of "contingency response," can you tell us something about the future for mine warfare and countermeasures?

CNO: Mine warfare is undergoing fundamental changes in concept, equipment and weapons. This is evidenced by the emergence of the helicopter as the principal mine countermeasures sweep vehicle, and in the increasing depth capability and state-of-the-art of
mine mechanisms in existence and under development.
The last “generation” of naval mines was built for a specific mission—antisubmarine warfare. Technology has vastly improved, as shown by the MK 36 destructor used so effectively in the Vietnam conflict. New mines programs will continue to take advantage of this increased technology.

In the future are a new low-maintenance influence mine called “Quickstrike,” a mobile mine for standoff submarine launching, and deep-sea mines with a versatile capability.

The Mine Countermeasures (MCM) force as we have known it was structured around a need for ships to sweep prior to amphibious assaults. We built Minesweeper Launches (MSLs), Minesweeper Boats (MSBs), Inshore Minesweepers (MSIs), Coastal Minesweepers (MSCs) and Ocean Minesweepers (MSOs) in addition to various support ships to cover all the contingencies. However, this multitude of craft cannot sweep a modern minefield head-on with any degree of safety for ship or personnel. Further, as mines have become more difficult to actuate by sweeping and as airborne deliveries have improved, it is recognized that enhanced mine countermeasures are needed for all types of naval operations.

We are currently looking at several approaches to MCM, while retaining the MSO in commission. The helicopter is excellent for relatively shallow water sweeping and is expected to be a good minehunting platform. It is mobile and rapidly deployable wherever needed.

The hovercraft may well prove competitive, as might possibly the hydrofoil. For deep-sea MCM, a ship, probably dual-missioned, appears to be preeminent. A surface minehunter/patrol craft combining small size and a specific mission may well be the logical Naval Reserve Force ship, in keeping with the total force concept.

NAVY’S ROLE IN WORLD AFFAIRS

Do you think the U. S. Navy’s role and/or influence in world affairs is increasing or decreasing?

CNO: I believe our Navy’s role in world affairs is expanding and its influence increasing. From the founding of our nation, the United States has had a magnificent seafaring tradition. Since the beginning of the century when the United States became a world power with overseas interests and responsibilities, the Navy has played an increasingly important role in national foreign policy.

The involvement of the United States with the rest of the world continues to grow. We import more raw materials from overseas than ever before and must therefore sell more products overseas to maintain an even trade balance. Although we are not committed to the role of the world’s policeman, we are interested in stable regional balances of power. So long as our involvement with the rest of the world increases, the importance of the Navy will also increase.

In time of war, the Navy has provided a fundamental element in the defeat of overseas enemies. Since the end of the last world war, the Navy has continued to provide a key element in deterrence of aggression at all levels. Increasingly, due to its inherent mobility and flexibility, it has been the Navy which has been employed in response to crises, increasing tensions and to instability in overseas areas where American interests are involved.

I feel that the country’s involvement with the rest of the world will increase, that the Navy’s role in deterrence will continue and its unique suitability for bringing the national military power to the scene of crises will find greater application in the future.

What is the significance of the comparison of the U. S. and USSR in terms of the security of the United States, freedom on the high seas and world peace?

CNO: We are an island nation—dependent on the sea for access to our allies and the resources and markets essential to our economic growth and prosperity. Throughout the world, nations are becoming more interdependent for resources, products and services. Freedom on the high seas is more important to more nations than ever before.

Certainly, this fact is not lost on the Soviets. Although they are not so dependent on the seas, they have built a formidable navy, particularly in submarines, in order to become a maritime power with worldwide influence, capability and interests. My concern is that we, as a truly maritime nation, clearly recognize our vital dependence on the seas. Because of our worldwide commitments, we need a Navy not second, not equal, but superior to any other in order to preserve and protect freedom of the seas.

Our sea power played a major role when crises confronted us in such areas as Lebanon, the Dominican
Republic and Cuba. With respect to the Cuban missile crisis of 1962, our clear superiority in sea control was what enabled us to enforce a quarantine. We stand now at a point where the naval balance between the United States and the Soviet Union could tip either way.

Unless we intend to relinquish our position of maritime supremacy, we must vigorously pursue the modernization plans now in progress to return our Navy to the precedence that we have enjoyed in the past. If we do not have the individual and national will to maintain the capability to assert authoritative control over the sea areas on which we and our allies depend, we may come to face the prospect of having to negotiate from a position wherein we do not have equal advantage. In short, I believe that freedom of the seas, security of the United States, and world peace are interdependent and rest in large measure upon the Navy’s visible capability to deter encroachment by any potential aggressor.

Are you optimistic about the Navy’s ability to obtain necessary funds to carry out its fleet modernization?

CNO: During the recent past there has been worldwide recognition of the strength and sophistication of the Soviet Navy. I am encouraged by the growing perception of the American people of the danger inherent in permitting the Soviet Navy to become increasingly more capable than the U.S. Navy.

Our Five-Year Defense Plan reflects a well balanced program to modernize and improve our fleet capability vis-à-vis the Soviet Fleet. The Congress has in the past been prompt in providing those funds necessary for programs vital to national security, and I believe that the leaders in our nation consider that a Navy second to none is one such program. For that reason, I am confident that the funding necessary for fleet modernization will be made available, provided, of course, that we continue to make the most efficient use of the funds provided.

Here are highlight excerpts from a recent interview by Chief of Naval Operations James L. Holloway III with members of the Pentagon press:

Concerning the state of affairs in the Navy:

- “I feel that the organization is sound. Essentially our morale is good. Our material equipment is satisfactory. We have new weapons systems coming into the Fleet that I think will be superior to any of those that our competitors will be introducing. Those are on the plus side. On the other side, I recognize the fact that we still have lots of work to be done in recovering from the erosion of personnel readiness and ship maintenance that occurred as a result of the very high operating temps of the Vietnam war.

- “We’ve got to work to recover from our ‘over-tempoing’ of the past eight or nine years and move on into the future.”

- “In the next year our force levels will drop below 500 ships. That is of great concern to me as I see the continued building of the Soviet maritime capability . . . . The trend has been that we would ‘bottom out’ in about fiscal ’75 or ’76 in numbers of ships before our new ship construction program would start paying off in increasing numbers.”

Concerning the greatest strengths of the U.S. Navy in comparison with the Soviet Navy:

- “I would say that the greatest strengths of the U.S. Navy are the fact that we have a force, today, of 15 aircraft carriers and they (the Soviets) have no attack carriers as we visualize them, talking at this point in time. I see as a great strength in the U.S. Navy our submarine force quality. I see a great strength in the U.S. Navy in the quality of our ships, across the board; in their design for the tasks for which they are intended.

- “Finally, I think probably one of our greatest assets is: our people are better—they are more imaginative, with greater resourcefulness—and we have veterans. We have pilots who have flown over 200 missions in combat—we have destroyer skippers who have spent four or five years on the gunline—we have a lot of combat veterans in the U.S. Navy.”

Concerning the Soviet Navy:

- “Their strength, I would say, number one, is their submarine force, as it exists, and also their submarine production capability. A second great strength is their technological position with regard to surface-to-surface antiship missiles. I think a third strength is their air-to-surface missiles, or the air-launch antiship missile weapons which they have.”

Concerning new equipment and weaponry:

- “The Navy designed the F-14 for Fleet tasks and we think it does that job magnificently. The F-14 has been operating off USS Enterprise in the Pacific Fleet. This is its fleet introduction, and our experience has been that the aircraft’s performance has exceeded expectations.”

- “With the reduction in the total number of ships in the Navy, we have got to gain a greater multipurpose capability in each unit. I believe that we must emphasize in the U.S. Navy an offensive capability and that offensive capability would reside in missiles, such as Harpoon and extended Harpoon, or a long-range cruise missile that we might see in the future.”

DECEMBER 1974
IT'S ALWAYS THAT SEASON

HELPING HANDS

“Goodwill towards men” is a traditional Christmas greeting. Yet, in this sense, it is Christmas all year long for many U.S. Navy men and women.

Traveling all over the world, they sometimes witness sad and unfortunate events and sights, the ravages of hurricanes, poverty in underdeveloped nations, people without the basic necessities of life and children with no chance to receive an education. It is to the credit of the nation, the service and the individuals that Navy people willingly respond with unselfish goodwill, helping those less fortunate.

There are many official programs designed for such purposes. Operation Helping Hand in Vietnam, the Navy Civic and Domestic Action Programs, Project Handclasp and the Seabee Team Programs, to name a few. But, the individual sailor still remains the basic factor in a formula which amounts to a true humanitarian concern.

Working as a team, the crew of a Navy command or community often comes to the aid of those in need, using all the resources at hand and plenty of individual ingenuity to accomplish a mercy mission. One example: earlier this year an earthquake struck the city of Shimoda, on Japan’s Southern Izu Peninsula, where several hundred houses were damaged, numerous injuries
were sustained and several deaths were recorded. The city was a shambles, and its main industry, the tourist trade, was totally disrupted. Immediately, individuals of various local Navy commands and Seventh Fleet ships, along with local social and religious groups, responded with contributions of money, canned goods, bedding and household items. The large harbor tug USS *Kilnanny* (YTB 787) delivered nearly 3000 pounds of relief supplies and a check for 893,000 yen ($3200) donated by U. S. Navymen.

In another huge disaster, people in the flood-stricken Medjerda River Valley in Tunisia were near starvation because relief supplies were being used up more rapidly than they could be replaced. Bakers aboard the carrier USS *Forrestal* (CVA 59) responded by working through the night to make 1600 loaves of bread. These were airlifted by the ship's helos to the Tunis Airport and then delivered along with other supplies to flood victims stranded by the raging water.

U. S. Navy ships have responded on a smaller scale to the needs of others. Hardly a year goes by when one doesn't hear of Navy members painting an orphanage or donating books to a school located in a remote jungle.

The men of USS *Davidson* (DE 1045) are an example. During a WestPac cruise they took up a collection for an orphanage in Olongapo City, Republic of the Philippines. They reached their original goal of $500 in the first hour and ended by donating a total of $850 to the home. Rugs for the orphanage were also donated by another U. S. Navy ship's crew. Navy people at nearby Subic Bay Naval Base and Cubi Point Naval Air Station regularly contribute to the orphanage's cause.

Crewmen of USS *Bryce Canyon* (AD 36) undertook
another project for orphans last year. While deployed to Kaohsiung, Taiwan, they discovered that the nearby Ping Tung Orphanage needed repairs. Each weekend, men from Bryce Canyon traveled for one and a half hours over extremely rough roads to do what they could to improve the facilities. They screened windows, repaired the roof, dug a well, and accomplished electrical rewiring. They also topped it all off with a Christmas party for the children, complete with gingerbread men, candy and soft drinks, and gave the children a large Christmas gift, four swing sets.

This same spirit of humanitarianism is displayed by stateside commands as well. Four Navymen from NYC Bainbridge, Md., last year helped residents of the nearby town of Port Deposit convert an abandoned schoolhouse into a community center for the children. The basement was made over into a recreation hall for special events, and other rooms were furnished with pool and ping-pong tables. A library and reading room, and an arts and crafts center were also built in the old school. The surrounding seven acres were cleared for basketball courts, baseball diamonds and a picnic area.

Another example is the men of the Navy Cargo Handling and Port Group of Williamsburg, Va., who heard about a poor family in the area who needed help improving their home. The family was not eligible for public assistance, yet they were unable to pay for the needed improvements themselves. Their two small sons were subject to colds and other troubles because of inadequate shelter and substandard sanitation. The local social services bureau had acquired money through community appeals and the Navy men pitched in and built the family a new, two-room, cinder-block house, including indoor plumbing, electricity, insulation and a wood-burning stove. Area Navy Wives' clubs donated furniture for the family's new home.

Navy Wives' Clubs all over do similar good work. The club at the Naval Communications Station, Honolulu, has adopted a young Indian boy. Since the father was unemployed, the Navy wives contributed to the boy's support and education. The ladies and their children also write regularly to him and his life is now a little better because of his many new friends.

The Enlisted Wives' Club of the carrier was John F.
**Kennedy (CVA 67)** made life a little easier for another youngster. They collected funds to aid in purchasing a specially designed wheelchair for a 13-year-old paraplegic undergoing treatment in Kansas City. The boy, one of a family of six children, will be better able to get around on his own now, thanks to *Kennedy*’s wives.

Navy men and their wives, acting as individuals, have also done many good works for others. A master chief boatswain’s mate and his wife, stationed in Charleston, S. C., spend long hours collecting cake box bonus gift coupons with which to purchase kidney dialysis machines for the Medical University of South Carolina. At last count they had accumulated more than 2.5 million points and purchased three such machines. They are hard at work on their fourth purchase.

Another couple, Machinist’s Mate 1st Class Reed, F. Sampson and his wife Kathy, stationed in Norfolk, have taken an active part in the battle to help prevent infant crib deaths, a disease of unknown origin which is the leading mortality cause in this country of infants between two weeks and one year of age. After the loss of their own son they became members of the Tidewater Guild for Infant Survival, Inc., a nonprofit group formed to combat the disease and help others who have lost children because of it. They both spend a great deal of their time speaking to local groups about infant crib deaths, including the Navy Wives’ Clubs in the area.

These are only some examples of the many good works Navy men and women have done and are continuing to do. Hundreds of similar events occur each year. In addition, there are thousands of Navy people who donate their time as Boy Scout leaders, Little League managers, Sunday School teachers, drug abuse counselors and in dozens of other useful activities. Most go about their business quietly, receiving no applause or even recognition. Most of them would probably not want it anyway, for they are satisfied with the knowledge that they have done their share towards promoting goodwill towards men—and, peace on earth. This Christmas let’s all take a second to look around us and consider what each of us might do to aid our fellowman.

—JO1 Tom Jansing, USN
Operation Shipmate

Operation Shipmate, which began in 1969 at the Naval Station Charleston, S. C., involves youngsters ages 11 to 17 from an environment that offers little chance to develop many healthy interests.

Since inception, more than 1776 underprivileged youths have participated in one of the 10 four-day sessions held each summer. Hosted by the Navy, the operation is sponsored jointly by a local commercial company and the Charleston Office of Economic Opportunity.

Development of Operation Shipmate's schedule is based upon the needs, interests and abilities of youths. The basic principles are to provide opportunities for participation on an individual basis, to include group activities, to have many and varied activities, to enlarge the youngsters' interests for satisfying and rewarding experiences, and to furnish opportunities for participation in out-of-doors activity.

Above: "Breathe deeply," HM2 Stanford instructs a cooperative youth. Right: A thorough dental exam was included, the first for many participants.
The four-day schedule represented both mental and physical challenges. Shipmates were given vigorous calisthenics each day. Marine Barracks personnel supervised a modified Marine physical fitness test during each session. Those who passed the test were awarded official AAU certificates. Physical fitness was stressed along with nonsmoking and drug education.

Each Shipmate was also given a physical examination by the base medical department. If problems were found, the youth was referred to the proper authorities for treatment through the Office of Economic Opportunity.

High points of weekly sessions were tours of ships in the area. Here Shipmates watched Navy men, some not much older than themselves, involved in essential and technical work. Other highlights included eating at Navy galleys, barracks life, a tour by tugboat of the Navy waterfront, evening movies, basketball, bowling, volleyball, softball, swimming, a fire drill and demonstration of firefighting equipment.

On the final day of each four-day session the young men were treated to a picnic where commanding officer trophies were presented to the top three picked as "Captain's Choice," "Counselor's Choice" and "Camper's Choice."

Measures of Operation Shipmate's success are indicated by the happy, self-satisfied look on the face of every youth at sessions' end, and by the sense of accomplishment the volunteers gain themselves.

—Story and photos by PH1 Milt Putnam
USS Monticello (LSD 35) got two birds with one stone during her recent two-pronged endeavor on the island of Tinian. The event showed that the Navy can combine a necessary exercise with a humanitarian Civic Action Program.

Actually, Monticello carried out a comprehensive, high-impact, three-day Civic Action Program before undertaking a two-day landing called Exercise Quick Jab.

Upon arrival from Guam at Tinian in the Marianas in June, 200 Marines of “D” Company, Battalion Landing Team 1/4 and 100 sailors were offloaded from Monticello along with heavy road grading and repair equipment. Monticello is skippered by CDR John J. Flynn and the Marines aboard were led by Marine CAPT Ken Cole.

In soaring temperatures the sailors and Marines accomplished road grading projects and repairs to vehicles. They also undertook partial construction of the island’s Civic Center while painting other structures. Minor construction and welding jobs were also completed during the three-day program.

Welders repaired equipment parts and a broken irrigation system. Painters spruced up the island’s municipal buildings and also added new screens to the schools. Heavy equipment operators spent the period grading the island’s roads and putting them into excellent condition while clearing underbrush and 3000 square yards of beach area. A historic site on the island was also cleared, while basketball nets and backboards were installed in the Tinian Civic Center.

Numerous bags of cement and 2000 cement blocks
were offloaded from Monticello for use in a separate building project being accomplished by the islanders themselves.

Making friends was also part of this Civic Action Program. A jeep and water trailer, street lights, bulbs, screens, sporting goods, paint and tools were donated to the islanders.

Following the day's construction and repair work, the battalion's Marine band entertained. Highlight of the affair was an evening barbecue for the men who took part in the program.

Nor was the ship herself ignored. The ship's small craft ferried islanders to and from shore for shipboard visits and a closer look at the dock landing ship.

The Tinian visit was wrapped up by Exercise Quick Jab, a small-unit exercise which included an afternoon rehearsal and a predawn landing at Unia Lam Lam Beach on Tinian's northwestern shore. This was the same area of the World War II landings on the island; the beach is now part of the island's military retention land.

Monticello's mammoth stern ramp was used in the landing debarkation which was preceded by a Navy Underwater Demolition Team and an advance party of Marines who were landed on the beach in rubber rafts the evening before the main part of the exercise. The frogmen, once ashore, charted and marked the best path for the LTVs—tracked landing vehicles—which followed later.

Approximately 150 Marines were landed on the small beach during the rehearsal phase of the exercise. Thanks to their efforts and those of the Underwater Demolition Team, the following landing on Unia Lam Lam Beach just before dawn brought Exercise Quick Jab to a successful conclusion.

—Story by LT Dale R. Wilkerson
—Photos by PH3 Scott Stuart and LT Wilkerson
ICE ISLANDS
Drifting Stations in the Arctic
T-3, known also as Fletcher's Ice Island, is a section of glacier ice, now about 100 feet thick, which has been under observation since 1948 and occupied intermittently by U.S. groups since 1952.

A number of other United States Arctic drifting stations have been in operation for varying periods of time, including Station Alpha which was established on an ice floe in 1957. Station Charlie, another U.S. station to be located on a floe, was set up in 1959 as a joint venture between the Office of Naval Research and the Air Force.

For many years T-3's camp has been occupied, initially by the U.S. Air Force and, since 1962, maintained and supported continuously by the Naval Arctic Research Laboratory which is operated under contracts by the University of Alaska and ITT Arctic Services for the Office of Naval Research.

Beginning in 1960, the Arctic Research Lab has established six additional drifting stations in the Arctic Ocean. ARLIS I (Arctic Research Laboratory Station) was established on an ice floe on 10 Sep 1960 by the icebreaker USS Burton Island.

In order to reach the floe, the icebreaker had to penetrate the Arctic pack ice more deeply than had been done at any time previously. ARLIS II, a second ice-island station, was established in May 1961. It was evacuated near the Arctic Circle east of Greenland after four years of continuous occupation. ARLIS III, IV, and V were small, temporary stations set up on the ice pack for about three months each during the spring of 1964, 1965 and 1969 respectively, about 150 miles northeast of Point Barrow.

All the drifting stations have now been abandoned except T-3 which is on a standby status.

Here is an account of the ice islands and the hardships endured by the men who brave life on a drifting ice block to probe the secrets which affect weather, the environment and commerce.

Fletcher's Island isn't on any tropic cruise itinerary. It is, in fact, a floating block of ice that was "discovered" electronically before it was ever sighted. The island is also known as T-3 from the first radar contact (see below) which harned of its existence back in 1948. The Air Force then found it adrift in the Arctic two years later. Fletcher's T-3 ice island is now a floating platform from which Navy scientists probe the secrets of the Arctic Basin. These are of considerable importance to the Navy and mankind in general.

About 10 per cent of the world's ocean area is covered all or part of the year by ice. It is, therefore, a justifiable supposition that such ice has a profound effect on weather, the environment and commerce. That's why the study of what goes on in the Arctic's watery regions is important.

Among other things, the water's ice cover effectively reduces heat exchange between atmosphere and the ocean by reflecting solar radiation in summer and suppressing the ocean's heat loss to the atmosphere in winter. Not only does the presence or absence of sea ice affect the interaction of atmosphere and ocean in the polar regions, but also it probably affects the entire globe, or at least a large portion of it.

Fletcher's Island, one example of several floating ice islands, has had a long history of service to science. In 1950, the drifting ice block was identified as "Radar Target Number Three" when it was 850 miles from the North Pole and drifting northward. When the floating island was 120 miles from the North Pole, it was evacuated near the Arctic Circle east of Greenland after four years of continuous occupation.

Fletcher’s Island, one example of several floating ice islands, has had a long history of service to science. In 1950, the drifting ice block was identified as "Radar Target Number Three" when it was 850 miles from the North Pole and drifting northward. When the floating island was 120 miles from the North Pole, it was evacuated near the Arctic Circle east of Greenland after four years of continuous occupation.

All the drifting stations have now been abandoned except T-3 which is on a standby status.

Here is an account of the ice islands and the hardships endured by the men who brave life on a drifting ice block to probe the secrets which affect weather, the environment and commerce.

Fletcher's Island isn't on any tropic cruise itinerary. It is, in fact, a floating block of ice that was "discovered" electronically before it was ever sighted. The island is also known as T-3 from the first radar contact (see below) which harned of its existence back in 1948. The Air Force then found it adrift in the Arctic two years later. Fletcher's T-3 ice island is now a floating platform from which Navy scientists probe the secrets of the Arctic Basin. These are of considerable importance to the Navy and mankind in general.

About 10 per cent of the world's ocean area is covered all or part of the year by ice. It is, therefore, a justifiable supposition that such ice has a profound effect on weather, the environment and commerce. That's why the study of what goes on in the Arctic's watery regions is important.

Among other things, the water's ice cover effectively reduces heat exchange between atmosphere and the ocean by reflecting solar radiation in summer and suppressing the ocean's heat loss to the atmosphere in winter. Not only does the presence or absence of sea ice affect the interaction of atmosphere and ocean in the polar regions, but also it probably affects the entire globe, or at least a large portion of it.

Fletcher’s Island, one example of several floating ice islands, has had a long history of service to science. In 1950, the drifting ice block was identified as "Radar Target Number Three" when it was 850 miles from the North Pole and drifting northward. When the floating island was 120 miles from the North Pole, it was evacuated near the Arctic Circle east of Greenland after four years of continuous occupation.
ICE ISLANDS

occupied by Air Force Colonel Joseph O. Fletcher and others but the Air Force left it when the ice island became relatively immobile near Point Barrow in spring 1960. On 12 Apr 1962, command—or custody—officially was transferred to the Navy’s Arctic Research Laboratory.

During the years in which Navy scientists have occupied the island, a considerable amount of information about arctic environment has been gathered, although a complete understanding of the interaction of ice, water and atmosphere still eludes them. These secrets, however, may yield to scientific investigation when all the data are collected.

Aims of the Joint Study

Since 1969 the Navy has been joined by several federal agencies and private institutions to study the interaction between the atmosphere’s field of motion, the ice pack and the liquid ocean. The study aims at predicting ice movements and "deformation," and the heat exchange between the ocean and the atmosphere.

Prediction of ice conditions, of course, is also basic to the operation of both surface ships and submarines. A knowledge of ocean atmosphere heat exchange is necessary to understand the interaction between what is called "polar heat sinks" and global climate.

The joint project to study polar ice and its various effects was proposed in 1969 and is still underway. It is called AIDEX for Arctic Ice Dynamics Joint Experiment and aims at answering questions relating to ice "deformation," how it relates to stress and strain, internally and externally, and how the heat balance is affected.

The answers to the questions of the joint project were considerably hindered in the beginning by the inability to predict the internal ice stress or even measure it directly. With an array of ice stations, however, it seemed possible to find at least a part of the answer. Researchers have also obtained data and scientifically valuable descriptions of the ice in the test area through frequent aerial survey flights and current "sensing" techniques.

The transfer of momentum between atmosphere, ice and ocean is regulated by the roughness of the ice topography. At the same time the topography of the ice is itself affected by the strains generated from wind and water stresses. The relationship of these stresses and strains is the subject of study. Scientists are also striving to develop a valid method of estimating bottom roughness of ice formations and they feel this may be achieved through airborne observations of top surfaces, and then relating the top and bottom "profiles."

The scientific research on ice floes and pressure ridges has already provided an insight into the physical processes by which the ice pack is deformed. Important in this research is the continued observation of the spacing and length of pressure ridges in the ice and fracture patterns with the surrounding ice.

... all have now been abandoned except T-3, which is in standby status...
To the layman the subject is a complex one, but one essential fact that he understands is that the changing condition of the ice can be a pivotal factor as it concerns the exchange of heat between ocean and atmosphere.

The work accomplished by Project AIDJEX and the ice islands will culminate in the formulation of a "predictive" model which, hopefully, will yield forecasts of ice formation and drift on the basis of a few easily measured quantities. Such a model will make it possible to estimate from a given atmospheric pressure field what the ice conditions in a certain location will be. Predictions will also be possible to the extent that atmospheric pressure can be forecast.

In the end, AIDJEX information will be correlated with the modeling on a global scale of atmospheric and oceanic circulations. Only then will it be possible to examine the global consequences of natural or artificial modifications of the arctic ice cover.

Enduring Hardships

When reading about arctic research, it is difficult to imagine the hardships endured by the men who do such work. Some excerpts from a report concern activities supported by the Office of Naval Research and the author writes about Fletcher’s T-3 Ice Island and ARLIS II, another ice island which, for a time, drifted within a short distance from Fletcher’s Island. ARLIS II, however, lost its usefulness when it drifted into the Greenland Sea. Here are a few typical passages excerpted from the report:

"The year 1964 started with true arctic weather on both stations. Wind and cold hampered all operations, especially the continuing flights to supply fuel using the DC-4 aircraft. Storms, blowing snow and mechanical problems with the aircraft continued to plague the resupply in spite of tremendous efforts. At the end of
ICE ISLANDS

January, the official temperature at ARLIS II was -55 degrees Fahrenheit and the temperature at T-3 dropped below the scale on all available thermometers. The temperature was estimated to be -72.5 degrees Fahrenheit. At the end of the month, the appearance of twilight to the personnel of T-3 was highly encouraging, though very dimly manifested on the southern edge of the horizon.

"The month of February brought sunlight and the beginning of a solution to the fuel problem at ARLIS II and T-3. The first C-130 aircraft load of fuel from Thule, Greenland, was delivered to ARLIS II on the 19th. Later loads replaced the DC-4 Cat (tractor), which had been giving trouble and was sorely needed for work on the airstrip. These deliveries marked the beginning of the end of an extremely trying and frustrating period for all hands concerned.

"The author personally recalls this time as one of dogged persistence well tried by wretched frustration. One bright point that did mark the month was the establishment by the Arctic Research Laboratory of ARLIS III, a small temporary floe station (for magnetic studies) . . . thus, for the short duration (101 days) of ARLIS III, the United States had three drifting stations in the Arctic Basin lying in the region from 100 miles north of Barrow to 150 miles south of the North Pole.

"March saw more fuel delivered to each island. The comfortable supply of fuel and the rapidly increasing daylight made the storms of blowing snow seem less severe and the labors of clearing and shoveling much easier. Many windy days at both stations meant that many days were spent dragging the runways. The uninhibited would find it hard to imagine how greatly the depressive combination of cold and darkness affects men's everyday lives. The simplest tasks become chores and difficult tasks become well-nigh impossible."

In May 1965, the position of ARLIS II had ended its usefulness as a floating observation station and USS Edisto had been sent to evacuate its personnel.

The report for that period records, "On May, the winds again shifted the ice enough to open a few leads and the next day Edisto closed to within 17 miles of ARLIS II. The commanding officer and LT Boosman flew to the island by helicopter, landing on ARLIS II at 1430 amidst a very happy scientific party. The next two days proved to be the most difficult for Edisto. ARLIS II was surrounded by a five-mile ring of very thick, well-cemented polar pack. Outside this ring was another 10 plus miles of 10/10ths polar ice cross-hatched with thick pressure ridges and heavy floes. The ship battled the ice for three more days and closed 11 more miles with the island. On the afternoon of the ninth, the ship moored to the ice 6.7 miles from the camp, on the edge of the doughnut-shaped ring of heavy ice, which surrounded the station.

"Flag-lowering ceremonies were conducted and the physical removal of equipment began. Helicopter...

...DOWN TO THE LAST

Keeping Fletcher's T-3 Ice Island supplied with fuel was always a problem and 1974 has been no exception. At one point, the men on T-3 were down to their last barrel of fuel oil. If a plane couldn't get through, death was almost a certainty. Antarctic Development Squadron Six (VXE-6) which had had similar experience with such problems at the other end of the world, was called upon to help. Even these old hands, however, declared a landing on T-3 to be a hair-raising experience. Here is an account of their first mission to T-3 and how it felt to travel at 100 miles per hour on skis across a block of ice floating in the Arctic Ocean.

"The flight (by LC-130, ski-equipped Hercules transport) to T-3, 300 miles from the geographic North Pole, began after the four-engine, VXE-6 aircraft stopped in Canada and Thule, Greenland, to pick up a scientist and a special snow-removal caterpillar.

Navymen and scientific workers on T-3 unload bladders of heating oil delivered by Hercules aircraft from Antarctic Squadron VXE-6.
operations were hampered by poor visibility and 'whiteout' (sudden and complete loss of visibility). The condition, however, did not affect the arrival at the ship of a weasel train with 3500 pounds of equipment from ARLIS II after a two-and-one-half-hour trip across the ice. . . .

"The honor of being the last man to leave the station was given to Carl Johnston in recognition of his long tour on the island. Carl spent a total of 41 months on ARLIS II. . . .

"In the course of the four-year lifetime of ARLIS II, the station was used by 14 separate research projects, 118 scientific personnel, 132 support staff, visitors, etc., and 87 members of aircraft crews for a total of 337 people. The saga of ARLIS II was completed, but the drifting research station programs continue with the investigations being carried out by T-3."

The report continues, recounting about Ice Island T-3 much the same kind of activity and hardships which took place at and were endured on ARLIS II. The narrative closes with an account of work still to be accomplished with these words:

"Thus the Navy's drifting research station program continues from T-3, whose present position (at that time well inside the tight Beaufort Sea Gyre) offers the possibility of many years of service to science."

Ice Island T-3 is now in a standby status. It has been a platform for research over eight years since the above forecast.

—Robert Neil

BARREL OF FUEL OIL . . .

"As we expected, locating the moving island with radar was a problem but it wasn't the only difficulty we anticipated. The heavy machinery on board presented a distinct hazard in what was sure to be a rough landing.

"When we reached the island, we made a test run by flying inches above the ice with the tips of our skis marking a trail behind us. Photographs were also made at this time.

"When we actually landed on the ice, I thought the aircraft would shake apart. For 15 seconds, the world seemed a blur of snow (from whirling props). That landing had to be one of the craziest, wildest, bumpiest rides anyone ever had."

Antarctic Development Squadron Six may never forget that first landing on T-3. Indeed, they are having ample opportunity to refresh their memory. The 10-man crew of the 130,000-pound aircraft which made the first flight to Fletcher's T-3 Ice Island now takes part in regular operations in the T-3 area.
"... contrary to the opinion of many, the ocean is not a silent world."
Most moviegoers are familiar with the classic scenario — sweaty men in a submarine listen as a destroyer passes overhead searching with its sonar pings, then slowing to listen for noise from the sub.

The use of acoustic energy is common to these operations. Because such energy is predictable and travels for great distances through water, sound is a practical Navy detection tool. As newer and more sophisticated sonar equipment is developed, however, the need for accurate information on the behavior of sound becomes increasingly important.

Oceanography is a multidisciplinary science incorporating many fields that can be applied to the marine environment — physics, geology, chemistry, biology, meteorology and geography. To know how sound behaves underwater, NavOceano examines the sea floor, analyzes seawater, studies marine animals and plants, and measures ocean waves, tides and currents as well as studying the acoustical properties of the marine environment.

Because the ocean is the traditional environment of the Navy, the Fleet must know as much as possible about it to provide for the nation’s defense in war and for the safety of all who use the seas in peace. The Naval Oceanographic Office (NavOceano) is uniquely equipped to furnish oceanographic information and support the Navy. Without its studies and surveys, the effectiveness of sonar would be drastically curtailed and a vast amount of information necessary for maximum naval effectiveness would be lacking.

The research and development done by NavOceano scientists contribute to the basic knowledge of the ocean environment and are the basis for applications to instrumentation, platforms and weapons systems. NavOceano reports the results of its surveys and research in many publications to aid in long-term planning of military and nondefense programs and furnishes, as well, synoptic data for ongoing operations at sea.

Sonar, according to the Naval Oceanographic Office, detects targets in two ways — actively (echo ranging) and passively (listening). A target can be tracked and identified using either mode if the signal from the target is sufficiently strong. But underwater sound signals don’t always have the required strength. The intensity of acoustic energy is diminished as sound travels through the water or is reflected either from the sea floor or sea surface.

Here are some reasons why sound is lost as it travels through water:
- Wave fronts spread as distance from the source increases.
- Some sound energy is converted to heat. This is called absorption.
- Sound waves are refracted because of differences in sound speed gradients.
- Sound waves are scattered by sea life or by the sea surface.
- Some energy also may be lost at the sea floor (bottom loss) because of absorption and scattering.

Other things happen to underwater sound, too. Whenever a sound wave strikes a boundary between masses of two different densities, and sound speeds, it will be reflected. For example, if the sea surface and bottom were completely smooth and the water clear, acoustic signals would reflect in the form of a perfect echo.

But perfection is rare. The sea usually has irregular upper and lower boundaries and contains many particles and organisms. Whenever a sound pulse hits a rough sea surface, a rocky or hilly bottom, suspended particles or marine organisms, much of the sound is returned in the form of many small, unwanted echoes called reverberations. These are sometimes strong.
enough to mask other desired signals and can limit the performance of active sonars.

To learn all about sound and its relationship to the Navy, the Oceanographic Office conducts a continuing, worldwide ocean data collection program. Acoustic measurements are made both from ships and aircraft.

Collection of bottom loss information usually involves two ships—a "source ship" which drops acoustic devices into the water, and a "receiving ship" with a hydrophone lowered into the water to detect the strength of the signals received.

A single aircraft may be used very efficiently to collect these acoustic data, too. By dropping modified sonobuoys and signal charges from NavOceano's specially equipped airplane, scientists can accurately measure sound propagation in any part of the ocean.

Combined ship and aircraft operation is used to study long-range sound propagation. The aircraft flies along a trackline that extends several hundred miles from the receiving ship. Acoustic signal devices are dropped from the aircraft into the water and the signals are received and processed aboard the ship. Bottom loss characteristics, on the other hand, are determined by direct measurement.

NavOceano also studies the influence of marine organisms on underwater acoustics. Scientists use acoustic measurements in conjunction with biological sampling to determine the relationships between marine life and sound scattering. These kinds of measurements allow NavOceano scientists to form an extensive data bank of acoustic information which can be used for many different projects.

In addition, mathematical models are being developed to describe the acoustic properties of an area. These models can be used to predict the performance of Navy acoustic systems. They also may be used in regions where acoustic data is lacking.

Contrary to the opinion of many, the ocean is not a silent world. For man to hear what goes on beneath the waves, mechanical instruments are required. Hydrophones, for example, continually receive ocean background noises which are classified as follows:

- **Self-noise.** This is any sound that is caused by the operation of the platform (such as the ship on which the hydrophone is mounted). Noise made by other ships and industrial operations is also akin to self-noise.

- **Ambient noise** is background noise produced in the marine environment. It includes sounds made by fish and sea mammals.

- **Geological disturbances** such as earthquakes and volcanoes also, of course, produce noise as do physical sources such as ice and water turbulence.

Both self- and ambient noises, of course, can seriously hinder the efficiency of underwater listening devices. The former, however, can be reduced by electronic filtering or by shutting down unnecessary sources of noise aboard ship. A project designed to determine noise levels of traffic in major oceanic ship lanes also is underway and a study to define noise produced by offshore oil drilling is also possible.

Ambient noise, on the other hand, is a different
But self- and ambient noises are not the only distractions which bedevil sonar operators. Effective airborne and surface antisubmarine operations depend on prompt and accurate recognition of submarine-like contacts. The term “submarine-like contacts” is used because sonar systems may be affected by similar acoustic signals produced by, or reflected from, large mammals.

NavOceano scientists are especially interested in several species of whales because they have the ability to return submarine-like echoes or to produce sound. The scientists have been classifying whales as to physical and acoustic characteristics as well as the probability of their being in Fleet operating areas.

Using aircraft, ships and fixed platforms, scientists record the sounds and distribution of whales in their natural environment. This information is used to determine patterns of migration and distribution within the oceans.

Data on sonic abilities of whales is made available to the Navy to help sonar operators determine whether their contact is a false target or an unknown submarine to be tracked. Knowledge of the type of problems introduced by false targets may also enable the designers of detection equipment to modify future sonar systems to discriminate against misleading biological signals. In addition, information on the distribution and migratory patterns of the various whale species can aid in conservation of this resource for the future. Therefore, the important statistical data collected by NavOceano scientists is reported in journals to other interested scientists and to the international whaling commission.

The Integrated Command ASW Prediction System (ICAPS) is another of the many projects by which NavOceano helps the Fleet perform its mission more effectively. The objective of ICAPS is to make a carrier task force independent of environmental and acoustical shore support. It will give the task force an immediate picture of environmental factors that affect ASW operations.

ICAPS’ computer programs automatically merge the water temperature values observed by task force units with stored historical data on temperature and salinity to produce a sound speed profile for the entire water column. Acoustic predictions are then calculated from the sound, speed profile and other information such as bottom loss and sea conditions. Information is provided as listings of detection ranges for various acoustic systems. Other visual products such as sound velocity profiles and acoustic ray plots are displayed graphically using a cathode ray tube.

The Integrated Command ASW Prediction System has been successfully tested on several aircraft carriers during naval exercises and now is being adapted to existing shipboard computers. With ICAPS, the antisubmarine warfare force has the self-contained capability to predict sonar performance during operations and thus to use the instruments and forces effectively.
Civilian and military scientists have just finished an experiment in the Pacific Ocean north of Hawaii designed to discover the basic causes of weather in order to forecast it more accurately in the future.

The North Pacific Experiment (NOPAX) used some unique equipment—a ship that stands on end in the water and a "monster" buoy. A special P-3 aircraft from the U. S. Naval Oceanographic Office and two U. S. ships also participated.

The purpose of the experiment, according to senior scientist Dr. Russ E. Davis of San Diego, was to acquire routine data on the air-sea transfer of heat, motion and water vapor as a basis for more intense studies of how ocean temperatures cause climate changes.

The unmanned Alpha Buoy, nicknamed "monster" because of its size and fierce red paint, provided a stable platform for instruments recording routine surface meteorological measurements. It was also used in coordination with FLIP (Floating Instrument Platform) for physical oceanographic measurements.

FLIP and her crew measured the ocean's heat flow, profiled currents and studied transfers of heat from the surface to various ocean depths.

FLIP's 355-foot length consists of more than a football field of the tube-like hull, with only about 55 feet of bow. When the tube portion is flooded with seawater, the ship flips on end, reducing the bobbing movements of the ship from yards to inches.

The crew's quarters, electronics shop and other working areas are in the 55-foot prow, rising above the water. Measuring instruments may be mounted anywhere along the full 300 feet of submerged hull, making location, depth and orientation of those instruments controllable to a higher precision than can be achieved with any other platform.

The P-3 aircraft augmented FLIP's intensive observations of currents, winds, air and sea temperatures, and eddy fluxes in the atmosphere.

The 30-day period spent at sea doesn't mean the end of work for the scientists. Months of studying the data...
collected at sea with the use of computers will determine future courses of investigation and experimentation into the basics of weather.

As a result of this experiment at sea and many more months ashore studying the data collected, scientists hope that a better understanding will eventually lead to more accurate weather forecasts.

This operation hasn’t been FLIP’s first time at sea, of course. She became operational in 1962 and worked for six years in the Pacific for the Scripps Institute of Oceanography, University of California, to investigate acoustic problems. In early 1969, she was towed out of the Pacific and into the Caribbean, in the vicinity of the island of Barbados, to participate in a three-month, large-scale, air-sea-interaction field experiment.

Like this latest, that project was designed to increase man's knowledge about weather and the effects the ocean has on it.

FLIP was born out of a need to develop a very stable, yet movable, platform for underwater research. She was conceived and designed by Dr. F. N. Speiss, Director of Scripps' Marine Physical Laboratory (MPL) and Captain C. B. Momsen Jr., of the Office of Naval Research, assisted by other scientists from Navy-oriented organizations.

Once she is towed to her research location, it takes about 15 minutes for FLIP to do her thing. The portion of the buoy that remains above the water contains laboratories, living quarters and engineering space. When it is time to return to home port, the vessel is “flipped” back to its horizontal position by blowing water from the ballast tanks with compressed air. The crew of six are, by necessity, extremely versatile and all are capable of making the flipping operation alone (with the exception of the cook). FLIP can accommodate nine scientists in addition to the crew.

FLIP weighs about 600 tons. A 12½-foot diameter steel cylinder, which extends 100 feet below the ocean surface, supports the cabin. Attached to this cylinder is a cone-shaped section, flaring outward and downward 50 feet until it becomes a 20-foot diameter cylinder which extends downward to the full 300-foot draft. It is this 60 per cent reduction in diameter that occurs within the buoy that gives the platform a natural period for heaving which lasts about half a minute.

Because FLIP must function in both horizontal and vertical attitudes, operating machinery and essential living equipment are swing-mounted or “gimballed,” like a ship’s compass, so that they stay horizontal when the ship is in any position. It is very stable in stormy seas and to date there has never been a case of seasickness when FLIP is in her working position.

Clockwise: This P-3 aircraft aided through aerial searches for drifting buoys, recording temperatures and tracking ocean currents. FLIP is outfitted for many different experiments. Living quarters aboard FLIP. This small room served as galley, dining area and lounge. Research Vessel Washington tows the Alpha Buoy out of Pearl Harbor to join FLIP at the NORPAX site north of Hawaii. Alpha Buoy and FLIP moored at Pearl Harbor.
The name Cyclops brings to mind a race of legendary one-eyed giants. Navy archives, however, has its own fabled Cyclops.

During World War I the naval collier USS Cyclops disappeared mysteriously while en route from Bahia in Brazil, to Baltimore, Md., with more than 300 persons aboard. To this date, no trace of any part of her has been found, nor has any acceptable explanation been offered for her disappearance. Most theories involve the Bermuda Triangle off the North Carolina coast. Here, the clashing of warm Gulf Stream currents with cold North Atlantic waters has for centuries victimized ships, rightfully earning the designation “Graveyard of the Atlantic.”

Cyclops’ course would have taken her through the triangle.

The collier left Bahia in March 1918, carrying a heavy load of manganese ore. She replenished her coal supply with a stop at Barbados and, shortly after, reported fair weather in communicating with a merchant vessel and indicated no problems. What happened next is one of the Navy’s most baffling riddles—she never reached port, none of her crew or passengers were ever heard from, no distress signals from her were received and, strangest of all, no trace of wreckage was ever found.

Then, in 1973, a retired Navy diver reported he thought he had stood on the deck of the sunken mystery ship in 1968 while diving on what he believed to be a different hulk. The possibility he might be right led the Navy to assign the salvage ship USS Opportune (ARS 41) the task of relocating this hulk, and confirming whether it was Cyclops.

The search for Cyclops is not a particularly surprising assignment for the 90-man crew of Opportune. The 213-foot ship conducts salvage operations, provides at-sea lifting capability, fights shipboard fires and repairs and tows ships which have been battle damaged, stranded, sunk, beached, set afire or abandoned at sea. This multifaceted mission brings her a wide variety of assignments.

During one six-month Mediterranean deployment Opportune crewmen fought two major fires aboard merchant ships, recovered a downed helicopter and assisted in salvaging an Air Force jet aircraft. Shortly after returning from that cruise, she recovered a rocket payload from a depth of over 5850 feet. The rocket had been used to photograph a solar eclipse and the recovery of the payload from a depth of over a mile was a record for undersea recovery.

Many of Opportune’s jobs are not the type that can be written into a schedule. A plane crash off the coast of Myrtle Beach, S. C., required the salvage ship to get underway on four hours’ notice, with many of her crew away on Christmas leave. She arrived on the scene shortly after midnight to recover portions of an Air Force A-7D jet aircraft. Working through darkness and fog, Opportune crewmen recovered vitally needed components and turned them over to the Air Force before dawn.

On another occasion she was called away from her scheduled operations to recover a crashed Navy F-4 Phantom jet off the coast of North Carolina’s Nags Head. After locating the site, Opportune sailors recovered wreckage that enabled experts to determine the cause of the crash and ultimately, perhaps, help prevent similar mishaps.

The unexplained disappearance of Cyclops, however, has generated numerous Navy wardroom discussions as to the cause.

Some of the more probable theories offered include:
- She was torpedoed by a German submarine or struck a mine.
- A shift of cargo and ballast caused her to capsize.
She failed structurally, broke in two and went down immediately.
Grinding of the manganese ore weakened her bottom causing it to drop out suddenly.
She was struck by a meteor.

While each theory has its merits, there are also logical arguments which downgrade each of these concepts. Opportune hummed with only one question, "Is this indeed Cyclops and will we be able to determine the cause of her fate?"

The "hulk" was quickly located and for three days the crew of Opportune probed the depths. Both scuba and hard-hat divers went over the side. Initial reports were inconclusive. A remote-controlled underwater television camera was used to explore the hulk, with crewmen crowding the topside monitor. They saw starfish at home on the ocean floor and other fish startled by the camera's high intensity light. Then an anchor chain showed. The camera bumped and scraped along the ocean floor and suddenly it clanged against the side of a ship. It was a regular Jacques Cousteau feature of marine life and disjointed closeups of a rusting hulk.

Artifacts were brought up—the ship's bell, heavily encrusted with barnacles, caused a stir of expectation. A sharp knife sliced through the barnacles to get at the ship's name beneath. But there was no name, nor any other marking on the bell.

From the divers' reports a sketch began to take shape. Slowly the bow, booms, and bridge took form on paper. A picture appeared and there was no longer any question—this was not Cyclops.

The identity of that hulk is still unknown. From what was found, divers know it is a freighter-type vessel, probably of World War II vintage, probably a foreign ship. Some of the artifacts recovered may lead eventually to discovering her identity, but that's a job for others.

Now Opportune is underway again for new tasks and new problems. For the present, the sea has kept the secret of Cyclops. But for Opportune, there will be other days and other secrets to probe from the depths.

—Story and photos by JOC Tom Streeter, USN
In the past, the United States Armed Forces have made use of a large number of the available doctors in this country. According to one authoritative survey, 80 per cent of all male physicians in the nation under age 35 have served at one time or another. This abundance of medical talent was available largely through the Selective Service law.

Even though the draft has ended, there are now about 13,000 physicians still on active duty, but the needs of the military services, especially for career men and women, continue while the supply dwindles. Since 1967, the services have required an annual input of between 4000 and 5000 doctors to satisfy health care requirements.
Now that there is no draft, where are military career-oriented doctors coming from in future years?

Here is news that will interest those who are concerned about the future of military medical care as well as Navy men and women in the health professions who would like to advance in their chosen careers.

In the last four years, more than 4500 doctors entered active duty service annually, responding to their obligations under the draft. But their retention rate has been less than one per cent!

What then can be done to increase attraction or retention of physicians?

Money alone isn't the answer, for the salaries of military physicians have recently been increased to approach the civilian competitive market. However, physicians, more than most, recognize the humanitarian challenge as a part of the compensation they receive for their labor.

A "Uniformed Services University of the Health Sciences," established by an act of Congress, will go far toward satisfying that challenge. Here are some facts:

- The university will offer service medical personnel additional opportunities to teach, carry on research in many aspects of health, and move up the ladder of professional advancement along with their colleagues in the civilian community.
- In addition, they will have an opportunity to develop not only in new and different areas of medical education, but also in the area of health care—that can be adopted by the three military services and society in general.
- More important to you, as a Navy man or woman utilizing health facilities, the university medical school will eventually stop the rapid turnover of physicians in the armed forces.
• It will save the government money in training and indoctrination costs because there would be greater permanency of service.
• Students attending this university will receive an education equal to the best in America, and the staff and faculty will be of highest quality, drawing upon the expertise of both the civilian and military communities.

The act authorizing the establishment of a Uniformed Services University of the Health Sciences is intended to educate individuals as career military people (although up to 20 per cent of the physicians may enter other federal medical programs to fulfill their seven-year obligation).

The university will have the capability of awarding doctoral degrees in medicine, dentistry and veterinary medicine as well as appropriate degrees or certification in nursing, pharmacy and allied health professions. It will perform an important role as well in developing leadership in health education and research. Its mission, in addition to the foregoing, includes:
• Exposing students enrolled at U.H.S. to a variety of medical experiences.
• Generating new knowledge through research to help solve national problems as well as military problems in the prevention, diagnosis and treatment of disease and other aspects of health.
• Cooperating with the three military medical departments and the Assistant Secretary of Defense (Health and Environment) in developing model health science programs and health services.

University policies will be established by a nine-man Board of Regents appointed by the President with the approval of the Senate. A site adjoining the National Naval Medical Center in Bethesda, Md., has been selected for the construction of the new Uniformed Services University of the Health Sciences. (This selection is in keeping with the law's requirement that the univer-
sity be established within 25 miles of the District of Columbia.)

The initial intent of U.H.S. is to construct a basic science facility having the ultimate capability of handling up to 150 medical students at each year level. The curriculum of its School of Medicine will be integrated with the teaching programs of three military hospitals in the greater Washington area, initially. In addition, it must have sufficient flexibility in design so as eventually to encompass additional students in dentistry, nursing, veterinary medicine and allied health.

The use of the National Naval Medical Center, Walter Reed Army Medical Center, and Malcolm Grow Air Force Medical Center remains a necessity for the clinical education and experience of the students. It is also planned to use Wilford Hall Air Force Base Hospital in Texas as a primary clinical teaching center.

The university's effectiveness as an education center will be enhanced not only by its proximity to the three military medical teaching hospitals but also to the famed National Institutes of Health and the National Library of Medicine.

While there is a shortage in the health professions, the most critical is that of physicians. Therefore, Congress placed the highest priority on training physicians at this university.

The med school curriculum will be designed on a four-year basis to provide a superb foundation in medical education but fail to encompass areas peculiar to the military environment. For example: emergency medicine, tropical diseases, parasitology, the adverse effects of hostile environments such as high altitudes, deep sea or the polar regions. The military physician has been the pioneer and the primary investigator in all these areas and many others. Military physicians have, for years, been in the forefront of the giant advances in medicine, but have frequently not received the recognition that has been accorded to their civilian colleagues.

Where will the students of U.H.S. come from?

- Students will be selected by procedures, recommended by the Board of Regents and prescribed by the Secretary of Defense, that emphasize the basic requirement that all candidates demonstrate sincere motivation and dedication to a career in the uniformed services.
- Students will be commissioned officers and will serve on active duty in the pay grade of O-1 with full pay and benefits.
- The university could review the available backlog of enlisted and officer personnel as a reservoir of student resources. Given the appropriate academic background, many career service men and women have the motivation, practical experience and military exposure necessary to fit into the university.
- Graduates of the medical school will be required to serve on active duty for at least seven years after graduation, not counting time spent in internship and residency programs. Up to 20 per cent of each class may perform other federal health duty for seven years in lieu of serving in the Armed Forces.

The university will be under development for the next several years. It is anticipated, however, that the first class will begin within the next two years. Look for future announcements as the university progresses toward becoming an operating institution.

—Melvin Museles, CAPT, MC, USN

Since July 1973 when the doctor draft ended, the number of new general medical officers who normally staff Navy dispensaries and outpatient clinics, has dropped sharply. The number of specialists on active duty, however, has remained stable and specialty medical care is generally available in all Navy medical facilities.

To alleviate the problem of declining numbers of general medical officers, the Navy is using nurse clinicians and physician assistants to carry out patient care responsibilities formerly performed by a physician (see October Navy News Briefs). It is also accelerating construction and modernization of medical facilities; regionalizing health services on a triservice basis; increasing emphasis on recruiting and retention of physicians (see October Navy News Briefs); offering scholarships for students in the health professions and establishing a Uniformed Services University of the Health Sciences.

Although some may notice the Navy can't always furnish all the medical care desired by all the Navy family all the time, they should remember:

The Medical Department is still totally committed to taking care of all members of the Navy family. Active duty personnel will, of course, come first.

Care will continue for dependents, retirees and survivors insofar as it is possible within the limits of Navy facilities and without endangering the Navy Medical Department's primary mission.
He even makes 'house' calls

If you think the traveling "country doctor" has long since vanished from the scene, look again. He hasn't in the Navy, especially overseas. LCDR (Dr.) Allan K. Yung of the Yokosuka Naval Hospital has recently begun packing his bag and making regular trips to various U. S. military hospitals around that country.

Dr. Yung, an ear, nose and throat specialist, began his travels as a result of the current military doctor shortage which created a shortage of specialists at many of the dispensaries and hospitals in Japan. This situation required Navymen and their dependents who were patients to suffer the expense and sometimes emotional trauma of traveling to different locations such as Yokosuka or other larger facilities to get a specialist's treatment. In an effort to alleviate this difficulty, the doctor "visitation" program was started. A typical request for this service was recently made by the Naval Security Group Activity, Misawa, to ComNavForJapan. The Misawa Air Force Hospital is now one of Dr. Yung's regular stops.

Although born and raised in China, Dr. Yung graduated from the Medical College of Virginia in 1966 and entered the Navy in 1969. (He has also studied acupuncture in his native Hong Kong.)

He is highly in favor of the overseas visitation program, which he indicated was a real need from the patient's perspective. He stated that the doctor may lose some time in travel, but his travel time is offset by improving the efficiency and broadening the capability of the hospitals he visits. All preparatory work (X-rays, lab work, etc.) is done well in advance. Consultations and surgery are arranged on a very tight and efficient schedule and, most important, the operating room staffs are extremely well qualified.

In an era of computerized medical science, Navy Dr. Allan Yung carries on the tradition of bringing the doctor to the patient.
PHAN PATTI PHILLIPS

Focus on a photographer

Airman Photographer's Mate Patti Phillips awakens. She looks at her clock and stares into the darkness of morning, thinking of her parents and family in Everett, Wash. Snapping on a night lamp she swings her feet onto a plush red rug; day has begun for the 21-year-old Navy photographer.

After a breakfast of milk and doughnuts Patti, one of three photographers assigned to the headquarters, Sixth Naval District, Charleston, S. C., hurries to the photographic laboratory for the morning brief.

At 0800 she checks her equipment and asks questions about jobs she will be shooting that day. Ten minutes later she is out on an assignment: the subject is an agreement between the naval station and city officials on furnishing fire protection to each community, civilian and Navy. Both the commanding officer of the station and the mayor are on hand to make the cooperation effort official.

After leaving that assignment office, Patti rushes to the Veterans Administration Hospital on another photo story. Then, some time before 1300 she manages a hasty lunch.

Back at work, Patti processes the morning's film and places it in the drier. She grabs her 35 mm and is off again to do a photo story about a woman engineman stationed at Charleston.

Returning to the photo lab she writes captions for the day's photos and starts the engineman story. Early evening finds her back in the darkroom. Two hours later, with everything printed up, she completes the engineman story and the day's work.

"I enjoy working long hours," explains Patti. "Besides, I love my job. I enlisted in the Navy because of the educational opportunities. Right now I plan to make the Navy and photography a career."

Patti has completed Photographer's "A" and Photojournalist "B" schools at Pensacola, Fla. She is looking forward and waiting until she can apply for the Navy's one-year photojournalist course at Syracuse University in New York.

—Story and photos by PH1 Milt Putnam

DECEMBER 1974
BM1 ENRIQUE LOSONGCO

... walking a little taller

First class in all respects!
That's the expression used by the men of USS George K. MacKenzie (DD 836) to describe Boatswain's Mate 1st Class Enrique Losongco of Agana Heights, Guam. The 37-year-old Navy veteran, a native of Guam, is one of two boatswain's mates selected for meritorious advancement to BMI in 1974.

"I was quite surprised when they told me that I was recommended for meritorious promotion," he said. "When I was actually selected from among all the top performers, I was in a state of shock. When I came down from the clouds, I walked a little taller."

Losongco, from a family of 12 children, breaks into a broad grin when he speaks about his early years on Guam. "There weren't too many Losongco's until my father and his brother got married. Now there are at least 20. Large families are very common on Guam.

"I really do miss the village fiestas at home," he said, during an interview aboard the destroyer. "Did you ever taste Guamanian barbecued spareribs, chicken, roasted pig and the trimmings?"

The village fiestas will have to wait, however. Losongco's wife and their four children are living in San Diego while he serves in MacKenzie, currently deployed to the Western Pacific.

Speaking of life at sea, Losongco related that he spent the majority of his 18 and one-half years in the seagoing Navy. "I've served on a cruiser, destroyer, two repair ships, a floating drydock and a refrigerated stores ship."

Talking about his early days in the Navy, he remembers, "When I first came into the Navy in 1955, all Guamanians were in the steward rating. Shortly after that, you were permitted to go into other fields if you were qualified."

He laughed when he told about his first trip to the States and reporting to San Francisco. "You know Guam is only about 35 miles long and I had never been away from the island before. Well, they told me I was going to be assigned to San Diego.

"I said to myself, 'that's probably a long drive; maybe more than a half-hour.' I rode on a train for the first time and spent the next 10 hours looking at my watch, waiting. Wow! What an indoctrination to the United States.

"I have since been to Australia, Hong Kong, Japan, Hawaii, Taiwan, the Republic of the Philippines, Singapore, and Djakarta in Indonesia. The Navy even sent me back to Guam in 1969 for a tour of duty," he said.

Losongco, who is assigned to the Master-at-Arms team in MacKenzie, spoke about his day-to-day dealings with other members of the crew.

Speaking of racial difficulties that have developed in the world in recent years, he said, "Being Guamanian is my nationality and I'm extremely proud of my island upbringing. I've never had a problem because I am a..."
Guamanian. My theory—if you treat people well and abide by the rules and regulations, then you don’t have problems. I think I get along with everyone—it doesn’t matter what they are as long as they do their job.

“I feel most people look for positive leadership. To be a good leader, you must assert yourself and present a good bearing. You must be more presentable and positive than the men you’re leading. That’s what I try to do—be forceful, but not overbearing.”

MacKenzie’s commanding officer, Commander D. E. Buck, wrote the Chief of Naval Personnel that . . .

“One of Petty Officer Losongco’s greatest assets is his ability to empathize and communicate with his men. His deep concern for his men enables him to establish a pride and spirit among subordinates far beyond realistic expectations. He can truly be described as a human relations expert . . .”

There you have it. World traveler, father, leader and Navyman . . . First Class in all respects!

—Story and photos by LCDR Tony R. DeMarco

DTC DUANE O. RITTMEYER

‘. . . now open wide’

As the toothpaste ads proclaim, tooth decay is an increasing problem of modern civilization, but if Chief Dental Technician Duane O. Rittmeyer has anything to do with it, such a thing will never attack the bicusps off the crew in his ship.

Rittmeyer is presently serving aboard the guided missile cruiser USS Oklahoma City (CLG 5), flagship of Vice Admiral George P. Steele, commander of the U. S. Seventh Fleet.

“I spend a good part of my time on administrative paperwork,” Chief Rittmeyer said, “but I have been trained to assist the dental officer by cleaning teeth, taking and developing X-rays and performing general dental tasks.

“You know how valuable our work is if you’ve ever had a toothache,” he added. “If you have a chipped or broken tooth in front, the benefits we provide can change your whole outlook and improve your morale. If a patient needs a lot of work, I like to assist the doctor in providing the necessary treatment from start to finish. It gives me a feeling of pride and accomplishment.”

The dental officer and his staff are responsible for the dental health of more than 1100 men aboard Oklahoma City, including the staff of the Seventh Fleet.

“I’ve been in the Navy since 1955,” Rittmeyer said, “I enlisted because I had a desire to go to sea, to visit some of the different countries around the world.”

The chief and his wife, Masako, make their home in Yokosaka, Japan, under the Overseas Family Residence Program. Under this program, the chief spends almost half of his time at home, where otherwise he might spend up to eight months a year away from his wife. Rittmeyer met his wife in Japan and likes the country. He feels that the Japanese people are among the finest in the world.

After recruit training, the chief attended Class “A” Dental Technician School and, later, Class “B” School where he learned advanced dental skills. Reporting aboard Oklahoma City in June 1970, he has since visited practically every major port in the Western Pacific, including Taiwan, Korea, Thailand, Okinawa, Singapore, Malaysia, Hong Kong and the Republic of the Philippines.

Planning to remain in the Navy, he wants to complete his college degree work. He is already qualified to enter the hospital administration field once he retires from the naval service.

—Story by JOSA G. M. Kadinger, Photos by PH1 T. Green

DECEMBER 1974
HM1 C. RAY GRAVES

Building morale

"Ladies and gentlemen, welcome to a trip in C. Ray’s empire. A little thing we do in the name of love, accompanied by music, to capture your heart. Today your heart—tomorrow the world. For, you see, the sun never sets on the good rock and Doc. The C. Ray Show is in your neighborhood."

Speaking over the musical background, Hospital Corpsman 1st Class C. Ray Graves opens one of his nightclub shows. His off-duty hobby is being a disc jockey and he can produce almost any type of program from country and western to rock to soul music. Ray also appears as master of ceremonies at local rock concerts and banquets, and entertains at garden parties.

Ray’s DJ career started when he was 17 and was asked to appear on a campus radio station program at Texas Southern University. "I liked it and have been doing it now for 14 years," he said.

Ray now owns a $7000 collection of equipment which includes a variety of speakers, tape decks and professional turntables. His private record and tape library resembles that of a professional radio station.

He often works with teenagers and younger children. "I feel more relaxed with youngsters and I enjoy playing for them more than I do for others. This type of job is a good opportunity for me to give the teenagers something to do to keep them off the streets," he remarked. "One of my recent shows was at the Pala Indian Reservation with the children in the Head Start Program."

Not all of Ray’s time with teens has been spent entertaining them, however. He has also worked as a counselor for various drug rehabilitation programs overseas and in the States.

In spite of his crowded schedule, Ray finds time to play handball and racquetball and coach football teams. "I have coached the defensive units for the Virginia Roadrunners, a semiprofessional team, and for the Leathernecks, 1973 interservice runner-ups in Okinawa," said Ray.

Even with shows and sports, he still manages to relax and enjoy another of his hobbies, a cookbook collection. "I’ve gathered recipes from every country I’ve been to," he stated, "and I can whip up some very tasty meals when the occasion arises."

A 12-year Navy veteran, Ray is currently working with the Hearing Conservation Program, Preventive Medicine Unit, 1st Marine Division. Since going through boot camp he has attended six medically related schools.

"I enjoy being in the Navy, it’s a lot of fun for me because I like my job as preventive medicine technician. I’ll stay around as long as I enjoy it," Ray concluded.

—Story by LCPL R. W. Morris
—Photos by CPL Mike Creamer and LCPL J. Herrera
"Duty with the Seabees is really great; there isn't another unit anywhere in the Navy I could be happier with than that 302 crew," said the young Seabee.

Construction Builder John W. Stetzer, assigned to Construction Battalion Maintenance Unit CBMU 302 at Subic Bay Naval Station in the Republic of the Philippines, almost sounds like a Navy recruiter. Stetzer, a 1968 graduate of Memorial High School in Eau Claire, Wis., tells how he became a Navy Seabee.

"After graduating, I became a bricklayer apprentice. I was on a three-year apprenticeship. My vocational instructor was a Seabee in the Naval Reserves and he told me all about them. He thought very highly of the 'sailor-builders' and suggested I give some thought to joining the Navy after my apprenticeship was up," recalled the bricklayer.

Stetzer continued, "I wanted to choose the branch of service that offered the best construction school, and from what everyone, including my father who had served with a Seabee unit during World War II, told me, the Navy was it."

He entered the service in January 1973 and, after completing recruit training and Navy Builder School, reported to CBMU 302 at Subic Bay.

He recalls his first impression of the Philippines. "Since this was my first trip overseas, my first thought was how different it is. I wasn't prepared to see the things I did. There is such a distinctive lifestyle here and it took me a long time to adjust to the culture. Now that I've been here almost a year, I'm pretty much at ease with things," Stetzer said.

CBMU 302 is one of the last units of its kind in existence. Most were disestablished after the conflict in southeast Asia ended.

"I've enjoyed the time I've spent at 302 because we're constantly involved in so many different types of construction work here," he said. "I feel that I have learned more here at 302 than I could in three years at another command. If there's something I need to learn, it's here for me."

Looking ahead towards a career in the Navy, Stetzer said, "I have about two years left on my present enlistment and I haven't made up my mind about the Navy as a career. I guess that depends on how things go during the next two years. I've started taking college courses here at the base education office because whatever I decide to do I want to have a good education behind me.

'I must have been walking around half asleep! I mean, it's taken me all this time to realize how much of an opportunity I have to further my education while
PAYMENT OF SELECTED REENLISTMENT BONUSES
BuPers has announced that funds are currently available for lump-sum payment of selected reenlistment bonuses (SRB) for personnel who have reenlisted or will reenlist during FY 1975. All lump-sum payment requests cannot be approved, but those who submit or have submitted requests prior to reenlistment this fiscal year have a better chance to receive it. Personnel are urged to verify SRB eligibility with their career counselor or personnel office before reenlisting.

NEW ENLISTMENT ADVANCEMENT SYSTEM IN OPERATION
The Navy has modified its enlisted advancement system to place more emphasis on performance and leadership in advancement consideration. The change, instituted with the August 1974 exams, emphasizes a "whole man" concept, concentrating on an individual's performance and reducing the emphasis of examination scores. Details on procedures used in computing final multiples for those personnel who took the August exams are contained in NavOp 182/74 (DTG 211314Z Oct).

YEAR'S FIRST QUARTER RETENTION RATES STILL ON RISE
The Navy retention rates for the first quarter of fiscal year 1975 have risen from the rates achieved in FY 74. First-term reenlistments numbered 5409 or 37.7 per cent of those eligible; that figure is up from the FY 74 figure of 32.9 per cent. Career reenlistments reached 80.7 per cent of those eligible with 10,508 reenlisting for the second or subsequent time. The FY 74 career reenlistment figure was 80.3 per cent.

CNO CONFIRMS NEW EM UNIFORM CHANGEOVER DATE
CNO has confirmed 1 Jul 1975 as the date for all male personnel E-6 and below to change over to the new service dress uniform, except for those with less than one year of obligated service remaining. The new uniform, the result of recommendations by retention study groups and surveys conducted between 1966 and 1970, has already been issued to nearly 200,000 recruits.

NEW POLICIES FOR TEMPORARY LDOs OUTLINED
Temporary limited duty officers who have twice failed of selection under the Officer Personnel Act for promotion to the grade of lieutenant commander subsequent to the FY 75 Lieutenant Commander Selection Board will be required, depending upon their total years of active service, to select one of the following options:
Those who are retirement eligible on 30 Jun 75 will be required to transfer to the Retired List not later than 1 Jul 75 or to terminate their temporary appointment not later than 30 Jun 75 with subsequent transfer to the Fleet Reserve or to revert to their permanent enlisted rate not later than 30 Jun 75 and continue on active duty.
Those who are within two years of retirement eligibility may remain on active duty in their temporary grade until retirement eligible. At that time, they must either transfer to the Retired List or terminate their temporary appointment with subsequent transfer to the Fleet Reserve. A third option is also available which consists of reversion not later than 30 Jun...
75 and continuation on active duty in their permanent enlisted rate.
Those with less than 18 years of active duty on 30 Jun 75 must revert to their permanent enlisted rate and either continue on active duty or be discharged. SUPERSNOTE 1800 of 16 Aug 74 has further details.

- **RESERVE/GUARD OMBUDSMAN OFFICE ESTABLISHED**
  An ombudsman office has been established by the National Committee for Employer Support of the Guard and Reserve. It is designed to help resolve employer-related problems for members by utilizing nearly 300 Advisory Council members throughout the country, plus other key Reserve and Guard personnel.
  Any Reservist or Guardsman who is experiencing some difficulty with his employer which prevents his meeting military training schedules, may contact the office directly by writing to: Ombudsman, Employer Support, Arlington, VA 22202.

- **UNIFORMS BY MAIL**
  The Navy Resale Systems Office has announced that the Naval Uniform Shop, Brooklyn, N.Y., now offers all Navy personnel a worldwide mail order service for custom-made and stock uniforms, and uniform accessories. Order forms can be obtained at most Navy Exchanges and Naval Uniform Shop representatives are located at a number of activities to assist. Mail orders should include the appropriate size, description and color of the uniform or item desired. Personnel ordering by mail must furnish their social security number and complete mailing address with all orders, correspondence and remittances. A catalog of available items can also be obtained for the nearest exchange or by writing to the Naval Uniform Shop, 3rd Avenue & 29 Street, Brooklyn, N.Y. 11232.

- **NAVAL SURFACE WEAPONS CENTER CREATED**
  In a move toward greater economy and efficiency, the Naval Ordnance Laboratory, White Oak, Silver Spring, Md., and the Naval Weapons Laboratory, Dahlgren, Va., have been consolidated into a new Naval Surface Weapons Center. Approved with an effective date of 1 Sep 1974, the consolidation is scheduled to be completed by July 1975. The new center will be the principal research, development, test and evaluation laboratory for Navy surface warfare systems, ordnance technology and strategic systems support. It is estimated that savings of about 55 civilian overhead positions will be achieved largely by attrition.

- **NAVY ALCOHOLISM PREVENTION PROGRAM TRAINING**
  Commands are reminded that the Alcoholism Training Unit, San Diego, offers a two-week training course for personnel assigned to local Navy Alcoholism prevention programs. The course is designed to familiarize students with the concept of alcoholism as an illness which is both treatable and preventable, and to provide them with information and training in recognition, referral, treatment, rehabilitation and follow-up of the alcoholic and alcohol abuser. The course is not intended to make full-time paraprofessional alcoholism counselors.
  Graduation from the course leads to classification as a Collateral Duty
Alcoholism Counselor (CODAC) NEC 9521 for students who meet all other requirements of this NEC. Classes will convene early in each month of 1975 except July and December. Complete details of eligibility, submission of applications, class convening dates and quotas can be found in BuPersNote 5356 of 2 Oct 1974.

- **SELECTION BOARD PROCESS ENDS MERITORIOUS ADVANCEMENT PROGRAM**
  The selection board process for advancement to Chief Petty Officer has eliminated the need for the meritorious advancement program for E-6s. Under the selection board process, increased emphasis is being placed on performance and leadership in determination of final multiples for E-6 candidates. Also, a revision of the E-4 through E-9 advancement examination passing scores will allow a 92-95 per cent passing rate. Meritorious advancements in individual cases such as Sailor of the Year selectees will continue.

- **CAREER COUNSELING CODE-A-PHONE AT BUPERS**
  A 24-hour code-a-phone has been installed at the BuPers Retention/Career Counseling office to record career-related inquiries from the Fleet. The number to call is Autovon 224-2041, or commercial 202-694-2041. When calling, be ready with the following: Name (including spelling), rate, SSN, command to which attached, phone number where you can be reached for reply (commercial or autovon) and concise statement of inquiry. Callers requesting information in the same area of inquiry on individuals within the command should also give names (including spelling) and SSNs of each.

- **APPLICATIONS FOR ENLISTED EDUCATION PROGRAM NOW BEING ACCEPTED**
  The Navy Recruiting Command is accepting applications for the Broadened Opportunity for Officer Selection and Training (BOOST) Program. This program is open to enlisted personnel who may have been educationally deprived but have demonstrated the necessary qualities and desire to become naval officers. Those interested in the program should see their education officer or career counselor. Applications are due by 15 Feb 1975. Details of the program are contained in BuPers Manual articles 1020350 and 1020360.

- **OFFICERS’ COLLEGE DEGREE PROGRAM EXPANDED**
  The College Degree Program provides an opportunity for officers to earn a baccalaureate degree through full-time study at a civilian college or university. This program was expanded recently and permits up to 18 months of study, with waivers possible for up to 24 months of study. Formerly, this was a one-year program, but it was expanded to compensate for the termination of the Undergraduate (BS/BA) Program at the Naval Postgraduate School.
  Application procedures for the College Degree Program are described in CNETInst 1520.4. The next deadline for applications to reach CNET (Code N-1312) is 1 Feb 1975 for officers desiring to be considered by the selection board which will convene on 8 Apr 1975. Boards meet twice a year to select officers for this program.

- **NUCLEAR POWER SCHOOL SLATED TO MOVE**
  The Naval Nuclear Power School (NPS), Mare Island, Calif., is expected to move to Orlando, Fla., in early 1977. The move, part of the Navy’s program
to consolidate technically oriented training, is the final step in combining nuclear power training. NPS, Bainbridge, Md., is scheduled to move to Orlando during FY 76. Relocation of NPS Mare Island will affect approximately 145 military staff members and their families.

- **LHA TRAINING COURSES BEGIN**
  A new training program designed to teach personnel how to handle equipment on the Navy’s new amphibious assault ships (LHAs) began recently at the San Diego Fleet Training Center. Thirty courses ranging in length from one to 19 weeks are offered to both officers and enlisted personnel.

- **APPLICATION DEADLINE NEAR FOR ADVANCED RESEARCH STUDIES.**
  Applications are now being accepted for postdoctoral research associateships available at five separate Navy research activities. The next program begins 1 Jul 1975. Applications must be submitted by 14 Jan 1975 and supporting documents must be received by 12 Feb 1975. Candidates must hold the equivalent of an M.D., D.D.S. or Ph.D. degree.
  Areas of research in which associateships are awarded include: experimental medicine, immunology, undersea medicine, aerospace medicine, behavioral sciences, biochemistry, biophysics, environmental stress, microbiology, parasitology, virology, biomagnetics, physiology and radiation biology. For details on application, specific fields of interest, and a list of required supporting documents, write: Associateship Office (JH 606), National Research Council, 2101 Constitution Ave., NW, Washington, D. C. 20418.

- **EIGHT MORE WOMEN SELECTED FOR FLIGHT TRAINING**
  Four active duty and four civilian women were recently selected to be the second group of women to go through Navy flight training. They are: ENS Mary C. Giza, Naval Communications Station, Honolulu; ENS Mary L. Jorgensen, VT-10, NAS Pensacola; ENS Catherine C. Mills, Naval Inshore Warfare and Amphibious Group, San Diego; Officer Candidates Linda E. Vaught; Pamela A. Hicks; Jean F. McCaig; Donna L. Spruill and Jill E. Brown.

- **F-14 SQUADRONS REASSIGNED**
  SEACNAV has announced that two additional F-14 squadrons will be established on the east coast in April when VF-142 and VF-143 are moved from NAS Miramar, Calif., to NAS Oceana, Va. The two squadrons are presently in transition from F-4 to F-14 aircraft. The transition is expected to take until March, at which time the units will be moved east. They will be assigned to Carrier Wing Eight, based at Oceana and are scheduled to deploy aboard USS America (CVA 66).

- **FIVE SHIPS CITED FOR SERVICE, EXCELLENCE**
  Three East Coast and two West Coast ships have been recognized for their ability to make full power and execute sustained high-speed operations during Insurv (inspection and survey). The ships cited were USS Pharris (DE 1094), USS McCandless (DE 1084), USS Valdez (DE 1096), USS Reasoner (DE 1063) and USS Towers (DDG 9). USS McCandless was singled out for overall cleanliness, quality, maintenance and excellent shipboard attitude.

**DECEMBER 1974**
'CONTACTING THE MCPON'

My staff and I receive literally hundreds of calls and letters each month from Navy members and their dependents who are seeking advice or assistance with a particular problem or area of concern. It is obvious, however, that a sizable portion of the people who call or write do not really understand the position of the Master Chief Petty Officer of the Navy. Favorable action on behalf of some requests would require me to overstep my authority as MCPON.

Since the establishment of the Master Chief Petty Officer of the Navy billet in 1967, former MCPON Delbert Black and I have served four CNOs. Under the direction of these CNOs, the MCPON has assumed additional responsibilities and duties; however, the authority of the MCPON has never altered.

The Master Chief Petty Officer of the Navy is not a decision-maker. As MCPON, I may advise, request, suggest, comment, urge, or recommend. However, I do not have the authority to cut a set of orders, change a PRD, approve an official request, or waive an operational policy.

Please do not get the impression that I am trying to dissuade you from contacting me. My office is always open to Navy members and their dependents. In fact, I encourage you to turn to me with a problem, a suggestion, or a criticism. I assure you that you will be heard. We try to understand and, if possible, we try to help; but don't expect us to "undercut" or "go around" a decision which should be made by your command. The chain of communication is always observed.

While I do have direct access to the Chief of Naval Operations and the Chief of Naval Personnel, do not get the idea that I run to them each time a sailor calls me in distress. I firmly believe that problems should be resolved at the lowest possible level in the chain of command where they actually occur and by the people actually involved. Particularly now that the Master Chief Petty Officer of the Command and Master Chief Petty Officer of the Fleet/Force programs are in full swing, matters that reach my attention are frequently referred back down the chain of communication for appropriate action.

When I, in my role as MCPON, or a member of my staff supports a Navyman or Navywoman or a cause that is common to Navy personnel, we depend entirely upon the strength of argument and reputation of office. You might say that the MCPON and his staff have a license to reason with others in your behalf. The more logical or meritorious your case, the more favorable consideration you will likely receive. If your case cannot be given favorable consideration, we will advise you as to the reasoning behind the decision.

Depending on the nature of your request, it may take several weeks before you receive a reply. In all cases of written correspondence, a member of my staff will acknowledge your letter and predict the date by which you should receive a reply.

No one need ever worry about sharing or leaving a message with any member of my staff. They are trustworthy and capable of serving you in my behalf.

If you do have a problem, check first with your supervisor or leading petty officer. Talk it over with your MCPON, chaplain, or career counselor. If there is a satisfactory solution, a member of my staff will acknowledge your letter and predict the date by which you should receive a reply.

For more urgent matters, you may call my office on autovon 224-4854 or commercially at (202) 694-4854. You may also reach my office after working hours by dialing the same number and recording your message on our code-a-phone.

As a shipmate, we stand ready to assist you. We can't always supply a favorable response, but we'll always make an honest effort.
For Top 'A' School Grads:

ACCELERATED ADVANCEMENT

There's more than an education to be gained by the individual Navyman or woman who does well in studies in Class "A" School or advanced Electronics Field/Nuclear Field training programs. Accelerated advancement to 3rd class for certain "A" school graduates, previously in effect, was canceled owing to budgetary limitations in January 1973. The program has now been reinstated.

In other words, AEF/NF accelerated advancement remains the same, but accelerated advancement is now being reinstated to include certain "A" School graduates.

If class placement is high enough on the percentage scale, the award may be an automatic promotion to petty officer 3rd class without having to take an advancement examination. This is made possible through the Navy's Accelerated Advancement Program which offers quick promotions to deserving individuals.

Since the AEF or NF student obligates for six years upon entering a chosen field of study, there is no requirement to obligate further to become eligible for the accelerated advancement program.

The Class "A" student, however, is required to obligate for a minimum of five years to become eligible.

For purposes of establishing eligibility to compete for advancement to petty officer 2nd class, those individuals who accept accelerated advancement are considered to have 18 months' time in service on the date of advancement to 3rd class, unless a larger amount of time in service has been accrued by actual or creditable cumulative time from pay grade E-1.

Accelerated advancement is predicated upon two other conditions for those people who fall under the reinstated Class "A" program. They must rank in the upper 50th percentile of the overall class, and their class standing must be within an established promotion percentage range for their particular school. For example, a student in the Class "A" Engineer School must rank in the upper 50th percentile of his class and, in addition, place among the top 20 per cent of that percentile in order to be eligible.

Those Class "A" Schools participating in the accelerated promotion program, and convening on or subsequent to 1 Dec 1974, together with percentage ranking requirements are:

- 5%—ARH, AK, ASE, ASM, BU, DP, DS, DT, EA, ETN, ETQ, PH, PN, STS.
- 10%—CM, DK.
- 15%—AX, AQ, AZ, CE, EN, EO, ETR, HM, JO, PC, PT.
- 50%—ABE, ABF, AC, ADJ, ADR, AE, AG, AME, AMH, AMS, AO, ASH, AT, AW, BT, CTA, CTI, CTR, CTO, CTT, EM, EW, FTM, GMG, GMM, GMT, HT, IC, IM, ML, MM, MN, NR, MML, OM, OS, OT, PM, PR, QM, RM, SH, SK, SM, STG, SW, TD, TM, UT, VN.
The Stroebel Family

Getting There Is Half the Fun

Vamoose, a sloop-rigged, 34-foot yacht arrived at the Rainbow Bay Sailing Facility in Honolulu some weeks back with Lieutenant Commander Donald W. Stroebel and his family on board. Arrival of the newly built yacht culminated 15 months of construction, planning and outfitting—by the Stroebel family.

The Stroebels had intended to build the yacht for several years and, in March last year, construction started in San Diego. Eight months later she was launched. Assigned at the time to the aircraft carrier USS Ticonderoga, but in receipt of orders to the U. S. Naval Communication Station Honolulu, LCDR Stroebel made the decision for the family to crew Vamoose and sail her to Hawaii.

More than 40 friends and neighbors witnessed the Stroebels cast off for Hawaii.

During the 19-day transit each member of the family—Stroebel, his wife Ursula, daughter Teresa, 18, and sons Tom, 17, and Stephen, 19—stood two-hour watches with eight off. Stephen, a midshipman on summer leave from the Naval Academy in Annapolis, navigated the yacht by celestial navigation. Mrs. Stroebel and Teresa operated the galley.

Because fresh water was at a premium on the small craft, it forced the family to look for other ways to conserve. They brushed their teeth and bathed in salt water. "On the day of our arrival we celebrated by taking freshwater baths," said the skipper.

According to Stroebel the most exciting part of the trip was the day before arrival in Honolulu when they made landfall on the Molokai Light. While guarding VHF Channel 16 for possible message traffic from Hawaii and the West Coast, they heard that the light's power had been reduced and they were surprised to spot it as soon as they did.

LCDR Stroebel is now at the Naval Communication Station Honolulu, with responsibility for communication with all ships in the eastern Pacific from Midway Island to the western coast of the United States.

—Photos by PH3 George Keller
Left: Vamoose arrives in Honolulu after 19 days at sea. Above: The Stroebel family, who built the yacht they sailed in, is interviewed by a local television newsman. Right: With the Arizona Memorial in the background, LCDR Stroebel is welcomed to Hawaii by a friend.
Sentimentality—plus practicality—has earmarked USS *Recruit* from the days the San Diego landmark was constructed in 1949. Her 25th anniversary this year is being used as a special occasion to remember the help that she has given in training some of the Navy’s finest sailors.

The dry-land ship mock-up, easily visible at the San Diego Naval Training Center from Harbor Drive, was officially commissioned and designated 27 Jul 1949 as Training Destroyer Escort One (TDE 1) by the Navy. Because of new technology, she was decommissioned in 1967.

From the time of her creation, the ship’s aim was to help recruits in their naval indoctrination in the various parts and equipment found in modern-day warships. By her 25th anniversary, USS *Recruit*—known to millions as “Miss Neversail”—had gained a special niche in the Navy’s history.

She is believed to be the first such recruit mock-up, and, perhaps, the first non-ship to gain a commission. A similar landlocked training ship stands at the Navy’s Recruit Training Command in Orlando, Fla. As a commissioned ship, she had to observe morning and evening colors, fly a commission pennant and observe both the International and Inland Rules of the Road.
for casting off and mooring—even though "frozen" in asphalt.

During the days of her commission, the ship was fully manned by 0800 each morning (except Sunday), and the crew stood at attention as the colors were raised on the flagstaff. A short time later, with all hands at their stations, the ship was made ready for sea. The lines might not have been cast off as smoothly as those handled by a seasoned crew, and the orders probably weren't as crisp and clear as those of rated petty officers, but Recruit did—in theory at least—head for the open sea.

While at sea, the young recruits rotated in their tasks to familiarize themselves with all facets of shipboard activity.

When it came time for Recruit to return to port, the procedure was reversed. The lines were put over at exactly the right time and in the right order when the ship was secured to her moorings. This sequence was repeated about 16 times for every Navyman in recruit training at San Diego.

On the deck, forward, is a three-incher, while two K guns are located astern. There are lifelines, an accommodation ladder, quarterdeck and bridge. There are signal halyards, searchlights, engine-order telegraph and wheel. The only thing that keeps her from sailing out of her concrete channel is the lack of engines and screws.

But, after functioning as a commissioned ship for 18 years, USS Recruit fell victim to automation. Because of complications caused by computers that couldn't "comprehend" a motionless ship without a crew aboard 24 hours daily, the training aid was decommissioned on 7 Mar 1967.

Today, Recruit remains one of the Navy's largest training aids. Although no longer in a commissioned status, the TDE 1 remains a part of the San Diego Recruit Training Command with eight classrooms, including a damage control locker, bridge, wooden anchor and gun, sound-powered phone demonstrators and staff offices aboard.

She is some 225 feet long with a beam of 24 feet, 4 inches. Her mast height is 41 feet, freeboard 12 feet (she has no draft), for a total height of 53 feet.

The most impressive statistic of all, however, is that in her 25 years, she has helped in training more than 1.158 million sailors for the U. S. Navy.

Below from left to right: Beginning construction, 1949. USS Recruit nears completion. USS Recruit celebrates her 25th year of training recruits in various aspects of modern-day warships.
The mystique of the sea has fascinated Black man since early times. From the dust of antiquity to the present time the destiny of the Black race has been indissolubly bound to the pounding of the ocean waves.

Black and White sailors helped open the doors of the new world to the rest of humanity. History, much of it little known, abounds in examples of Black seamanship. For example, many scholars believe that Pedro Alonzo Nino, one of Columbus’ crewmen, was Black. In the latter 1400s, Abubakar, a Black African also known as Abu B’kar, is said to have sent forth an expedition from western Africa to discover new land across the Atlantic.

Blacks were with Balboa when he discovered the Pacific Ocean, although their actual number is not certain. It has also been said that one of the Blacks with the Cortez expedition planted the first wheat crop in the New World. A sizable group of Blacks marched through Mexico with Cortez, and other Blacks trekked through the steaming equatorial jungle with Alvarado.

During the American Revolution, Blacks again contributed their share to the nascent dream of American independence. (For a report on this see the article, “The Role of Black Sailors in the Wars of America,” ALL HANDS, Aug 73, pp. 55-61.)

For example, one of the seamen aboard a schooner named Defence in the early spring of 1776, was a Black man named George Cooper. Three Blacks on Captain David Porter’s privateer Aurora served faithfully (all went by the then common name for Blacks of Cato). Another fought in the Massachusetts brig Julius Caesar. Many Black men served on board other Massachusetts ships, including Hazard, Deane, Morning Star and Prospect.

Several members of the crews of the defensive coastal galleys of Georgia were Black. The names are known of some 75 Black men who served in the Navy for the State of Virginia during the Revolution. Blacks also served as pilots, under John Paul Jones, and later aboard Royal Louis with Stephen Decatur. A letter written by George Washington on 26 Jul 1779 to Major Henry Lee also alludes to the employment of Blacks as pilots.

On brigs, galleys, sloops and schooners, Black seamanship and intrepidity added measurably to the attainment of self-rule for the newly liberated colonies.

Again the Black man was called upon to prove his naval mettle in the War of 1812. In fact, one of the acts generally regarded as having precipitated the War of 1812 involved Black as well as white sailors.

Early on a June day in 1807, the British man-of-war Leopard attacked the U. S. naval vessel Chesapeake...
outside Norfolk harbor. After a sharp engagement in which *Chesapeake* lost three men and had 18 wounded, the vessel was boarded and four alleged Royal Navy "deserters" were removed. At least two of the impressed men (some sources say three) were minorities. According to the captain's report (from James Barron to Secretary of the Navy Robert Smith) William Ware "is an Indian looking man" and Daniel Martin "is a coloured man." Three of the four were later returned to the U. S.

The War of 1812 was primarily a naval war and the tradition from Revolutionary War days of employing Black seamen was continued. Blacks served under Commodore Chauncey on Lake Erie. Of nearly 50 Blacks aboard his ship he said, "Many of them are among my best men." Blacks in the crew of the vessel *Tompkins* served with such coolness under fire that her commander, Nathaniel Shaler, was moved to say, "When America has such tars, she has little to fear from the tyrants of the ocean." At Lake Erie and Lake Champlain Black sailors, side by side with their white comrades, rendered the "last full measure of devotion."

During the War of 1812, Blacks comprised one-sixth of the seamen in the U. S. Navy. Thus, in the first defense of the soil of the newly formed United States, Blacks performed a sizable role in the sea service.

As seagoing civilians, in the decades before the Civil War, Blacks assisted materially in the advancement and increased knowledge of American coastal waters.

Paul Cuffe, a New Englander in the shipping trade, hired Black and white sailors. He established cultural and mercantilist relations with Africa. Cuffe also taught navigation in Sierra Leone. He, along with eight other Massachusetts Blacks, petitioned the state legislature to give Negroes the right to vote if they paid taxes. A respected member of his community, he died in 1817.

James Forten, a Black Philadelphian, invented a device that aided in the control of sails. A Revolutionary War naval veteran, Forten also owned a sail factory, and went on to become a man of wealth (see *All Hands*, Aug 73, p. 56).

Lewis Temple, a New Bedford blacksmith, invented the toggle harpoon. A recent authority referred to the device as "the most important single invention in the whole history of whaling." The toggle harpoon more than doubled the whaling industry's overall catch.

Black Americans, both slave and free, looked forward to the day when slavery would be forever erased from the United States. Events here and abroad made many Americans realize that slavery was an inhumane system. On the brink of the Civil War, Afro-Americans realized that in this conflict they could hope to gain their greatest goals: freedom and equality.
Black men, some slave and some free, flocked to naval vessels in the early days of the Civil War.

When the Civil War commenced, the Union Secretary of the Navy, Gideon Welles, had only 7600 personnel and 42 of 76 vessels ready to close 185 registered harbors in close to 3000 miles of indented coastline, exclusive of rivers.

Welles, an efficient ex-newspaper editor, faced a staggering task. He and his assistant, G. V. Fox, would practically have to rebuild and redesign the Union Navy. He was hampered by defections to the Confederacy, sometimes approaching complete demoralization, and above all an acute shortage of manpower.

Naval enlistment by Blacks steadily increased. In order to facilitate enlistment on 20 Sep 1861 Welles issued an order which read in part: "You are therefore authorized, when their services can be made useful, to enlist them for the Naval service, under the same forms and regulations as apply to other enlistments." They were initially limited to the lowest rating, but that was later to change.

Several times from the summer of 1862 until at least the beginning of 1863, the Army requested large numbers of Blacks from the Navy. The Navy gained still more recruits by making "enlistment landings." For example, the chief officer of USS Pocahontas, along with the ship's surgeon and a portion of the crew, went ashore along the South Carolina coastline where "we..."
had a gathering of the Contrabands and Dr. Rhoades proceeded to select such as were fit for the general service, in obedience to your order of the 21st instant. He has selected some ninety. . . .” (In those times, the term “Contraband” indicated liberated or escaped slaves.)

Naval records of the time provide examples of Blacks among ships’ crews. Blacks were particularly numerous aboard gunboats. These steam-driven, shallow-draft, heavily armed vessels bore the brunt of some of the hardest fighting. The crew of the gunboat Mendota carried a high proportion of Blacks. Of the 38 crew-members of the gunboat Glide, 30 were Black.

Again, owing to manpower shortages and the fact that the Contrabands were doing an excellent job, their possibilities for advancement were increased. Black sailors could now become firemen, coal-heavers, landsmen, seamen and all ranks short of petty officers. The order limiting rank had been rescinded. Although some distinction would be made as to the man’s slave or free status, this too would later cease.

Directives were issued by Welles and Admiral Porter to use the Blacks “to a greater extent than heretofore.” A check of the logs and muster rolls of some eight vessels showed that aboard these eight ships were a total of 364 Blacks of whom 279 were landsmen, four cooks, five stewards, 18 coal-heavers, one 1st class fireman, one 2nd class fireman, five ordinary seamen, and seven seamen, plus 44 boys (this was a regular assignment category on board ships at this period). The “mix” was a condition of affairs in fair accord with the general numerical proportion of these ratings in the Navy as a whole.

The use of Blacks as pilots was a common practice. In 1863, Rear Admiral Dupont wrote to Welles: “I desire to add that I have made use of the services of certain contraband pilots, and have authorized the payment of them sometimes of $30.00 a month and sometimes of $40.00 a month. May I hope that this course meets with the approval of the Department? They are skillful and competent.” Records also exist of several Black pilots being killed in action.

In general, discrimination or segregation was at an absolute minimum in the Union Navy. Blacks were quartered and messed in common with other sailors. Black seamen on occasion held rank above that of their white comrades, and until late in the war naval personnel records did not distinguish white from Black. Discrimination, however, did exist simply because of the carryover from civilian society.

The record of Black naval bravery was not confined to those wearers of the uniform but included others as well.

- One of the most daring acts of the Civil War was performed by a slave, Robert Smalls. On the night of 12 May 1862, Smalls and eight other Black men and women took possession of the steamboat Planter. He
had been a helmsman before the war. Smalls piloted the vessel past the Confederate gun batteries and on out of the Charleston, S. C., harbor. He had deceived the Confederate forces by wearing the coat and large straw hat usually worn by a ship’s captain. The Confederate sentries let the ship pass, thinking it was just moving to another spot in the harbor. Smalls turned the boat over to the Union Navy and he and his party were awarded nine thousand dollars.

- The Waring incident is another illustration. S. J. Waring was a merchant vessel captured by the Confederate privateer Jeff Davis. After the Confederates had arrested Waring’s original crew, with the exception of two seamen, the vessel again set sail with a passenger and a Black steward replacing the two members of the crew. While bound for Charleston, S. C., William Tillman, the Black steward, overcame three of the Confederate crewmen and with the help of the passenger, Stedding, took control of the ship. The vessel was brought to New York harbor and turned over to the Union government on 21 Jul 1862. Tillman later received $6000 in prize money.

- The Enchantress affair was still another example of Black bravery at sea. Enchantress had also been captured by a Confederate privateer, and her crew was replaced with but one exception. This exception was a twenty-five-year-old Black, Jacob Garrick, who had served as steward. When the captured vessel came within sight of one of the Union blockading ships, the Confederate hoisted a Union Flag in an effort to get by. Garrick, then out on deck, dove overboard and
alerted a Union blockading vessel as to the true identity of the now Confederate Enchantress.

A number of Black sailors in the Civil War were awarded the Congressional Medal of Honor.

- Aaron Anderson, landsman of Wyandank, received the medal for bravery while serving with an expedition on Mattox Creek, Va., 16-18 Mar 1865.
- Robert Blake, a crewman aboard USS Marblehead, won the medal for bravery in an extremely sharp engagement with Confederate batteries on Stono River, S. C., 25 Dec 1863.
- John Lawson, a landsman on board Admiral Farragut's flagship Hartford won the medal during the Battle of Mobile Bay. Lawson, though wounded badly, refused to go below and stayed in action throughout the engagement.
- Joachim Pease, a seaman aboard the famed Kearsarge, also won the Medal of Honor. Of Kearsarge's historic encounter with the Confederate raider Alabama, Captain Winslow wrote that the Black man "had exhibited marked coolness" and was "one of the best men in the ship."

More recent research indicates that three other Medal of Honor winners were Blacks: Landsmen William H. Brown and Wilson Brown, and Engineer's Cook James Mifflin.

Black sailors served on many famous vessels during the war. Black seamen composed part of the crews of Farragut's Hartford, Winslow's Kearsarge, and at least three Blacks were on board Monitor when she sank in a storm off Cape Hatteras on 31 Dec 1862.

The Union Navy had varied missions: blockade, cooperation with the Army, and commerce protection.
The Navy's job included riverine operations to split the Confederacy, amphibious operations to seize land, and distraction of the Confederate Navy. In the great effort to achieve these goals, both Black and white sailors fought and died. Over one-fourth of the entire Union Navy was Black. Black enlistment was approximately 29,511 men and they suffered over 800 casualties.

Aboard ship, it was every man's responsibility to answer the call of the alarm rattle. Black sailors, like their shipmates, served on rams, monitors, gunboats and labored on the stone fleets. As men everywhere, they laughed and grumbled about the "lobscouse" (salt meat cut up as finely as possible, powdered ship's biscuits and slush mixed in a tin dish and baked) and occasional lack of drinking water. When fighting, each of them could handle a boarding pike or cutlass as well as any man in the defense of freedom.

—C. R. Gibbs

"This article," says author C. R. Gibbs, "has only scratched the surface in the area of Black naval participation. The progeny of Africa, along with the progeny of Europe, responded to the calls of their country during the war to preserve the Union." He wrote with pride when he forwarded it to the Navy, "The past history of the Navy shines with examples of racial cooperation; show them, let the proud past of the Navy as well as the present reach out and touch the minds of all Americans."

Far left: This is a portion of a photograph by Mathew Brady taken of the crew on the Monitor during the Civil War. Top left: First battle between iron ships. Shown are Monitor and Merrimac (css Virginia) in battle in 1862. Above: Some of the crew on the deck of a monitor. Black sailors served on rams, monitors, gunboats and labored with the stone fleets.
Delta Queen

Sir: Your article on Delta Queen in the September 1974 issue recalls a part of my naval career with the old battle force—23 Jun 1926 to 2 Feb 1977. I believe I had the first orders to Delta Queen issued upon her being taken over by the Navy.

I was ordered to San Francisco when the Navy took over the Golden Gate International Exposition buildings there, and I helped establish the medical storehouse. As time went by the activity grew from one person a day to 1000 a day reporting in for duty.

A healthy scream got me the promise of a Navy fighting ship. Five days later, with orders in hand, I trod the pier at Yerba Buena looking for my ship. A navy yard worker informed me I had passed her four times, a ferryboat.

I boarded Delta Queen and found her intact, exactly as she was taken over, even to pennies in the gun ball machine. Being certain the enemy would not board Delta Queen, I carried out in the aide to the commandant’s office on the base until he came up with a new set of orders for me. This time I drew an armed “ship,” the yacht, Heidl. Still I balked, and finally got my orders for a midnight departure aboard USS Wharton. I ended up on Espirito Santo for a stay on Guadalcanal, far removed from those who were trying to convert me to a ferryboat sailor.

Yet, the yacht boys were successful on one more try—I wound up on USS Southern Seas off New Zealand. Later I drew duty with the Regular Navy aboard USS Trever.

When I had first gone to Delta Queen—as I look back on it all now—I lacked the necessary sympathy for a ship with a soul asking me to help shape her up in her new role. I think she found her answer in the traditional Navy way; we didn’t join her, she joined us. And in proving her worth she earned the title of a Navy ship.—CWO Ernest J. Weber, USN (Ret), Orlando, Fla.

You asked for it--another ALNAV PUZZLE

Here’s an ALNav word puzzle for naval history buffs. The puzzle appearing in the June 1974 issue of ALL HANDS (p. 62) was such a success that we’re doing another one. This one is a contribution of Richard Kamienski, former AD3, USN. The directions are simple. The names of at least 42 U. S. Navy World War II fighting ships can be found among these letters. The names sometimes read forward, at other times backward, up, down, or even diagonally. Draw lines around each name as you discover it. No abbreviations, please!

Hint: Look for aircraft carriers and battleships. Ready? Set? Anchors aweigh!

STTESUHCASSAMBOXERZWHADIONWA
OHOFGFEAOBCLPACPDCDIASEXETAGGBG
UJAZHIRANOZIRAINAEBLKEHBCO
TKNNJXYNYKJIAYQXMSCECZMSQJNDFT
HTXTGEZLNNHLREFIYOHGSAANAKRA
DUITSRTAMDGSTMLRXNIEWJESRIER
AOEVRBIOPVNUWKPNMJPVNTUA
KQTQPQIDLESTWDXEPROILGKEEQSRS
ORASTUPNAUXYZNJEHNBTNOWVWBTU
TBMLPLHKWOPQYADITYOHAHKLAAXVA
AINAVLYSNNEPBZECNNOGOBGNFDZG
DCDFEFHZKMCXICIFEGDRFCJMCAO
RAYXGIKCOCNADHJKLHMKHEHIDERY
ALABAMANLMKLWAINIGRVTSWPOE
HAWCIPPSISSIMROSTWXSORQTUD
CZKAMIENSKIPVUIPFKEFVYZXWBYWN
IVUSTRQOPLJUHISHLEXINGTONZAO
RAINROFILACMCBSIASANAKRAFSC
EOPTSWVIZBDTFGDHEIKCDVERDHI
MLNQRUHYNXAEICIUQOGFNFUAFRIT
MKMJTRUVWFTFGHORPMEENCYGENHGENS
OZYSERRXRBCDAINAPHZHKIDJGGT
HPQKESSENNTEUMJLXMLOPLINTG
NONJGFDZAXBCPWKLWQUIKNTMKAOH
OUKNORTHCAROLINAIVRNJISRNRL
BMLIHECYCOLORADOTSYESREJWENA
"I don't care who you say you are, you better stay out of the stack and get those reindeer off the bridge."

"Would it be asking too much to know where you get your meals?"

"No John, I won't marry you ... not even for a guaranteed class 'A' school."

"Still haven't found your sea legs, have you, Bailey?"

"You want to know what Seaman Jones does, Lieutenant? ... anything he wants to do."
What's a chief quartermaster who served in three wars doing navigating around a public affairs office? When you’ve got as many talents as Wallace Louis Exum, author and artist, it’s not very hard to find wherever the Navy assigns you. Wally recently completed a Reserve active duty stint with the Naval Internal Relations Activity’s Print Media Division, the office which puts out ALL HANDS magazine.

Born in San Francisco, the chief enlisted in the Navy at age 16 and saw three years of service in World War II, four years in Korea and two years in Vietnam, earning a Presidential Unit Citation, five battle stars, a Purple Heart and other assorted commendations. In between wars he managed to put in two years each at the University of California at Los Angeles and the Hollywood Art Center, plus some 20 years of Reserve service.

Living with his wife and daughter in Port Townsend, Wash., Wally says they settled there by accident. They were headed to Nevada, the only battleship to get underway that day, is taken out by a chief quartermaster who finally has to beach her because she has been crippled by enemy bombers.

Since he has been in Port Townsend, Wally was commissioned to do an oil portrait of Marvin Shields, a Seabee who died in Vietnam, by the new skipper of USS Marvin Shields.

Chief Exum’s many talents have served the Navy well for 30 years now. He’s a good example of the vast amount of talent the Navy has on its active-duty and Reserve rolls.

Sonar Technician Ken Merriken was getting ready to go on leave. He had just completed a Med cruise aboard USS Biddle (DLG 34), and decided there was no better way to spend a vacation than bicycling along the Italian Riviera (where Biddle just happened to be). It was also a means of getting away from GQ, fire drills and that sort of thing.

Blue sky, blue sea, Italian villas, the Maritime Alps—just what the doctor ordered, thought Ken as he pumped blissfully along with the tune of “Santa Lucia” bouncing around in his head.

Suddenly, something else was beating his brain. “This is not a drill. Fire, fire on the mountain!” Wait a minute, what happened to Santa Lucia? Looking up, Ken saw a roaring fire galloping up the mountainside towards the village of Suseneo and threatening homes, trees, rose gardens, vineyards and people. Reacting like any Navyman who has been through an infinite number of ship’s fire drills, Ken dropped his bike and rushed off to help.

Ken’s reward enough was a good deed done, but there was something else. One of the homes he helped save belongs to Nicolo DiStefano, a goldsmith from the nearby resort town of San Remo. DiStefano was so grateful that he cast a single medallion commemorating Ken’s help. In a special shipboard ceremony the people of Suseneo presented it to Ken with their thanks.

Jack Cover: Featured are two honor-able mentions and the third prize winner of the ALL HANDS Photo Contest, color category. Left top: Honorable mention—submitted by SA Heywood Tate, recovery of the Skyship III Space Capsule. Right top: Honorable mention—submitted by PT1 K. E. Blain, flight deck of USS Ranger (CVA 61). Bottom: Third prize—submitted by YN3 Anthony P. Caruso, entitled “Parts of the Whole.”

The All Hands Staff
If some of you are thinking about going back to the "real world," take a good look at it.
Sure, civilians can always quit their jobs. But sometimes the jobs are quitting the people.
Let's say you do leave the Navy and find a job for as much as $1000 a month. That $1000 may not be as much as you think.
Here's why.
Out of that $1000 comes $195 in federal taxes if you're single. In the Navy you pay income tax, too. But only on basic and special pay.
Out of that $1000, you'll have to deduct items like food, housing, and clothing. The Navy either provides these for you or gives you an allowance to help cover them. Out of that $1000, maybe you'll pay for retirement plans. Health and long-term disability insurance. Life insurance.
All these civilian deductions could reach $500 a month! So that $1000-a-month job doesn't go as far as it may appear.
How about if you lose or walk out on your civilian job. You leave. And look for a new one. Maybe it takes a week. Maybe 6 months. Without pay.
If you want to change your Navy job, you can—if you have the qualifications and training. And you still get your Navy pay.
So get all the facts from your Command Career Counselor.
See him today.

The Navy.
Don't wait 'til you get out to wish you'd stayed in.
KEEP THEM COMING

...YOUR COLOR PHOTOS MAY END UP ON THE COVER OF ALL HANDS