July/August 1994

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US NAVY

Surface Warfare

A total force

The Total Surface Force

Post-Cold War, New World Order downsizing, rightsizing, streamlining--no matter what terminology or jargon you choose to apply, our surface force is getting smaller. At the same time, our missions and responsibilities continue unabated while trouble spots proliferate across the face of the globe. By now we are all intimately familiar with the brutal reality.

Therefore, now, more than ever, we must employ our remaining assets as effectively as possible. We must streamline bureaucracy, optimize personnel assignments, maintain our ships, aircraft and shore assets as cost-effectively as possible and eliminate duplication of effort and waste.

In this issue of *Surface Warfare Magazine*, we strike a central theme of how our Total Surface Force is adapting to the sweeping changes at hand. We focus on the composition of our Total Surface Force: active-duty surface / expeditionary warfare forces as well as the naval surface reserve force. Coordination, communication, interoperability and flexibility are key to the successful utilization of these three major components of a Total Surface Force as a viable and effective instrument of our national policy.

As you read the comments of several of our Total Surface Force leaders, you will quickly recognize that our vision and goals are all essentially the same -- molding our leaner force into the most combat-effective force ever.

The broad dynamic impact of the downsizing is also illustrated throughout other sections of this issue of *Surface Warfare* -- from the consolidation and revision of training at Great Lakes and SWOSDOC in Newport, to the commissioning of the last of the *Ticonderoga*-class cruisers to the latest in shipboard maintenance programs.

Change also comes to our staff at *Surface Warfare Magazine* as we bid farewell to JOC(SW) Kip Burke, our Managing Editor for the past three years. His outstanding journalistic talents and efforts on behalf of our community will be sorely missed. Bravo Zulu, Chief!

Philip J. Coady
Rear Admiral, U.S. Navy

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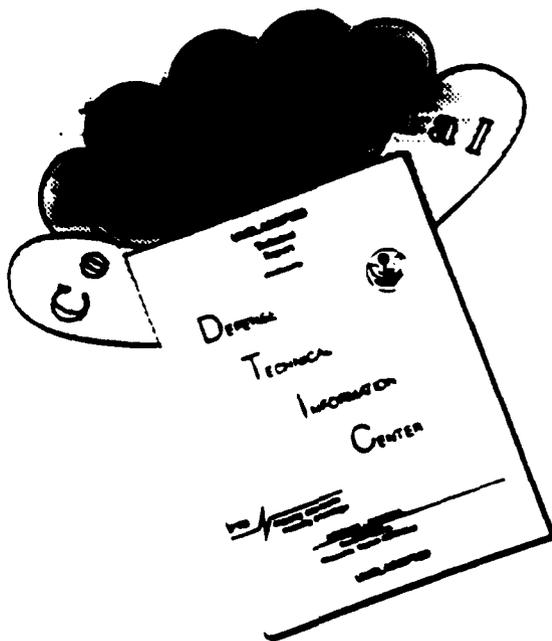
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Surface Warfare

Magazine

July/August 1994
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ON THE COVER:

Cover: Expeditionary warfare: Maneuver from the sea -- An amphibious assault supported by Aegis-led sea-based theater ballistic missile defense is just one of many possible littoral warfare scenarios discussed by MGEN Harry W. Jenkins, Jr., Director, Expeditionary Warfare Division, in this issue. Art by James Ryan, Missile Systems Division, Raytheon.
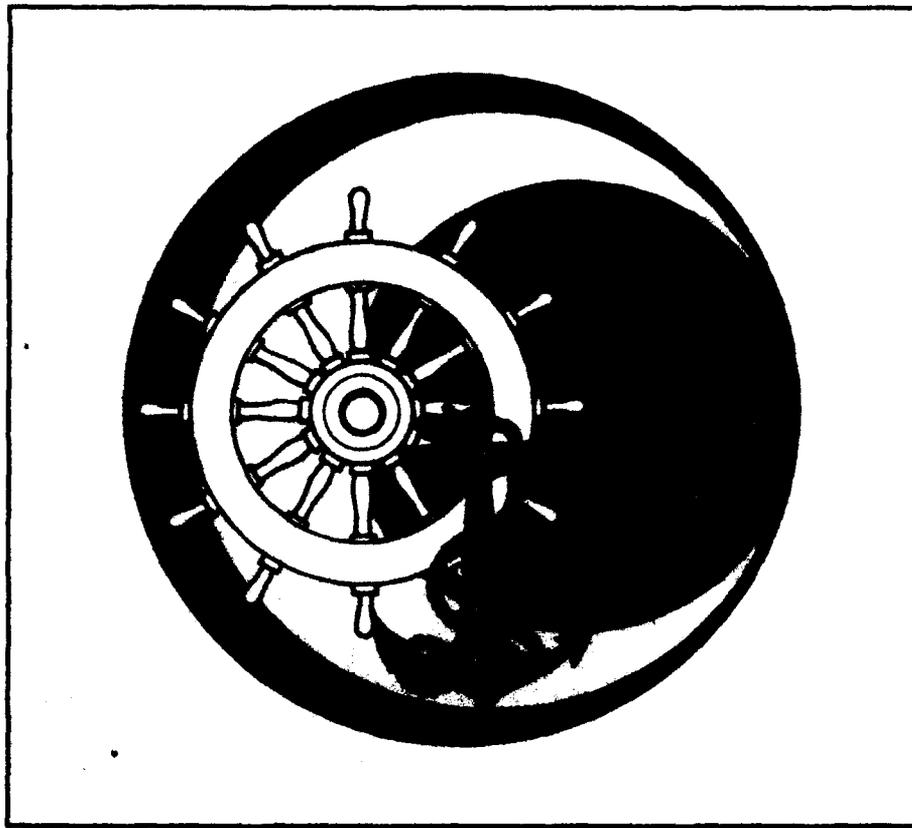
Surface and Expeditionary Warfare Reserve Forces

ADAPTING TO CHANGE

With the Cold War behind us and the Navy now undergoing a restructuring and consolidation, it is more important than ever to review and assess the role that our surface reserve forces will play in this new era.

Accordingly, in this issue and the next, *Surface Warfare Magazine* will present a series of articles detailing how top leadership views the effective integration of our surface and expeditionary warfare Reserve Forces into the Total Surface Force.

"... the talents of our people"

—An interview with RADM John F. Paddock, USNR

RADM John F. Paddock, USNR is triple-hatted as Commander, Naval Reserve Readiness Command Region Two; holds a mobilization billet as Deputy Director, Surface Warfare Division (OPNAV N86TF); and, as a civilian, serves as program manager for Martin Marietta Ocean, Radar & Sensor Systems Division in Syracuse, New York.

RADM Paddock

• As the first N86TF, the Director Surface Warfare Division's right-hand man for Naval Reserve asset utilization, how would you describe your role within the OPNAV N86 organization? What are your primary duties? What is your goal during your tour as N86TF?

The N86TF position is a new Reserve Flag billet, intended to support both N85 (Expeditionary Warfare) and N86 (Surface Warfare). It was established in October 1993 in response to a request from RADM Phil Quast, then N86. This action was a timely indicator of the growing importance of the Naval Reserve resource within the Navy and especially within the surface warfare community. The numerous N85/N86 Reserve programs are quite varied and significant to littoral warfare, providing a growing Reserve capability in many areas. Virtually all of our Reserve assets face change in this post-Cold War era, as outlined in the new OPNAVINST 1001.21A on Total Force Policy. The policy provides guidance to achieve improved peacetime support from the Naval Reserve and readiness for crisis response.

As the first N86TF, I am in a unique position to influence the nature of the billet. My duties include advising N85, MGEN Harry Jenkins, and N86, RADM Phil Coady, in matters involving Total Force composition, readiness and missions which may be tasked to N85/N86 Naval Reserve programs. I also work closely with the Director of the Naval Reserve (OPNAV N095), RADM Tom Hall, his staff and others in the Naval Reserve Force. The position provides an excellent opportunity for the Naval Reserve to foster closer relationships with

> **"Our primary contribution in the Naval Reserve is the talents of our people, who often have many years of active duty experience in their background."**

our active-duty counterparts in the surface warfare community. My goal is to ensure the potential of our capable reservists is fully recognized and is utilized appropriately to enhance Total Force readiness.

• There have been a number of changes in the relationship between the active and Reserve communities over the past two decades as to what role our reservists are being trained and groomed to play. This trend will surely continue in the post- Cold War era. What are you doing to help educate both the active and Reserve surface communities so that Reservists can be more effectively utilized and quickly integrated into the Total Force in any variety of scenarios – both in war and peacetime?

The Naval Reserve is a growing proportion of our Total Force. Today and in the future, the reserves will play an increasingly important role as active forces are stretched to support a wide variety of contingencies. Many of us lack a full appreciation of the breadth and depth of Naval Reserve capabilities, particularly in sustainment. Though I started out in the Naval Reserve and then spent many years on active duty, I did not fully appreciate the Naval Reserve's potential until I was a relatively senior officer, after rejoining the Naval Reserve. I want to help educate our surface warfare community on the broad capabilities available from reservists and how to access them. The articles in *Surface Warfare Magazine* in this issue and next, are one step toward that end. Participation in wargames, analysis and the assessment process certainly provides many opportunities in this regard.

I'm also visiting the field to improve my understanding of the many good things happening, and complement the efforts by the Director Naval Reserve and Commander Naval Surface Reserve Force in spreading the word. Together with the other surface Reserve flag officers, I participate in the Surface Warfare Flag Officers Conferences, which also help foster the teamwork necessary for success.

N85 and N86 are continuously reviewing their Re-

serve programs in the context of "...From the Sea" and other guidance, seeking improvements in how we utilize the Naval Reserve. The related assessment process and wargames are also opportunities to educate. I believe last December's Total Force '93 wargame at the Naval War College was a watershed event. We had a large number of flag officers and staff representatives participating, with a good active/Reserve balance. We looked closely at how and when Reserve forces would be employed in theater by the CINCs or in backfill roles. TF 93 provided the first reasonably clear picture, in my view, of the role of the Naval Reserve in the post-Cold War era in addressing major regional contingencies.
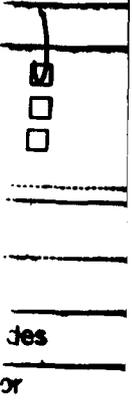
TF 93 also generated many of the substantive issues which we are now addressing through the Surface/Expeditionary Warfare Naval Reserve Advisory Committee (SWNRAC) and other actions to meet requirements and transform valid concepts into reality, whenever feasible. We recently revised SWNRAC, adding an Executive Steering Committee, a flag-level forum consisting of not only N85 and N86, but also DIRNAVRES, COMNAVSURFRESFOR and our Reserve flags from the two surface type commands, RADM G. Dennis Vaughan and RADM Tim M. Jenkins. This forum provides a key opportunity for discussing key N85/N86 Total Force issues, developing top-level guidance for our staffs and coordinating follow-up actions. We want to ensure requirements are met by the most effective and affordable combination of Total Force resources, active and Reserve.

• You've come up through both the Navy's active and Reserve surface organizations during your distinguished career. What do you view as the primary contributions our reservists can make to the surface warfare community in this new era?

Our primary contribution in the Naval Reserve is the talents of our people, who often have many years of active-duty experience in their background. Our Reserve community cannot by its nature provide a large pool of entry-level personnel. In addition to Navy professional skills, our active counterparts should recognize the myriad of civilian skills possessed by reservists. The Naval Reserve often can provide tailored ad hoc support utilizing the civilian occupation code database to facilitate accessing this talent pool. The Reserve community stands ready to work with our customers, the gaining commands at every level, to structure programs which work effectively and properly utilize Reserve resources. The challenge is to communicate, work together and be innovative in meeting the emerging requirements.

• Should we restructure how our reservists perform required drill time to enhance their contribution to the Total Force? If so, how would you propose changing drilling routines to achieve this goal?

Gaining commands and units should be provided the flexibility to utilize drill time in a manner that makes the

most sense. In my experience, peacetime support and training often go hand-in-hand as we prepare for and participate in fleet exercises, maintain and repair gear, support logistics and so forth. In most situations we have the flexibility now to achieve the readiness objectives of the gaining commands. Reserve unit COs, working together with gaining commands and assisted by our full-time support staff, are often in the best position to initiate changes to programs and training plans in order to achieve maximum readiness. Certainly, OPNAVINST 1001.21A suggests such tailoring is in order and promotes flexible drilling to help meet this need.

• With the major restructuring of our Navy currently underway, what words of advice can you offer to our Reserve surface warfare community about how best to prepare for the continued change that lies ahead?

All must recognize change is a way of life in the years ahead, and work constantly to improve each Naval Reserve billet, unit and program to both reduce the risk in sustaining a smaller active force and to help lower defense costs by making better use of reservists; examine what "...From the Sea" means to the gaining command, incorporating a realistic assessment of how Reserve resources might help fulfill Total Force requirements in our thought process. We must approach this both top-down, as we do in wargames and in SWNRAC, and bottom-up, utilizing TQL tools to realize Reserve potential. Reserve and active teamwork is absolutely essential to success. Solid working relationships among units and gaining commands are particularly important, since they are best able to identify requirements and meet needs in their day-to-day activities. Gaining commands should have an informed vision regarding how best to utilize the Reserves in responding to the new Total Force Policy instruction. Reserve programs with definable, viable responses to valid needs will survive and grow.

Though there is room for improvement, I strongly believe the active/Reserve relationship is the best it's ever been and getting better, thanks largely to visionary leadership. This is truly an exciting time to be in the Naval Reserve, which now has many opportunities to serve and make a solid contribution to our Navy and the nation. ⚓

RADM Paddock was commissioned in 1966 following graduation from Syracuse University. He served on active duty in five surface combatants and in the Pentagon as a strategic analyst on the Chief of Naval Operations Executive Panel. He holds a Master of Science degree in Operations Research from the Naval Postgraduate School.

> **The challenge is to communicate, work together and be innovative in meeting the emerging requirements.**

Seventh Annual

Surface Navy Association

Symposium

October 24-28, 1994

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Surface Reserve force assessment

**By RADM Thomas F. Hall, USN, Director
Naval Reserve (OPNAV N095)**

When I assumed command of the Naval Reserve Force in August 1992, I believed one of the most important things I could do was to get out to the field and meet directly with reservists, to tell them what is going on in Washington, D.C., as I see it, and to hear directly from them about their concerns and suggestions. Accordingly, I have visited more than 220 Naval Reserve sites and met with more than 30,000 reservists over the past two years.

RADM Hall

In my travels around the country, I hear a great deal from reservists and receive tremendous ideas and suggestions from them. And, as a result, I have an important message to all reservists: Even though we are getting smaller, we are right-sizing in a thoughtful manner. There are increased opportunities for all reservists, and for those in the Surface Reserve Force in particular.

While we are decommissioning many of our ships this year, the number of ships in the Naval Reserve Force will increase through the end of the Future Year Defense Plan (FYDP). More importantly, the Surface Reserve Force will have newer, more capable equipment than ever before. We will have ships that can be integrated into battle-group operations and equipment

SURFACE & EXPEDITIONARY WARFARE
NAVAL RESERVE PROGRAM DESCRIPTIONS

NRF SHIPS: Train reservists and provide FFG, MCS, MCM, MHC support for the fleet in surface and mine warfare.

SPECIAL WARFARE: Augment SEAL teams, Special Boat Units, squadron/group staffs.

MOBILE MINE ASSEMBLY GROUP (MOMAG): Test and assembly of mines.

SHIP AUGMENT UNITS (SAU): Augment surface and expeditionary ships.

BASE OPERATIONS: Meet increased administrative and support service requirements.

MOBILE INSHORE UNDERSEA WARFARE UNITS (MIUW): Provide reservists and hardware for mobile surface/sub-surface surveillance. Reserves provide 100 percent of Navy capability.

STAFF AUGMENT:

Ashore: augment at all ashore echelons of command.

Afloat: augment for operational staffs (Includes: OPNAV, TYCOM, battle group and squadron staffs) Total of 80 Selected Reserve (SELRES) units nationwide.

AMPHIBIOUS SUPPORT:

•Amphibious Construction Battalion— *PHIBCB:* support amphibious operations, i.e. causeway ops, MPF offload, etc.

•**ASSAULT CRAFT UNIT (ACU):** operate assault craft

•**NAVAL EMBARKED ADVISORY TEAM (NEAT):** provide reservists on civilian ships to liaison with active Navy forces.

•**BEACH MASTER UNIT (BMU):** conduct beach preparation and landing force coordination.

TRAINING/SUPPORT: Provide reservists in fleet mission, technical management, admin and general training units. (Includes: FTGs, NWEPTRAGRUs, TACTRAGRUs & FLTSUPTRAs).

MOBILE DIVING SALVAGE UNITS (MDSU): Conduct diving and salvage operations.

SHORE INTERMEDIATE MAINTENANCE ACTIVITY (SIMA) : Provide shipboard repair capability to shore intermediate maintenance activities.

EXPLOSIVE ORDNANCE DISPOSAL (EOD): Provide reservists and hardware for explosive ordnance disposal.

MINE SEARCH DETACHMENT (MSD): Provide reservists and hardware for very shallow water mine hunting.

INSHORE BOAT DETACHMENT (IBD): MSD and harbor control/security.

that is compatible with the very latest technology being utilized in the active fleet.

One of the most exciting developments for the Surface Reserve Force is in mine warfare. The mine warfare mission within the Naval Reserve is a vital and expanding one. Following decommissioning of the last NRF MSO in September 1994, the first of 12 newly commissioned MHC 51-class coastal minehunters will join the fleet beginning in FY 1995. One MHC will be assigned to the active component and the other 11 will be part of the Reserve Force, offering current training opportunities for a variety of Reserve rates and ratings. Following its conversion in FY 1996, USS *Inchon* (LPH 12) will transfer to the Naval Reserve, redesignated as MCS 12. Additionally, four of the 14 MCM 1-class ships will be assigned to the NRF, with the first transfer to the NRF scheduled in FY 1995.

When USS *John F. Kennedy* (CV 67) joins the NRF in September 1995, the ship's crew will be manned at 80 percent active, 10 percent TAR and 10 percent Selected Reserve.

As the NRF decommissions older FFGs, they will be replaced by Flight III and IV FFGs, once again keeping Naval Reserve assets comparable to those in the battle groups. When these *Perry*-class frigates have their Reserve LAMPS detachments embarked, they will constitute fully trained, fully ready front-line combatants.

Another significant opportunity for Naval Reservists in surface ratings will be as crew members of the Operational Reserve Carrier (ORC). When USS *John F. Kennedy* (CV 67) joins the NRF in September 1995, the ship's crew will be manned at 80 percent active, 10 percent TAR and 10 percent Selected Reserve (SELRES). This alone could result in the addition of almost 300 SELRES enlisted billets being added to the already replete inventory of training/mobilization jobs that the surface Navy provides to the Naval Reserve.

The Naval Reserve has been a leader in the assignment of women to ships. Women have served as members of our primary crews aboard our FFTs since those ships transferred to the NRF in 1991. As is happening in the active Navy, the Naval Reserve in the future will expand its opportunities for women to serve aboard ships. In addition to assignment to NRF ships, women will be assigned to Surface Augment Units (SAUs), mirroring the CNO-approved embarkation of women-at-sea plan the active force is now executing. We will continue to be very aggressive in our assignment of women at sea in the Naval Reserve.

Currently, the Naval Reserve is providing significant peacetime support to the active fleet in many areas. The NRF is supporting maritime interdiction operations (MIO) in Operation Support Democracy. Military Sealift Command and Naval Control of Shipping Selected Reservists have supported this operation from CONUS-based offices. In counter-narcotics (CN) operations, the Naval Reserve has averaged one or two ships on station supporting JTF 4 or 5 over the past two years. In FY 1993 NRF ships performed 22 percent of ships steaming days in CN ops. Additionally, reservists in SPECWAR and Mobile Inshore Underwater Warfare (MIUW) programs routinely support CN ops in various theaters.

MIUW and EOD units have conducted exercises in support of several CINCs this year, particularly CENTCOM and LANTCOM. NRF ships have participated in a wide variety of NATO contingency exercises.

Later this summer, in Exercise Varsity Player, four PACFLT NRF ships will participate in a missile exercise in the Hawaiian OPAREA. USS *Oliver Hazard Perry* (FFG 7) is participating in BALTOPS 94 in northern Europe. Selected Reservists are assigned to the ship during the entire 56-day period. On the east coast, SELRES assigned to Phib Seabee units and Cargo Handling Battalions will participate in an annual exercise off Camp Lejeune, N.C. More than 200 SELRES will participate in off-loading MPS ships.

As you can see, the Naval Reserve today is actively engaged in operations which support the Navy's "...From the Sea" strategy. Our force structure is being shaped to expand this role. In the recently concluded Roles and Missions Study, our current missions were validated and potential missions were recognized. Possible future missions include placing LCACs in a reserve operational status and transferring tenders to the NRF, to name just two.

In conclusion, I want to dispel the myth that as we right-size, the Naval Reserve will lack new opportunities. While this is a time of transition and great change, it is also a time for great opportunities in an invigorated Surface Reserve Force.

RADM Hall graduated from the Naval Academy in 1963 and was designated a naval aviator in 1964. He was selected to flag rank in 1988 and in 1991 was promoted to RADM (Upper Half). He brings to the Naval Reserve a leadership style and focus developed through combat, fleet and staff assignments around the world. His assignments include command of Patrol Squadron EIGHT (VP-8), Naval Air Station Bermuda, Fleet Air Keflavik and the Iceland Defense Force. He has also served tours on the CNO staff and in BUPERS.

Warfighting Grocer

by JOCS Mike Beal, USNR

Today's Naval Reservist is no longer just a weekend warrior.

There are some remarkable people doing remarkable things for their country and money is not their driving force. A prime example is SM1(SW) Michael W. Tuck.

We all know commuting to work can be trying, but imagine a nine-hour commute in each direction. That's what Petty Officer Tuck endures one weekend each month as he travels from his home in Windsor, Va., an hour west of Norfolk, to his duty aboard USS *Samuel Eliot Morison* (FFG 13) in Charleston, S.C.

Not all Naval Reservists have such a hefty commute, but Petty Officer Tuck is not your ordinary sailor. "I could go to Norfolk and drill at a Reserve Center or get another comfortable shore billet," he says. "But I like a ship with guns, missiles and speed. USS *Samuel Eliot Morison* is my choice."

And the feeling's mutual, according to not only the ship's CO but to Commander, Naval Surface Group Charleston as well, who selected Petty Officer Tuck as its Sailor of the Year.

Why? Most Naval Reservists spend a minimum of one weekend a month and two weeks a year on active duty. Last year, Petty Officer Tuck voluntarily spent over seven weeks on active duty plus his normal monthly drills. Along with being ESWS-qualified, he's a qualified JOOD/conning officer, Quartermaster and Signalman of the Watch.

In addition to his Naval Reserve career, he has a busy civilian job: managing a family-owned grocery that does over $1.3 million worth of business annually.

Petty Officer Tuck is no stranger to serving his country. "I joined the Navy in June 1975. In October 1975, I was serving aboard USS *Claude V. Ricketts* (DDG 5) when we were ordered to the site of a collision between USS *John F. Kennedy* (CV 67) and USS *Belknap* (CG 26).

"My job was to keep the 12-inch spotlight on the ships so our OOD could keep clear of *Belknap's* bow during rescue operations."

When asked if he was activated for Desert Storm, Petty Officer Tuck said, "No, but we were ready to go on 24 hours' notice! All the Navy had to do was say we need you and I'd have been there tomorrow. We were really disappointed when we didn't get the call -- our crew was looking forward to the opportunity to serve."

That reflects the general attitude that permeates the surface Reserve force -- ready, willing and able to serve on very short notice.

As if managing a business and serving as a Naval Reservist weren't enough, Petty Officer Tuck is also a volunteer fireman for his community. Last, but certainly not least, he is married and has four children. He attributes his successful juggling of two careers, a family and community service to the full support and strength of his wife, Linda.

The bottom line: better be careful the next time you're in the local grocery and you start squeezing the tomatoes or criticizing the meat selection. You could be dealing with a gung-ho First Class Naval Reservist who also happens to run the place!

Accessing the Naval Reserve

The Naval Reserve, since its inception in 1916, has provided support for the Navy in all major conflicts. The method for accessing the Naval Reserve (and National Guard plus all other reserve components) in these events has been involuntary through an act of mobilization, either *full* mobilization authorized by Congress as in World War II or *partial* mobilization initiated after the Presidential Selected Reserve Callup (200K) for Operation Desert Storm.

. . . the new Total Force Policy allows the Naval Reserve to directly support the fleet in forward presence operations as well as crisis response . . .

Recent changes in the National Defense policies, started by President Bush in 1990 and continued by President Clinton, have resulted in a change in the employment of the Navy's Reserve component. No longer relegated to a training-only mission in peacetime, the new Total Force Policy (OPNAVINST 1001.21A) allows the Naval Reserve to directly support the fleet in forward-presence operations as well as crisis response, but only on voluntary assignment basis when involuntary recall authority is not warranted or has not been implemented.

Methods of accessing the Naval Reserve in peacetime: *Active commands with reserve unit:* Voluntary assignment of reservists to duty is usually processed through reserve units' commanding officers or Gaining Command Liaison Officers who coordinate between the active command, the members of the unit, and the parent reserve center. The type of support is driven by the amount of time such support is required, availability of drilling reservists and funding.

Active commands in need of exercise support: Fleet exercise and other support needs are transmitted to the Atlantic and Pacific representatives of the Naval Surface Reserve staff via message (PLAD: LANTREP-COMNAVSURFRESFOR NORFOLK VA or PACREPCOM-NAVSURFRESFOR SAN DIEGO CA). The dividing line between the two representatives is the Mississippi River. The representatives advertise these requirements on Surface Reserve Force-wide bulletin boards. This system works well if a command broadcasts its needs in advance to allow reservists more time to adjust their civilian work schedules.

Special projects/special needs: Occasionally, a command requires a reservist for a project or one with a special skill. These requests can be transmitted directly to COMNAVSURFRESFOR NEW ORLEANS LA.

The following methods are used to assign drilling reservists voluntary duty:

Inactive Duty Training (IDT): Four-hour drill period, a total of 48 drill periods normally scheduled in a fiscal year for training drilling reservists; normal monthly weekend reserve duty consists of four drills.

Inactive Duty Training Travel (IDTT): Drill periods conducted at a distance away from the reservists' reserve center requiring travel at government expense. The total number of drill periods combined under IDTT orders can be up to 12, equaling six days on site.

Annual Training (AT): Minimal amount of training reserve members must perform each year to satisfy the training requirements associated with their mobilization assignment; nominally 12-17 days.

Active Duty Training (ADT): Used for training members of the Reserve component to provide support in addition to (but not in place of) the annual training requirement.

Lead times are built into the process (an orders request must be initiated by a reservist six weeks in advance of OUT-CONUS orders and four weeks for IN-CONUS), allowing the Navy to capture the least expensive airline ticket for a guaranteed seat. Shorter-fused requests are also met in the manner prescribed above if reservists and funding are available. However, the shorter the lead time, the smaller the pool of reservists who are able to adjust their civilian career schedules to meet the need.

AOB: 1093

AOB: 263
DC "A"
DS "A"
Elevator

AOB: 905
IC "A" & "C"
PM "A" & "C"
DP "A"
RM "A" & "C"
ML "A" & "C"
MR "A" & "C"
HT "C"

Migrating to Great Lakes:

the Center *of*

Training Excellence

By LT Jon P. Walman

Big changes are in store for the Naval Training Center and its component commands -- Recruit Training Command (RTC) and Service School Command (SSC) -- located in Great Lakes, Ill., just north of Chicago on the shore of Lake Michigan. By October 1 of this year, as a result of BRAC '93 (Base Realignment and Closure Commission) recommendations, *all* Navy recruit accessions will be sent to RTC, Great Lakes; and by mid-1996, SSC, Great Lakes will become the center of Navy technical training by adding 51 new courses to its base of "A" and "C" schools.

The five-year Great Lakes migration plan is already underway. RTC San Diego has been deactivated while NTC and SSC San Diego are soon to follow. Other commands slated for closing include NTC and SSC, Orlando; Naval Technical Training Center, Treasure Island, Calif; and Combat Systems Training Center, Mare Island, Calif. Most of the training conducted at these sites will migrate to NTC or SSC, Great Lakes. In addition, preparations are being made to move the Navy Recruiting Command Headquarters from Arlington, Va., to NTC, Great Lakes.

"The base-closure and consolidation process is a consequence of the overall downsizing of our military infrastructure," said RADM Mack C. Gaston, Commanding Officer, Naval Training Center, Great Lakes. "By reducing our infrastructure, we have more funding available to operate our at-sea forces, which is what the Navy is designed for. At Great Lakes, we play a vital role in the downsizing process because if people are not properly trained, then fleet readi-

ness suffers tremendously. And now that over 80 percent of surface Navy training will soon be single-sited at Great Lakes, we can say that fleet readiness starts right here."

Migration plan

RADM Gaston has commissioned a nine-member migration team responsible for coordinating all activities associated with the Great Lakes consolidation. Composed of NTC and SSC staff members, the migration team is an ad hoc "tiger team" that is researching data, planning new construction and required renovation, and organizing efforts with other commands and agencies. These activities include: collateral training commands, the Chief of Naval Education and Training (CNET), Commander, Naval Coordinator Mid-South (formerly Chief of Naval Technical Training), the Bureau of Naval Personnel (PERS 2 and 4), the Naval Sea Systems Command (NAVSEA), and the Civil Engineering Corps as well as various Logistic Support Centers.

RADM Gaston

Migration team member LCDR Paul Cox said, "Our team brings together people from CNET, BUPERS and various architectural engineering firms to coordinate all the construction, refurbishment, manning, staffing and berthing needed to execute our plan. We're also responsible for bringing all the collateral equipment here, shifting berths, transferring billets, etc.

"We've already completed some of our major migration projects. We've moved the ET "A" School into a new building and have made all the necessary improvements to make it a state-of-the-art training facility. We've completely renovated our main galley in order to feed an additional 4,000 students at a time. We are currently modifying our barracks in order to accommodate the first women recruits arriving here in July."

Other facilities being built at Great Lakes include: new firefighting and damage-control trainers, a state-of-the-art Hull Technician School and a high-risk elevator school that will be used by several different ratings. In all, there will be eight new build-


ings constructed with renovations or additions to 64 existing buildings.

LCDR Cox added, "We're also preparing for BRAC '95 by certifying data requests from the Base Structural Analysis Team that will be used to identify our growth potential and make decisions on future base consolidations. We have a lot of room for further expansion. Right now, only about half of our 1,638 acres are fully developed."

Most of the savings resulting from base closures are due to economies of scale. As more bases are shut down, their associated overhead costs (i.e. administrative staff payrolls, rent, utility costs) are eliminated. Despite the base closures and consolidations, the Navy still plans to graduate about the same number (56,000) of quality recruits this year and next.

RADM Gaston said, "The consolidation of Navy training is giving us the most cost-effective means of producing sailors who are *ready to go to sea*. At the same time, we're doing everything we can to improve our facilities and to make Great Lakes a great place for our sailors to live and

STUDENT PIPELINE

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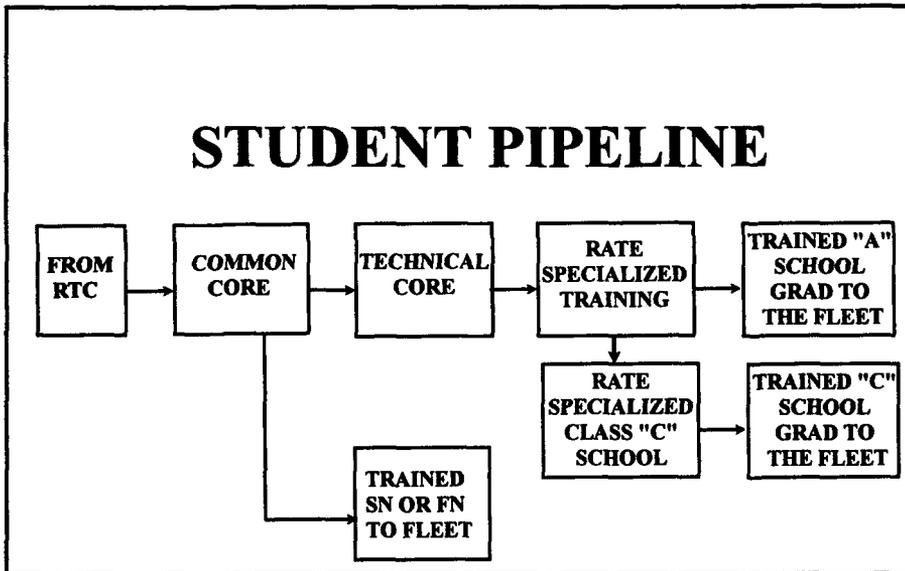
learn. We want to make a good first impression as this is where *all* our recruits will be getting their first taste of Navy life."

Eliminating fear

RADM Gaston said, "At Great Lakes we do everything we can to introduce and familiarize our recruits with shipboard life by making our facilities and training environment as realistic as possible. By developing our seamen, firemen and airmen to be technicians through the *functional* training process, we're giving them the tools they'll need at sea.

"In years past, the Navy would use the schoolhouse to teach our students mainly through classroom lectures with limited use of static displays or equipment, which were often outdated. That approach built in fear because the students were not being acclimated to the shipboard environment. Fortunately, those days are gone.

"Today, our training curricula is composed of about 50 percent classroom study and 50 percent lab work. This allows the students to touch and operate the same equipment they will see in the fleet, eliminating much of the fear they would otherwise have when reporting to their ships, submarines or squadrons."

In addition to facilitating growth for training purposes, RADM Gaston and his staff are making necessary quality-of-life adjustments to match the increased number of people coming to Great Lakes.

"Right now we have a community of about 30,000 people when you include the students, staff and their family members. In the next four years, we will grow to about 48,000. We're planning to put in more morale, welfare and recreation facilities, such as a third child-care center, additional religious programs, expanded medical and dental facilities and a lot of new Navy housing," the admiral said.

Change in motion

In addition to the consolidation of all recruit training and the planned migration of the Navy Re-

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Leading the migration effort

The Service School Command's Electronics Technician (ET) Class "A" School is a model example of the way Great Lakes is doing business. In just six months since the project began, the new ET "A" School has been transformed into a 100-percent digital, microprocessor-based radar and communications laboratory, rivalling the combat information centers and computer rooms of *Arleigh Burke*-class destroyers.

"We have insisted that the equipment being put in our new training facilities is first-rate, top-of-the-line stuff," said CAPT G. L. Maxwell, Commanding Officer of SSC. "We have the same equipment a sailor can expect to see when he gets back to his or her ship. In some cases, our equipment is even more modern than what's in the fleet."

Part of the upgrade included replacing the antiquated AN/SPS-10 radar sets with AN/SPS-64 and AN/SPS-67 systems found aboard today's surface combatants. *(See page 13.)* The new labs allow the trainees to concentrate on system interface and operational dynamics, with an increased emphasis on troubleshooting.

"All 12 classrooms are being equipped with liquid crystal display (LCD) projection panels that convert images from computer floppy disks to images shown on standard overhead projectors, which will allow instructors to project schematic diagrams and to enlarge or scroll diagrams with a remote control device. This will eventually be used to create small, animated displays of current flow through different circuit paths," said ET School Technical Training Officer, ETCM(SW) Jack F. Worden.

According to LT David A. Riposo, Director of the ET School, "All the classroom refurbishment, equipment installations and high-tech improvements are due to teamwork and a dedicated self-help effort. The hard work and resourcefulness of division staff members, together with the outstanding support from the professionals at NAVSEA, SPAWAR and NTC Public Works have brought this project in ahead of schedule and on budget."

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cruiting Command Headquarters to Great Lakes, the Service School Command, commanded by CAPT Gregory L. Maxwell, is making significant changes to its training philosophy/curricula to facilitate the expansion at Great Lakes.

SSC provides introductory and advanced-level training for recruit graduates to help prepare them for the designated specialties they will have in the fleet. It also supplements training afloat by offering advanced and/or specialized training for officers and enlisted personnel with at-sea experience. Course lengths range from two days to 32 weeks, and up to 90 percent of the courses are college transferable.

In the next two and a half years, the number of SSC courses will grow from 92 to 144 while the average number of students per day will increase from 3,700 to about 7,500. This expansion includes the migration of all apprenticeship training (seaman, airman, fireman) from RTC, Great Lakes to SSC.

In response to these challenges, CAPT Maxwell has initiated some measures to reduce costs and improve efficiency at SSC. Instead of being part of what was previously five to six independently acting divisions, he has now placed all "A" and "C" schools under three cohesive departments: Engineering, Combat Systems and Training, the latter being non-instructional. This reorganization has given SSC a much better command perspective.

Core and strand philosophy

CAPT Maxwell also changed the former apprenticeship training curricula and introduced the "core and strand" concept in order to reflect a more logical and standardized training progression (*see page 11*). The core/strand acts to eliminate redundancies, allowing more time for hands-on training. It standardizes the training process by replacing long "A" schools formed around ratings with a progression of short courses formed around functional areas. Consequently, certain rat-

ings, such as DS, have been or are going to be merged.

The "common-core" phase indoctrinates recruits with the shipboard duties of seamen or firemen by building upon basic military skills learned at RTC. The three-week course introduces students to shipboard organization and safety programs while emphasizing the importance of leadership.

After the common-core phase, the students entering technical ratings go through the "technical-core" phase where they receive further shipboard indoctrination and training in the areas of electrical, mechanical or electronics training. These students then break into their respective strands or specific rating areas. These include EM, IC, GSE, etc. for electrical; MM, BT, GSM, etc. for mechanical; and ET, FC for electronics.

"The flexibility provided by the core/strand concept has allowed us to place our best students where they're needed most. It also doesn't require students returning from the fleet to go back through the whole track," said CAPT Maxwell. "In the engineering technical-core curriculum, we were able to incorporate additional training, specialize it where necessary, increase the overall quality of training while still reducing the aggregate course length by 10 percent and lowering our need for instructors by 14 percent.

"The core-and-strand philosophy

is a much more efficient and cost-effective training strategy. In the past, only about 80 percent of our classroom capacity was filled by our students. With the administrative and organizational changes made in the engineering curriculum, we have increased average class utilization to 97 percent," he said.

A final way SSC is improving student education is by introducing some advanced training technologies which are creating a virtually electronic classroom. Some of the new technologies being used at Great Lakes include: Video Teletraining (VTT), Authoring Instructional Materials (AIM), Global Standard Training Activity Support System (STASS), and Interactive Electronic Technical Manuals (IETM) -- (See SWM Jan/Feb 94:14).

CAPT Maxwell added, "Our success, thus far, is largely due to our ability to work well together with the other Navy teams and civilian contractors. We are on track with every one of our FY-94 migration projects. In fact, the overall facilities cost estimate of $205 million to execute our migration plan through new construction, refurbishment, etc. --

which was presented prior to BRAC '93 -- is still good today."

People make the difference

Summing up the importance of training, RADM Gaston said, "This consolidation is only possible because the people involved in it are of the highest quality. We are the best Navy the world has ever seen. We're not the best Navy necessarily because of machines. We're the best Navy because of the people -- well-trained, well-educated, enthusiastic, highly spirited people. That's why we're winners -- that's why we're heroes -- that's why we'll always win.

"Every machine that exists was built by man. People are not machines and they were not built by man. Every machine that exists can only be fixed by man. So, it's not our machines that make us the best, it's our people that make us the best. That's why it is so important that we treat our people right and that we train our people right."

Did you know?

Built in 1911, the Naval Training Center, Great Lakes is steeped in tradition. It was the site for one of the Navy's first aviation schools and the first recruit training facility for women accepted into the regular Navy. The "Golden Thirteen" -- the first 13 black officers in the Navy -- received their commissions at Great Lakes, while many other distinguished naval officers, including the current Chief of Naval Operations and former seaman recruit, ADM Jeremy M. Boorda, started their Navy careers at NTC.

One historical fact that may come as a surprise to the many sports fans in the fleet. In the wake of World War I, the NTC student population had become large enough to support its own college football team. In 1918, the Great Lakes Bluejackets went on to win the Rose Bowl over the Marines from Mare Island. This winning tradition continued through World War II as legendary football coach, LTJG Paul Brown led his team to victories over numerous college football powers such as Notre Dame and the University of Illinois.

At SWOS Division Officer Course

No more "fire and forget"

By LT Esther J. McClure

The winds of change are blowing at the Surface Warfare Officer School Division Officer Course (DOC) in Newport, Rhode Island. The new class of 161 ensigns, which convened on June 10th, will receive training that is significantly different from the past in that it will focus on helping them learn the *practical application* of necessary skills *before* they report to their ships. A restructured curriculum and new teaching methods will enable the students to meet that goal.

A decision was made last year by the Secretary of the Navy to single-site all division officer training in Newport, Rhode Island, and close SWOSPAC in Coronado. "This was strictly a budgetary call; it just didn't make sense to keep both schools open and operating at half capacity when throughput had plummeted as a result of ship decommissionings," said Captain John C. Dranchak, the Director of the Division Officer Course.

In a related action, and with the budget firmly in mind, a training review was conducted in Newport in February 1992 which "took a hard look at the specialty training provided to surface warfare officers, to see whether we could realize efficiencies through course consolidations," according to Captain Dranchak. "As an example, in a review of training objectives we discovered that over 80 percent of the material taught at the specialty six-week Combat Information Center Officer course was redundant with material provided to all ensigns enrolled in the Division Officer Course."

In the end, several dozen courses were identified as being suitable for integration into appropriate curricula at SWOS, and the DOC curriculum was restructured to absorb more than 30 of those courses. Many of the same vital courses -- Harpoon Watch Officer, FFG-7 Weapons Officer, ASW Officer -- will now be offered at one location in a stream-lined format that will save millions of dollars.

Ensigns attending DOC will be programmed into a core/strand pipeline tailored to their ship type and specific billet. Although this training format may be familiar to those who have been through department head school, it is a

radical departure from the one-size-fits-all system that new ensigns used to go through enroute to their first ship.

The new framework consists of three phases. Core Phase I (11 weeks in duration) includes damage control, bridge and CIC watchstanding, leadership, shipboard management, and live fire-fighting. Core Phase II (6 weeks long) provides most of what was formerly contained in the Engineering Officer of the Watch (EOOW) courses, except for console time. All students attend Core training.

Following the two Core Phases, students will enter one of 32 Billet Specialty Training courses (Phase III) tailored to their ship types and initial billet they will be assigned.

"These changes have some important ramifications for commanding officers. It is now critical that LORTARPS reflect the specific billet that they want the incoming ensign to fill before the 10-week point in the curriculum so we can get the ensign on the correct track," said Captain Dranchak.

"COs also need to be aware that we can accept fleet inputs into the Core II and Specialty tracks depending on the availability of quotas. This will be particularly useful for those mid-tour intraship rotations. Each DOC segment has its own Course Identification Number (CIN) and convening dates, and course descriptions are provided in the CANTRAC. PERS 413 is quota-control for these courses," he added.

The cornerstone of the new curriculum is a shift in teaching methodology which places the primary emphasis of the course on practical application of knowledge, instead of rote memorization. The old curriculum with its 31 examinations required students to memorize a vast amount of factual material. The students, studying for two and sometimes three exams a week, referred to this as "fire and forget" learning.

"The new training focuses on understanding the dynamics and relationships among specific systems aboard ship," said LCDR John Rosander, the Academic Director. "Instead of concentrating on numbers and parameters, we will now be focusing on the *whys* behind those numbers."

Changes in modern naval warfare are also reflected in the curriculum revision. "Joint operations and littoral warfare are embedded in the curriculum in pertinent lessons and in doses appropriate to new division officers," said CAPT Dranchak. "Recent changes in electronic warfare, command and control and anti-submarine warfare are also reflected in our course material.

"One of the big payoffs in the 'Center of Excellence' concept is the synergism that results from having each level of the surface warfare training continuum working side by side at SWOS. The staffs at PCO school, department head school and the other training departments played an important role in helping us create the new DOC curriculum.

CAPT Dranchak concluded, "the goal is to enable division officers to retain more of what they learn so that they can more rapidly become a contributing member of their wardrooms. However, the job is not done when the student graduates. We need to get feedback from the fleet as this change takes root so we can make course corrections that may be needed in order to provide the best possible training for division officers."

Improving training with fleet input

Have you discovered a sore spot with your divisional training program? If you don't already know, there's a way to fix it. The Navy Training Feedback System is a feedback tool that is designed to identify, validate and resolve training-related deficiencies.

This system provides division officers, chiefs and leading petty officers a direct input to the training process by communicating information about an area of training they feel can be improved, or about an individual they feel is not properly trained or unable to perform a specific skill.

It works simply by filling out a feedback form (OPNAV 1500\39) which is available through the Navy supply system. The directions on the back of the form are easy to follow.

Anytime a training problem is encountered by Navy or civilian personnel that cannot be resolved at the unit, squadron or group level, it should be identified and reported on a feedback form. Your training officer or designated representative will forward the form to the Chief of Naval Education and Training (CNET) in Pensacola, Fla. Any reported training deficiency will be resolved as quickly as possible.

Use of the feedback system is taught in leadership courses at every level. The Navy understands that when it comes to training, no one knows better than those who administer training on board their ships. It also understands that effective training, which is measured through the ability to perform tasks, ensures readiness.

More information, including copies of the Navy Training Feedback System video, is available from functional commanders, echelon-two commands, and type commanders. You may also contact Mary Farrow or Terry Halvorsen at COM (904) 452-3879/8786, DSN 922-3879/8786, or FAX 3869. Feedback issues should be mailed to CNET Training Performance Evaluation Board, 250 Dallas Street, Pensacola, Fla., 32508-5220.

Senior Enlisted Academy in transition

By JOC(SW) Kip Burke

Over the next three years, the function of the Senior Enlisted Academy will shift to preparing prospective command master chiefs and chiefs of the boat for their new duties. At the same time, much of the executive leadership and management skills now taught at SEA will be integrated into new mandatory training for chiefs and senior chiefs.

"The Senior Enlisted Academy will begin a transition to function, to focus the curriculum on the command master chief/chief of the boat, beginning in January 1995," said ETCS Gail Brown, curriculum developer at Chief of Naval Education and Training. "The intent of the change is to prepare newly selected CMCs and COBs for the responsibilities of the position enroute to their initial assignment."

The curriculum is being developed to meet the real-world needs of fleet command master chiefs. "The curriculum will be driven by the realities of the fleet rather than by some dreamer behind a desk," said Master Chief of the Navy John Hagan. "We're basing what we want them to learn on what a command master chief does. The people at CNET have developed a list of skills and knowlege required based on duties performed, and the fleet and force master chiefs have validated that list and fleshed it out."

"A cross-functional group of CMCs and COBs came together in Pensacola in April. They represented surface, submarine, shore and aviation communities and had 35 CMC/COB tours and 280 years of naval service between them," ETCM Brown said.

A questionnaire from the job task list that resulted is being distributed to a sample of the CMC/COB population. "Command master chiefs and chiefs of the boat will be asked to rank the importance of the tasks on the list to doing their job," ETCS Brown said, "and to rank the value of training in those tasks. Analysis of the rankings will help determine the course content, and as a result, the course content will be driven by needs of the fleet."

The revised Senior Enlisted Academy will be the top end of the leadership training continuum which will implement mandatory leadership training for second class petty officer and above. Tentatively called Professional Military Education (PME), this continuum will replace leadership development programs at the command level.

Master Chief Hagan stressed that the changes in the Senior Enlisted Academy would not be immediate. "The next three to five classes will be selected the same way they always have, but we're going to be putting a few people in each class through the command master chief detailer."

JTIDS deploys with Battle Group

By LT L. Martinez and LTJG K.W. Rhodes, USS *Antietam* (CG 54)

The *Carl Vinson* Battle Group recently penned a new chapter in the book of naval warfare by becoming the first carrier battle group to deploy with the Joint Tactical Information and Distribution System (JTIDS). In doing so, the U.S. Navy became the first service to deploy JTIDS-equipped platforms in an operational environment.

JTIDS was designed as an advanced tactical information distribution system that provides digital data and voice communications, navigation and identification information for Navy, Air Force, Army and Marine Corps platforms as well as air control for similarly equipped aircraft. The system uses the new Link 16 or TADIL J message structure for the exchange of tactical information, including surveillance tracks, command-and-control directives, precise position/status reporting, electronic-warfare and digital-voice communications.

"JTIDS provides several benefits for battle group decision makers," said LT "Marty" Martinez, CIC officer on USS *Antietam* (CG 54). "First, it gives units a high-capacity, jam-resistant, secure, flexible, multiple-access information distribution system that provides decision makers with more reliable information about their environment. Also, all the JTIDS-equipped platforms -- USS *Carl Vinson* (CVN 70), USS *Antietam* (CG 54). USS *Arkansas* (CGN 41). USS *Asheville* (SSN 758) and selected E-2C and F-14D aircraft -- retain their previous tactical datalink capability."

The deployment of the *Carl Vinson* Battle Group represents the culmination of a joint service effort that began over 25 years ago, when it was first realized that the increased tactical demands of modern warfare would soon overwhelm the existing Link 11 system.

In the current battle group environment, not all units are JTIDS capable. The data-forwarder component provides a bridge between Link 16 and Link 11. In this role, a designated Link 16/Link 11-capable unit will pass track reports from one link to the other, thereby providing a complete and comprehensive tactical data picture for the entire force.

Another feature of JTIDS is the secure-voice capability, providing two separate yet simultaneous secure-voice circuits. Each JTIDS terminal contains two voice decoders which translate to and from the digital format to provide voice-recognition-quality communications. This feature has proved useful in sharing battle-group tactical information.

In a diverse and continually changing tactical environment, Link 16 serves a dual role of "plugging the holes" in existing data links and supplementing their operation. The resulting multiple datalink battle groups are poised to combat any threat in a global theater of operations.

The JTIDS deployment followed an intensive integration, training and testing program that began 18 months ago. This was followed by installation and culmination of a successful technical evaluation just before deployment.

Ships that can expect to receive JTIDS installation include aircraft carriers, fleet flagships, Aegis cruisers, *Tarawa*-class (LHA 1) and *Wasp*-class (LHD 1) amphibious-assault ships.

Editor's note: See ships deployed with the Carl Vinson BG in SITREP.

In the summer of 1982, the House Appropriations Committee issued a report saying USS *Ticonderoga* (CG 47), as the platform for the Aegis weapon system, was in danger of tipping or listing in rapid maneuvers or in rough seas. The main concern was the superstructure which housed the radar equipment.

The ship was criticized for being sluggish, overweight and unstable, and congressional investigators claimed that the weight of the ship would prevent her from keeping up with a carrier battle group. But RADM Meyer was adamant about his program. "You know what it takes?" he asked. "Staying power. Determination." And eventually, his determination won out over his skeptics.

The Navy first tackled the weight and speed concerns. As for the weight, the Navy said, 80 tons of lead ballast have been added in the ship's skeg. The ballast reduces the vertical center of gravity, thereby compensating for the additional displacement. In regard to speed, top-level requirements called for sustained speed in excess of 30 knots. *Ticonderoga* exceeded that requirement during sea trials in May 1982, handling high-speed, full-rudder turns with ease.

In order to further prove herself, the *Ticonderoga* was put through a series of simulated missile attacks. The ship was attacked from every direction 13 times by drones that attempted to jam the ship's powerful radars. The Navy reported that all 13 were shot down by *Ticonderoga* missiles.

And if that were not enough, *Ticonderoga's* record and that of other ships in her class have proved their worth:

• *Ticonderoga* rendered air picture coordination and naval gunfire

By JO1 Roger Dutcher

As the last of the *Ticonderoga*-class cruisers is commissioned, *Surface Warfare Magazine* takes a look at past trials and victories of introducing and integrating the class and its revolutionary Aegis program into the fleet.

"Our task is to create the major surface warships for the rest of the century," RADM Wayne E. Meyer, Aegis Project Manager and "the father of Aegis," said in 1977. Since then, the development and deployment of the Aegis weapon system -- and the platforms on which they are housed -- have remained locked on target.

support off Lebanon in 1983 and 1984.

• USS *Yorktown* (CG 48) coordinated the intercept of the *Achille Lauro* hijackers in the Mediterranean in October 1985.

• Two Aegis cruisers were on-line in support of U.S. naval operations that escorted U.S.-flagged Kuwaiti tankers in the Arabian Gulf in 1987 and 1988.

• During Exercise Imminent Thunder during Operation Desert Shield, *Bunker Hill's* Aegis system teamed with shipboard air controllers to ensure safety of flight for more than 40 aircraft operating simultaneously in the amphibious objective area. With her state-of-the-art Aegis combat suite, *Bunker Hill* provided essential AAW coverage and aircraft control at sea.

• *Bunker Hill* (CG 52) also led the effort to control the air over the Persian Gulf during Operations Desert Shield/Storm. The cruiser

provided continuity and direction for AAW forces assigned to Battle Force "Zulu," and also provided early detection and forward SM-2 anti-air missile defense against potential air strikes from Iraq and occupied Kuwait. After nearly four months in action, *Bunker Hill* passed the ba-

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Tomahawk missiles fired during Operation Desert Storm

USS *Bunker Hill* **28 missiles**

USS *Mobile Bay* **22 missiles**

USS *Leyte Gulf* **2 missiles**

USS *San Jacinto* **14 missiles**

USS *Philippine Sea* **10 missiles**

USS *Princeton* **3 missiles**

USS *Normandy* **26 missiles**

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ton to USS *Mobile Bay* (CG 53).

• "Throughout the war, our Aegis system was a critical link in controlling aircraft over the Persian Gulf,"

said CAPT Bob Patton, then-CO, USS *Leyte Gulf* (CG 55).

• The Navy credited USS *San Jacinto* (CG 56), on station in the Red Sea in January of 1991, with being the first "man-of-war" to fire a Tomahawk cruise missile during a war.

• On February 18, 1991, a submerged influence-type mine exploded under the stern of USS *Princeton* (CG 59), and two seconds later another mine exploded about 300 yards off the starboard bow. The combination of the explosions tore the ship's superstructure into two pieces at the amidships quarterdeck, and ruptured a firemain and some fuel tanks.

Even in her condition, with the after 5-inch/54 gun mount and after vertical launch system out of commission, *Princeton* remained a potent warship, still able to launch Standard surface-to-air missiles and Tomahawk land-attack missiles. A com-

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The Evolution of the Class

Commissioning date and homeport indicated for each ship.

Baseline I

USS *Ticonderoga* (CG 47) January 22, 1983, Norfolk

USS *Yorktown* (CG 48) July 4, 1984, Norfolk

*LAMPS III, RAST haul-down flight deck system and Block II Standard missiles added to these ships:

USS *Vincennes* (CG 49) July 6, 1985, San Diego

USS *Valley Forge* (CG 50) January 18, 1986, San Diego

USS *Thomas S. Gates* (CG 51) August 22, 1987, Norfolk

Baseline II

*Added Tomahawk and the Vertical Launch System:

USS *Bunker Hill* (CG 52) September 20, 1986, Yokosuka

USS *Mobile Bay* (CG 53) February 21, 1987, Yokosuka

USS *Antietam* (CG 54) June 6, 1987, Long Beach

USS *Leyte Gulf* (CG 55) September 26, 1987, Mayport

*Added SQQ 89 sonar:

USS *San Jacinto* (CG 56) January 23, 1988, Norfolk

USS *Lake Champlain* (CG 57) August 12, 1988, San Diego

USS *Philippine Sea* (CG 58) March 18, 1989, Mayport

Baseline III

*Added AN/SPY-1B radar:

USS *Princeton* (CG 59) February 11, 1989, Long Beach

USS *Normandy* (CG 60) December 9, 1989, Norfolk

USS *Monterey* (CG 61) June 16, 1990, Mayport

USS *Chancellorsville* (CG 62) November 4, 1989, San Diego

USS *Cowpens* (CG 63) March 9, 1991, San Diego

USS *Gettysburg* (CG 64) June 22, 1991, Mayport

Baseline IV

*Added UYK-43/44 computers:

USS *Chosin* (CG 65) January 12, 1991, Pearl Harbor

USS *Hue City* (CG 66) September 14, 1991, Mayport

USS *Shiloh* (CG 67) July 18, 1992, San Diego

USS *Anzio* (CG 68) May 2, 1992, Norfolk

USS *Vicksburg* (CG 69) November 14, 1992, Mayport

USS *Lake Erie* (CG 70) July 24, 1993, Pearl Harbor

USS *Cape St. George* (CG 71) June 12, 1993, Norfolk

USS *Vella Gulf* (CG 72) September 18, 1993, Norfolk

USS *Port Royal* (CG 73) July 9, 1994, Pearl Harbor

bination of ship design and construction, advanced preparation and training and the timing of the explosion, which found most of the crew

neering Development Site (CSEDS), comprising all the electronics that make up the Aegis Combat System, was commissioned at Moorestown in May 1977. RADM Meyer explained the mission of CSEDS -- to engineer and test the Aegis Combat System. "We in the project see this site as an investment in a new way to create our new Navy," he said then. "Our Navy is at a critical juncture, a transition point in the nature of combat systems -- forced by the intensity and diversity of attack made possible by missiles."

• In January 1983, *Ticonderoga* was commissioned the first Aegis cruiser.

• The SPY-1D radar underwent a successful start-up demonstration in 1985 in which the radar system tracked targets of opportunity in the search mode.

• Both *Ticonderoga* and *Yorktown* supported the raids on Libya in March and April 1986.

• The Vertical Launch System (VLS) component of the Aegis system was successfully tested on *Bunker Hill* in May 1986.

• In June 1986, the SPY-1D completed an operational test during which a variety of Navy jamming and fighter aircraft were tracked.

• *Princeton*, in 1989, became the first Aegis cruiser to receive the AN/SPY-1B, a system more effective as the result of signal processing gains. It also had an improved capability to detect small targets in heavy electronic countermeasures (ECM) environments.

• In 1991, USS *Chosin* (CG 65) received the AN/UYK-43B computers which processed more target track information at a much faster rate.

Aegis engagement sequence

A typical Aegis engagement sequence begins as a target is detected by SPY-1 as it scans 360 degrees, horizon to zenith. At the horizon, the search rate is higher, in order to quickly detect and track low-level and pop-up targets. Once detected, a target is automatically tracked by SPY-1. If a threat evaluation of the target by the Command and Decision System indicates a "hostile" target, it will result in the launch of a Standard missile on an intercept trajectory.

During missile flight, SPY-1 tracks the missile and continuously provides mid-course guidance. This keeps the missile's trajectory most efficiently aimed at the updated intercept points, compensating for changes in the target's course or speed. A few seconds before intercept, a MK-99 fire control system illuminator is linked to SPY-1 commands, pointed at the target and turned on. It then provides continuous-wave illumination of that target for the missile to home in for the kill.

The Aegis weapon system tracks and engages multiple targets simultaneously and can direct multiple missiles to different targets.

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in the least vulnerable area of the ship, enabled the cruiser to continue her mission.

The Age of Aegis

• In the spring of 1973, the first engineering development model of the Aegis Weapon System MK 7 was tested at a land-based test site in Moorestown, N.J., -- constructed to simulate actual shipboard conditions-- and was successfully completed the following October, readying Aegis for sea tests in USS *Norton Sound* (AVM 1).

• A series of successful at-sea firing tests began May 1974 and culminated with Navy Preliminary Evaluation (NPE) in February and March 1975. During NPE, Aegis achieved a perfect performance record of six successful intercepts for six actual SM-1 missile firings.

• The Aegis Combat System Engi-

The Last of the Class

USS *Port Royal* (CG 73), the last of the *Ticonderoga*-class cruisers to be commissioned, is the second U.S. Navy warship named to commemorate the battles of the American Revolution and the Civil War fought in the waters of Port Royal Sound and on the adjacent South Carolina sea islands.

In February 1779, South Carolina troops under the command of Colonel William Moultrie repelled an attempted British amphibious attack.

In November 1861, a combined Union Army-Navy expedition, under the command of Flag Officer Samuel DuPont, captured the island, which became the principal refitting base for the Southern Blockading Squadron.

The first *Port Royal* was a wooden sidewheel gunboat commissioned in 1862. The ship saw action in various campaigns off the Atlantic and Gulf coasts during the Civil War, including service in The Battle of Mobile Bay.

What's ahead for Aegis cruisers?

"As an integral part of our forward-deployed naval forces, Aegis cruisers will continue to serve as the backbone of the surface Navy well into the next century. They will be upgraded to meet the evolving theater ballistic missile and cruise missile threat and will remain ready to fight from the sea." -- N865, Surface Platforms and Combat Systems Branch, Surface Warfare Division.

"As long as our Navy is required to steam 'in harm's way' to carry out its assigned missions, formidable multi-mission-capable platforms like *Ticonderoga*-class cruisers will always be needed. Planned upgrades to the Standard missile and evolutionary improvements to the Aegis Weapon System promise to keep our ships on the cutting edge of combat readiness well into the 21st century." -- Headquarters, Aegis Program Office.
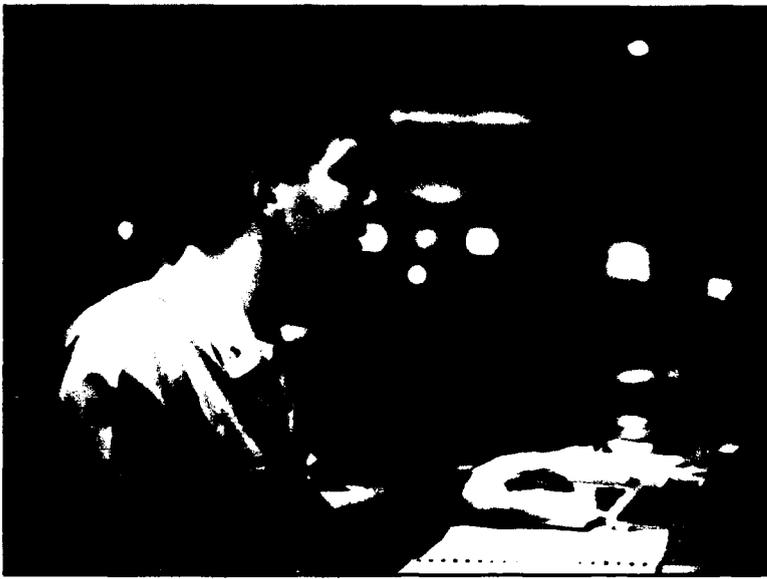
Above: LCDR Larry DiRita in *Leyte Gulf's* CIC.
Right: Vertical launch capability was added in later ships.
Below: *Antietam* at sea. Photo by PH3 David C. Lloyd.
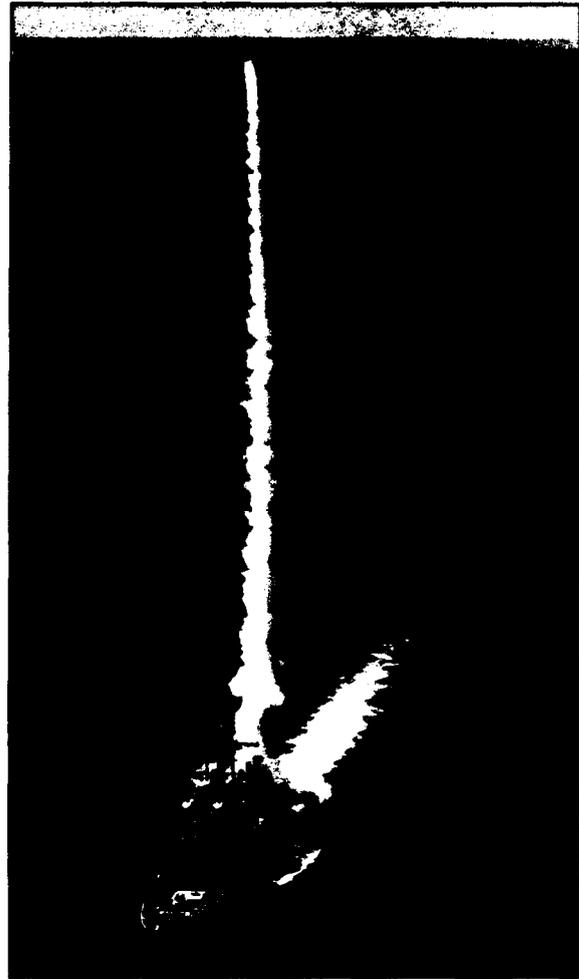
Ship Characteristics

Length: 532 2/3 feet at waterline 567 feet overall
Beam: 55 feet
Draft: 31 1/2 feet
Propulsion: 4 gas turbines; 80,000 shp; 2 shafts
Speed: 30+ knots
Range: 6,000 NM at 20 knots
Manning: approx. 385 (29 officers, 356 enlisted)
Helicopters: (2) SH-60B Seahawk LAMPS III
Missiles: (2) twin Mk 26 Mod 1 Launchers for SM-2(MR), (2) 61-cell Mk 41 VLS for Standard Missile SM-2, Tomahawk (TLAM, TASM) in CG 52-73
(8) Harpoon SSM
Guns: (2) 5-inch 54-caliber DP Mk 45
(2) 20mm Phalanx CIWS Mk 16
(4) .50 cal machine guns, 2 25mm chain guns
Torpedoes: ASROC fired from Mk 26 launcher in CG 47-51; from Mk 41 VLS in CG 52-73
(6) 12.75-inch torpedo tubes Mk 32

Search radars: SPS-49(V)6 air search
SPS-55 surface search
SPS-64 navigation
(4) SPY-1A multi-function in CG 47-58
(4) SPY-1B multi-function in CG 59-73
Fire control radars: (1) Mk 7 Aegis weapon system
(1) Mk 86 GFCS with SPQ-9A radar
(4) Mk 99 fire-control illuminators
(1) Mk 116 ASW FCS
SQQ-89(V)3 ASW system in CG 54-73
Sonars: SQS-53A bow mounted in CG 47-58
SQS-53B bow mounted in CG 59-67
SQS-53C bow mounted in CG 68-73
SQR-19 TACTAS in CG 54-73
EW/ECM systems: SLQ-32(V)3
UPX-34 SARTIS
SLQ-25 NIXIE
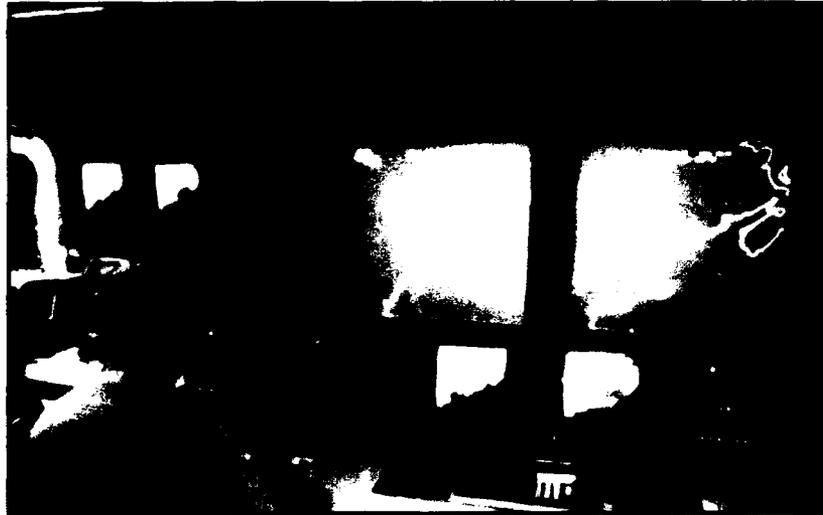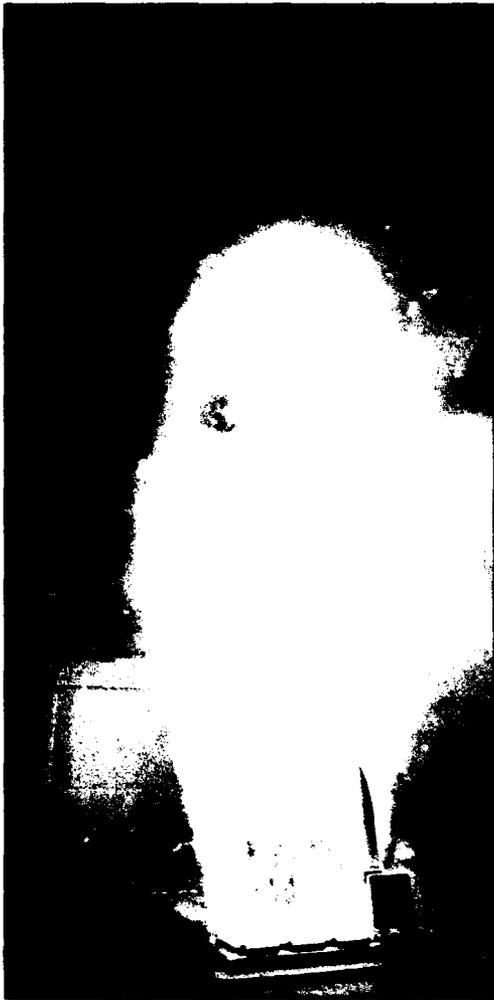
Left: Chancellorsville fires an SM-1 missile from her aft vertical launcher.

Above: The nerve center -- Shiloh's Combat Information Center. Photo by PHC S. Briggs.

Right: Leyte Gulf, winner of three consecutive Battle "E"s.

Below: Mobile Bay and Leyte Gulf, both Baseline II ships equipped with vertical-launch Tomahawk.

Above and overleaf: Equipped with a RAST haul-down flight deck system, Antietam carries a LAMPS III SH-60B helicopter for ASW prosecution. Photos by PH3 David C. Lloyd.

Below: Ticonderoga-class cruisers handle heavy weather with aplomb.

Left: Yorktown fires a Standard missile from her aft box launcher.

Beating the bad guys

gram in response to fleet inputs has brought SLQ-32 to maturity. To make effective use of limited fiscal resources, however, fleet representatives and program officials agreed

non-DDI consoles, support Advanced-Capability (ADCAP) improvements now under development, and maintain a single world-threat database. Develop-

SLQ-32 Variants

•(V)1, for smaller amphibious ships (LSD,LPD,LST) and some
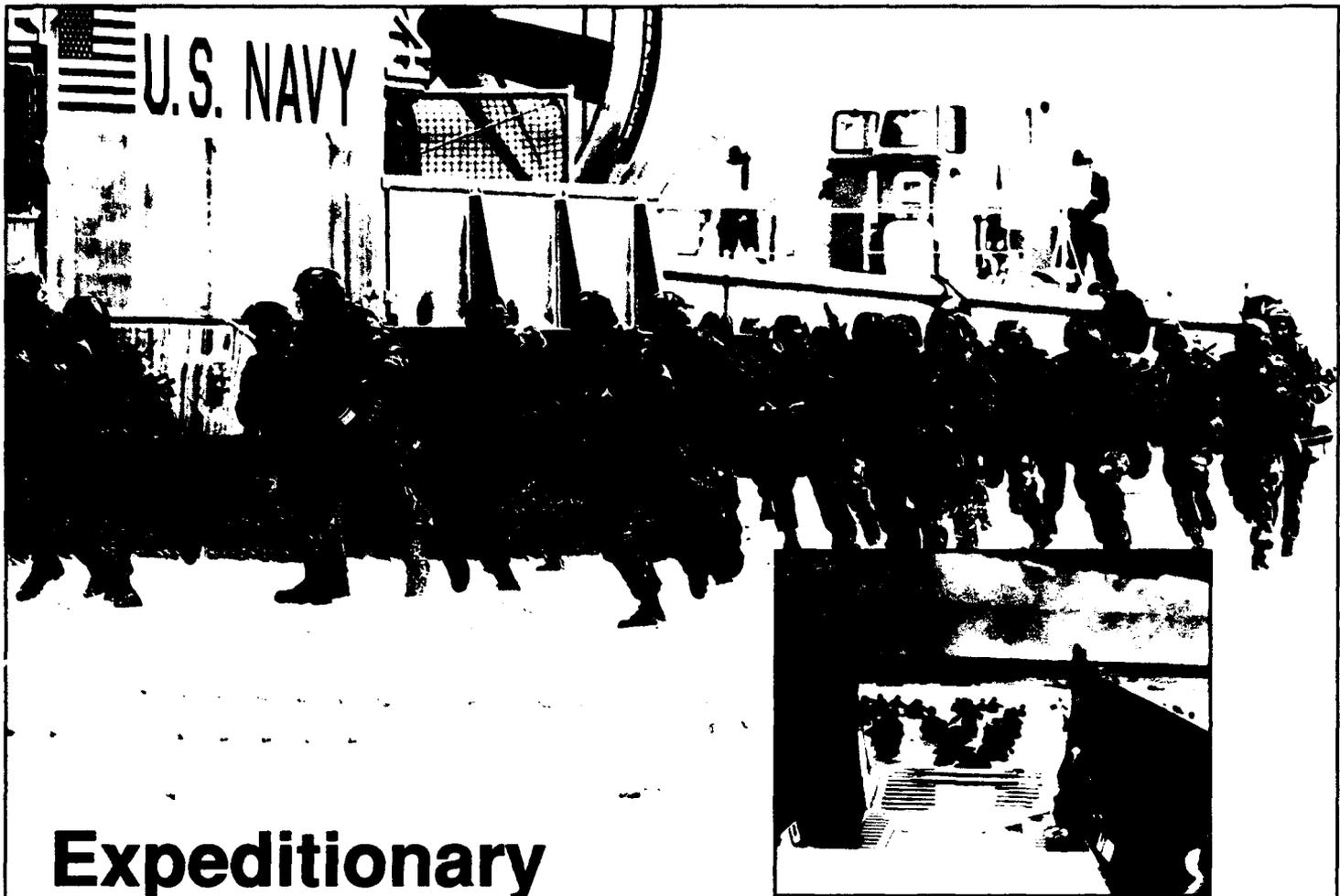
Expeditionary Warfare:

Maneuver from the sea

**An interview with
Major General
Harry W. Jenkins Jr. USMC
Director
Expeditionary Warfare Division**

As a consequence of the Navy's "...From the Sea" strategy, Navy leadership is placing much greater emphasis on warfare in the world's coastal/littoral regions. On June 6, the 50th anniversary of D-Day, Surface Warfare Magazine talked with Major General Harry W. Jenkins Jr., USMC, Director Expeditionary Warfare Division (N85) about many of the aspects of this rapidly advancing warfare area.

• **General Jenkins, could you briefly explain the role of your organization and how it fits into the OPNAV structure?**

The Expeditionary Warfare Division first came together about 18 months ago. It was designed to give additional emphasis to three war-fighting areas: First, everything associated with *amphibious warfare* including all its ships and systems as well as the manning, training and maintenance of ships and craft in the amphibious community.

Second, *mine warfare* in the Navy, whether it's deep-water or all the way up to the surf zone or craft-landing zone in an amphibious operation. We are the resource and platform sponsor for all mine warfare ships, equipment and EOD units as well as the manning, training and maintenance of those ships. We also oversee all research and development efforts in mine warfare.

The third area is *naval special warfare* (NSW). Al-
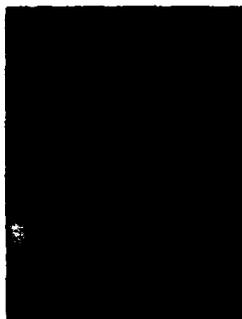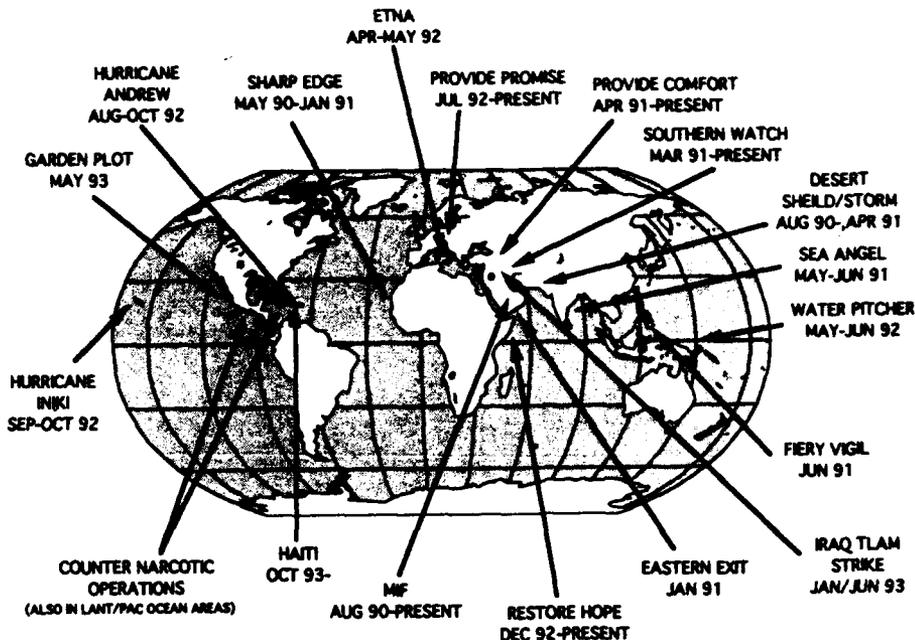
MGEN Jenkins

though I am the sponsor for NSW, the funding for these programs comes out from CINCSOF (Commander in Chief, Special Operations Force).

In addition, N85 is the point of contact for all unmanned aerial and certain unmanned underwater vehicle (UAV/UUV) requirements in the Navy. If there are naval requirements for riverine warfare in terms of actual ships and craft, we're the platform sponsor while N35 is the operational sponsor.

The Expeditionary Warfare Division is on equal footing with the other three platform sponsors, surface (N86), air (N88) and undersea warfare (N87). N85 was designed to give the warfighting areas I've just mentioned more visibility than they've had in the past, and it's a reflection of our " ... From the Sea" warfighting philosophy. More importantly, based on our concentration of forces over the past few years, it appears to be the way we're going to have to fight in future conflicts. *(See graphic above.)*

• **Can you describe how an amphibious landing in the future would compare and contrast to the D-Day landing 50 years ago?**

In contrast, there's no question that the state of amphibious warfare during the invasion of Normandy, which was the largest amphibious operation of its kind in history, was much different than it is today. Because of the state-of-the-art technology and systems and, to a lesser degree, the array of the opposition at the time, it was a case where you had to go straight down the barrel of a gun to fight your way ashore, establish the build-ups and work inland.

Most of the amphibious operations in World

ETNA
APR-MAY 92

HURRICANE
ANDREW
AUG-OCT 92

SHARP EDGE
MAY 90-JAN 91

PROVIDE PROMISE
JUL 92-PRESENT

PROVIDE COMFORT
APR 91-PRESENT

SOUTHERN WATCH
MAR 91-PRESENT

GARDEN PLOT
MAY 93

DESERT
SHIELD/STORM
AUG 90-,APR 91

SEA ANGEL
MAY-JUN 91

WATER PITCHER
MAY-JUN 92

HURRICANE
INIKI
SEP-OCT 92

FIERY VIGIL
JUN 91

IRAQ TLAM
STRIKE
JAN/JUN 93

COUNTER NARCOTIC
OPERATIONS
(ALSO IN LANT/PAC OCEAN AREAS)

HAITI
OCT 93-

MIF
AUG 90-PRESENT

RESTORE HOPE
DEC 92-PRESENT

EASTERN EXIT
JAN 91

N8 Organization

Deputy Chief of Naval Operations
Resources, Warfare Requirements and Assessment
N8
VAdm. T. J. Lopez

Programming Division **N80** RAdm. D. L. Pilling	Fiscal Management Division **N82** RAdm. W. A. Earner	Expeditionary Warfare Division **N85** Maj. Gen Jenkins	Submarine Warfare Division **N87** RAdm. T. D. Ryan	Special Programs Division **N89** RAdm. G. W. Davis
Assessment Division **N81** RAdm. D. T. Oliver	CinC Liaison Division **N83** RAdm. W. J. Hancock	Surface Warfare Division **N86** RAdm. P. J. Coady	Air Warfare Division **N88** RAdm. B. M. Bennitt	

War II were of that kind, where it was straight ahead, and you had to wear down the opposition -- what we call attrition warfare.

The way we're going to do amphibious power projection in the future differs in some respects to that. We will have much better command and control, and intelligence systems in our ships. That is evidenced by the kinds of things we're putting into our big-deck amphibious ships -- the LHDs, LHAs -- in terms of command and control upgrades and the acquisition of intelligence systems.

These high-tech improvements will enable the commanders of the future to have a greater ability to draw on the intelligence they will need to make the right decisions about where to land. In that respect, the capability we have on our ships today and what is coming in the future will be significantly better than what we had 50 years ago. These capabilities will allow us to plan amphibious power projection by picking and choosing our landing areas with a much higher degree of accuracy and sophistication in order to exploit weaknesses in the opposition.

In comparison, mine warfare, which played a major role in the D-Day operations, will also play a significant role in the future wherever we go. However, instead of leading with minesweepers, like we've had to do in the past, we're planning to use surface combatants and UUVs, or SSNs and UUVs, as part of our clandestine mine-reconnaissance initiative, which will operate well out in front of an amphibious force for days, maybe longer. We plan to run our UUVs into the coastal waters to see where mines are, and more importantly, to find out where they're not.

Three years ago in the Persian Gulf, if we had that kind of a reconnaissance capability, we could have contended with the Iraqi mine fields in a much different manner. It is a recon-

naissance problem and has been for the last 60-70 years. We're going to solve that problem with UUVs and other sensors.

When you look at the capabilities that we have today in our intelligence and reconnaissance systems, electronic countermeasures and some of our electronic combat-type initiatives -- things we did not have 50 years ago -- you can begin to understand how we are enhancing our ability to pick and choose the targets we can go after and where we're going to put our forces ashore.

• How do you envision the future of naval surface fire support and power projection from the sea?

Our amphibious power projection in the future will be similar to what we've had in the past in the sense that we will use a combination of platforms to deliver ordnance. On D-Day, you had conventional bombers bombing through the clouds, hoping to hit their targets, which they often didn't. You had battleships standing off the coast shooting at various targets that took a long time to register on the big guns. You didn't have a thing called a missile then; you have that now.

In the amphibious power projection missions in the future, naval surface fire support is going to be in all three of these areas. Missiles -- like Tomahawk -- which will go after high-value targets, will knock out the enemy's command and control apparatus over great distances. You will also have TACAIR coming off of the carriers with all-weather systems. You will have AV-8B Harriers coming off the big-deck amphibious ships for
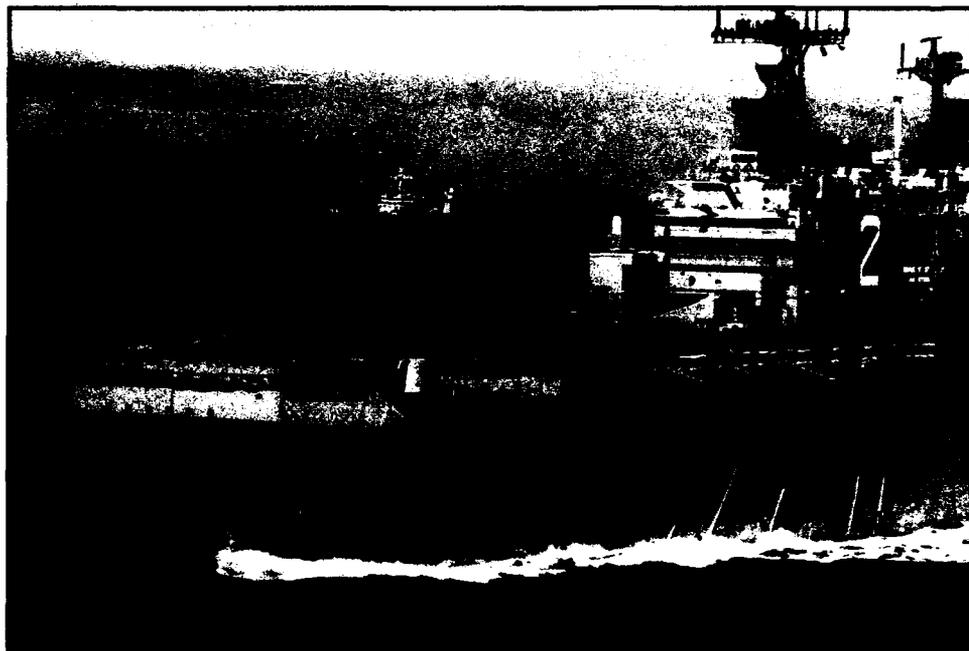
close air support and to protect our troops ashore. And, you're going to have some form of naval surface fire support in the form of a gun, which will help engage targets close in.

What you won't see is an Aegis cruiser standing off the coast shooting Tomahawks at trenchlines or pillboxes. If you're going to use a missile -- whether it's Tomahawk, some form of ATACMs, or a Standard missile -- it will automatically be employed against certain high-value targets that rate the missile.

• **Earlier you touched on attrition warfare during the Normandy invasion. Can you explain what is meant by the warfighting philosophy of maneuver warfare from the sea?**

The Army, since the time of the Indian wars, and the Marine Corps in the last 12 years or so, have espoused the principles of maneuver warfare. Basically, what it means is to use your intelligence to gain the advantage over your opposition. You want to exploit his weaknesses and avoid his strengths through maneuver. If you've ever read "The Art of War" by Sun-tzu, who was a Chinese philosopher hundreds of years ago, you will find that the principles of Sun-tzu apply as well in maneuver warfare today as they did in his time.

General Patton demonstrated some of these principles when he had the Third Army race across Europe after the Normandy landings. He practiced maneuver warfare by not allowing himself to get bogged down in pitched attrition battles. He used maneuver to outflank and outmaneuver his opposition in order to get at his command and control nodes, and other weaknesses, to keep American casualties down.

That principle is as valid today as it was 50 years ago or 2000 years ago in the case of Sun-tzu. The difference is that, in the Navy, we've never thought of maneuver warfare in terms of war at sea or projection of power from the sea. The sea is a vast maneuver space and the fleet has always maneuvered on the high seas, we just haven't thought of it in those terms, until now.

The critical importance of the intelligence that we've talked about is to enable the commanders of the future to exploit gaps or weaknesses in a potential adversary's

defenses, whether it's on the beach, in his command and control or at political targets. We also use that kind of information as a basis for projecting power -- whether it's missile strikes, TACAIR or amphibious forces -- in those areas where the opposition is weak, in order to get inside his organization and make it so he can't adequately control his forces.

In the Normandy invasion, we had to get our ships to point "A". The mission was to go and take "X" objective, so once they got there they went straight for the objective. The intelligence at the time, in many respects, did not enable the commanders to exploit the enemy's weaknesses and avoid his strengths. As a result, our landing forces ran into the German 352nd Division on Omaha Beach, which was not supposed to be there. Today, we are much better equipped to deal with that kind of situation, and utilize maneuver from the sea to avoid it.

• **How are the Navy and Marine Corps going to introduce maneuver warfare to the fleet?**

First, we're bringing technological improvements that enhance our warfighting capabilities -- like LCACs, high-speed aircraft, improved sensors and weapons systems, advanced intelligence and countermeasures.

Then there is the interface between the Expeditionary Warfare Division of the OPNAV staff, the Naval Doctrine Center in Norfolk, the Marine Corps Combat Development Command in Quantico and the fleet -- we're all working to bring it together in the form of doctrine. Once you get your doctrine established, then you start teaching it in the schools so that young officers and enlisted

personnel can learn about new warfighting principles. They need to know what our doctrine is, how it works, and eventually how it'll be used operationally. (See page 35)

In recent fleet exercises, there have been a series of somewhat related operations in which the Navy and Marine corps have attempted to implement some maneuver warfare principles and strategies. If you look at exercises in both the Atlantic and Pacific over the last couple of years, you'll see where people are beginning to make the changes in the way they use command and control and intelligence capabilities, and how they are practicing some of these maneuver principles that we're trying to espouse. We're not there yet, but progress is being made.

As the Naval Expeditionary Force moves into the littorals, the first thing it has to do is establish and control the battle space, which means controlling everything above, on and below the surface of the sea. This control has to be extended over the land mass to protect any a joint task force as it moves ashore and establishes itself inland. This is vital to meet a theater ballistic missile threat or a variety of other threats that might exist. Technology will enable us to do that, and if we follow the principles of maneuver doctrine, we'll be able to do it from the sea very well.

• **In the past few years, the Atlantic fleet has been conducting joint exercises using USS** *Mount Whitney* **(LCC 20) as a sea-based command and control center.**

**How do you foresee this practice being used in future warfighting scenarios?**

The way I envision it, you'll have flagships like *Mount Whitney* or *Blue Ridge* (LCC 19) that will be command and control centers for joint expeditionary warfare operations of the future. We may not be able to put an entire joint staff on board, but we can put a small joint staff on those ships that can be sustained for a certain period of time, depending on the size of the operation.

If it's a large operation like Desert Storm, than you're probably going to want to eventually transition to a larger headquarters established ashore because the operation will begin to outgrow the capability of the ship. However, in most cases, this will not be easily attainable. In Saudi Arabia, we were just lucky to have a built-in infrastructure ashore ready to fall in on. Clearly, we must come from the sea and we must have command and control ships like *Mount Whitney*.

In smaller conflicts, which we are most likely to see in the future, our command and control ships and even some of our big-deck amphibious ships now have the ability to support joint operations from the sea.
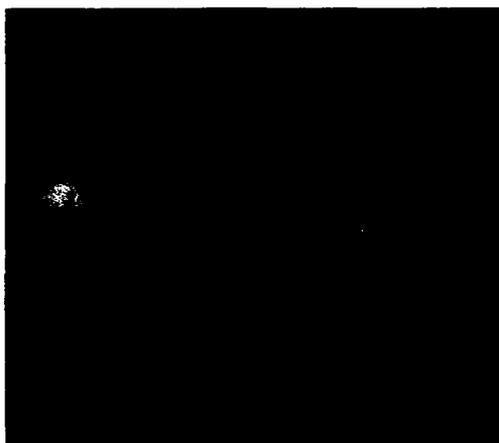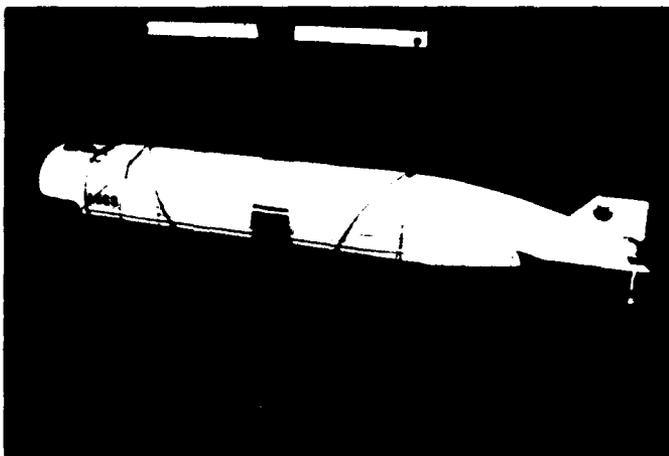
• **How will the new composition of amphibious forces affect the deployment and utilization of ARG assets?**

There will be a time in the not-too-distant future when amphibious ready groups will be made up of three main classes of ships. The LHD/LHA-class assault ships, the LSD 41/49-class dock-landing ships, and eventually the LPD 17. We'll have a series of other ships that will carry us to the point when LPD 17 comes on line.

As to how they're going to be employed, I think you're going to see a time when you're going to have a surface combatant and a 688-class SSN with them on deployment. It's going to depend on what the requirements are at the time.

For example, take an LHD-centered ARG with its LCACs, AV-8B Harriers, helicopters and eventually V-22, and put it together with either a DDG 51 or an Aegis cruiser that could link with the LHD; add to that an SSN for scouting and reconnaissance purposes, and you begin to have a fairly potent package you can take almost anywhere in the world. That's the kind of thing I think we're going to gravitate to.

• **Would that be considered an example of Adaptive Force Packaging?**

Sort of, but rather than cutting and pasting Marine units, it's an example of building that kind of capability around what normally rides in an ARG. Your basic Marine unit is a Marine Expeditionary Unit, Special Operations Capable, or MEU(SOC), and that's what you'll see in your three-ship ARG. By adding these other naval components around it, you enhance the mission capabilities of that force considerably.

That's the best way to use naval power, and to a degree, that's what adaptive force packaging is -- designing the force to get better use out of a variety of units and systems, which is fine as long as you don't fragment the basic Marine combat organization, the MEU(SOC).

• **Can you comment on some of the tactical and technological developments taking place in mine warfare?**

The future of mine warfare is fairly bright now,

Naval Doctrine has arrived

After its first 18 months since inception, the Naval Doctrine Command (NDC) has begun articulating naval doctrine, the theoretical underpinnings for naval warfare. This includes NDC's initial capstone publication, *Naval Warfare*, also known as Naval Doctrine Publication-1 or NDP-1. It is the fundamental philosophical statement of who we are as a naval service, what our basic beliefs as naval warfighters are, and how we conduct naval warfighting. *Naval Warfare* was written in eight months, then reviewed by the Navy fleet commanders and Marine force commanders. The finished document was approved by the Chief of Naval Operations and the Comandant of the Marine Corps on March 28, 1994.

Naval Warfare is descriptive, not prescriptive. It does not expound a theology or dogma. Rather, this publication outlines the basic principles upon which we will organize, train, equip and employ naval forces. It presents broad operational guidance for the total Navy/Marine Corps team, both active and Reserve contingents.

This capstone document forms the bridge between the naval component of U.S. military strategy and our tactics, techniques and procedures. It is conceptual and articulates a shared way of thinking. The treatment of such topics as the employment of naval forces and the principles of war forms the framework for the subsequent development and refinement of naval doctrine. It respects the commander's need to exercise initiative and battlefield judgement. *Naval Warfare* is the first step toward common understanding of naval warfighting.

Follow-on publications include: NDP-2, *Naval Intelligence;* NDP-3, *Naval Operations;* NDP-4, *Naval Logistics;* NDP-5, *Naval Planning;* and NDP-6, *Naval Command and Control.*

because people have learned that using a $22,000 mine to take out an Aegis cruiser is not a bad trade-off, and we don't want that to happen.

There are some major initiatives that are ongoing in mine warfare. The first one is to develop a clandestine mine-reconnaissance capability. As I mentioned earlier, this will be accomplished using an SSN and a UUV, or surface combatant and UUV, which will operate over the horizon, well in advance of the rest of the force, to determine whether the enemy is or isn't mining in a
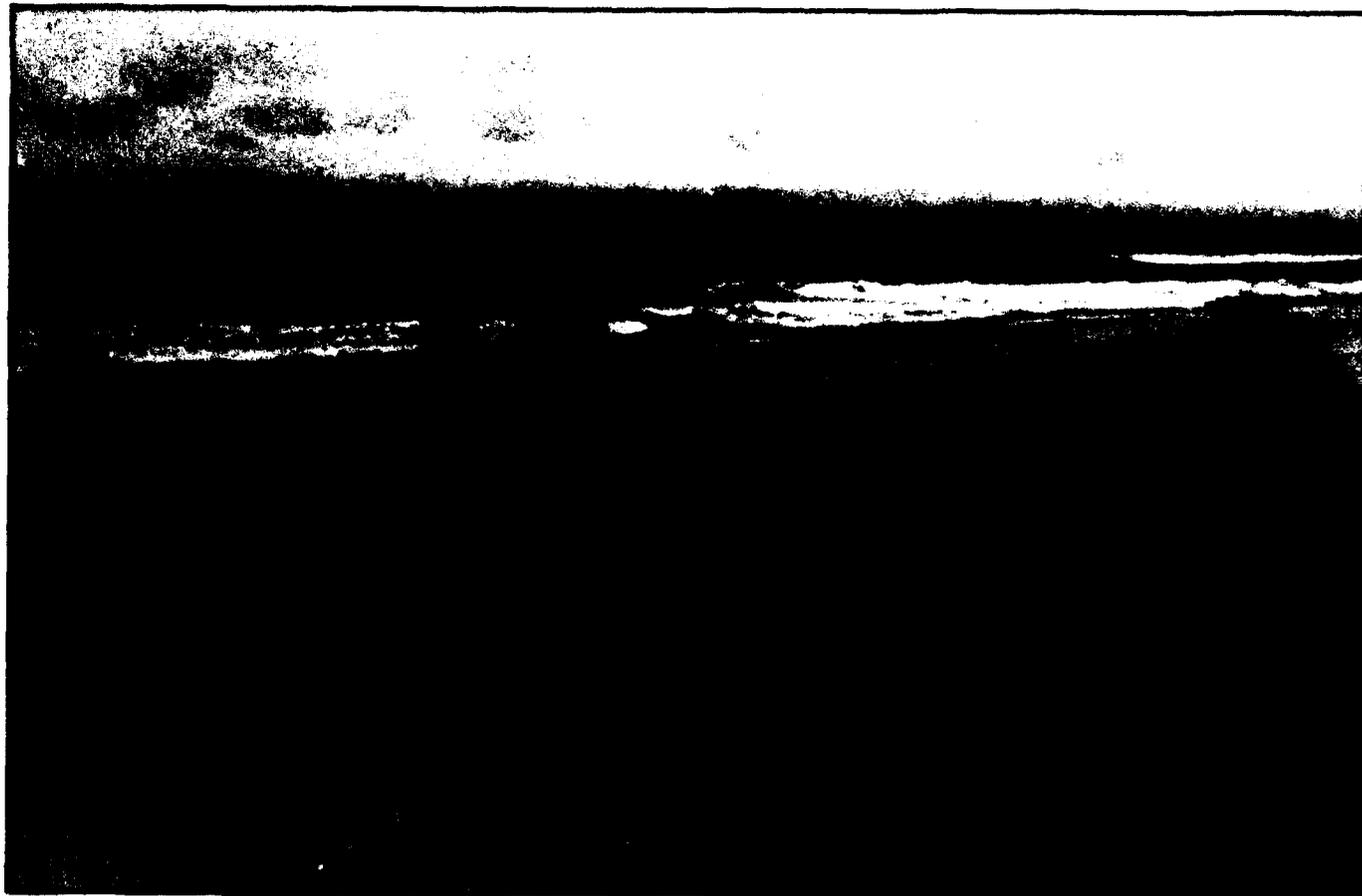
coastal area or choke point. Our goal is to have an organic minehunting capability that can deploy with either the ARG or CVBG.

The reconnaissance vehicle, or UUV, is what has been missing. When the parameters of a mine field are known, based upon information from the UUV and other sensors, the mine countermeasures forces, which will come via heavy sealift, can concentrate their efforts in a specifically defined area scouted by the UUV.

Today, because we don't have this organic capability, we spend precious time searching vast sea areas for mines. The reconnaissance mission accomplished by the UUV will make the whole mine operation that much more efficient.

The SEALs are also developing a small UUV that will give them the capability to go into the surf zone. Eventually, I'd like to help get SEALs out of their mine-neutralization mission in which they have to go in and blow up mines. By improving our reconnaissance capability with UUVs, we will allow the SEALs to concentrate on beach reconnaissance, which they are

very good at.

Once the UUV's done its job, the rest will be left up to SMCM (surface), AMCM (air) and EOD (explosive ordnance disposal) mine countermeasures forces, each having its own unique capabilities. The key point is that these forces must complement one another in order to have an effective mine countermeasures capability.

Our SMCM forces are the best they've ever been. In

Right photo by PH1 Robert N. Scoggin, Navy Combat Camera.

addition to our MCM-1 class, we are now commissioning the MHC 51-class (*See SWM Jan/Feb 94:18*). These ships are equipped with state-of-the-art minehunting and minesweeping gear. Our AMCM squadrons provide the most rapidly deployable and quick-response capability we've ever had. We are also ensuring that older SMCM and AMCM platforms will receive system upgrades.

In the case of the LCACs (Landing Craft Air Cushion vehicles), we will soon have over 90 in our inventory. We're going to convert 12 of them to MCACs or Multi-purpose Craft Air Cushion vehicles, of which one mission will be minehunting.

The MCAC is a standard LCAC with a couple of modifications to its skirt that enables it to house or host the necessary minehunting and clearing equipment that goes with a MH-53 helicopter. This will give us an organic mine-hunting, sweeping and breaching capability forward deployed with the ARGs. We also plan to give the MCAC a remote-control or auto-pilot capability in the future.

I want to mention that our move to establish the Mine Warfare Center of Excellence in Ingleside, Texas has greatly enhanced our ability to train together. All officers now receive from two to five weeks of mine warfare training prior to reporting to their ships. And for enlisted personnel, we've established a new Mineman (MN) rating structure to include initial and subsequent sea tours on SMCM ships, filling billets currently assigned to Boatswain's Mate, Gunner's Mate, Operation Specialists and Sonar Technician ratings.

• **Can you explain how USS Inchon will be converted into a command, control and support ship?**

When *Inchon* comes back from the Med, she'll go into the yard. Once the conversion is complete, she will function as a mother or repair ship for MCM 1- and MHC 51-class ships. She'll be able to house and provide maintenance capabilities for eight MH-53E embarked helicopters. She will also be capable of embarking the necessary EOD detachments and special warfare units.

She will enter back into the fleet as a NRF ship with 20 percent of her crew being Reservists. Many of our MCMs and MHCs also soon will enter the Naval Reserve Force. These are just some of the ways we are integrating our active and Reserve mine-warfare forces.

Inchon's C⁴I capability will be upgraded considerably in order to house Commander, Mine Warfare Command and his staff, as well as to provide the necessary command and control to run a full-blown mine-counter-measures fleet exercise. *Inchon* will be a key ship in the

overall force. The decision to make this conversion resulted from lessons learned in Desert Storm.

• **Where do you see us headed with unmanned aerial vehicles (UAVs)?**

I believe we are just beginning to scratch the surface on the potential for UAVs in the Navy as well as in other services. UAVs have come on strong since Desert Storm. In the Navy, we plan to put the short-range UAV, the Hunter, on big-deck amphibious ships, and eventually carriers, in order to give us a tactical reconnaissance capability out to about 270 kilometers. That should give us a 24-hour continuous coverage capability in areas where that system is employed.

The Hunter will have a variety of sensors, including a radio-relay package and eventually a laser designator for strike missions. The Hunter UAV is the same one the Army and Marine Corps are buying, so we've got natural interoperability across three of the services. Within DoD, the Tier II and Tier II Plus programs will provide longer-range UAVs.

I'm of the opinion that UAVs will eventually replace manned air reconnaissance because you can do the same thing much more efficiently, with better coverage, over longer periods of time with unmanned aerial vehicles. The consequences of losing a UAV is a lot different than losing a $60-million airplane and two crewmen. If you lose a UAV, you can just put another one out. I think in the next five or six years you're going to see more of a gravitation toward unmanned reconnaissance.

• **Is there anything else you would like to say to our readers in the fleet?**

We've talked about a lot of systems that are coming. I think they're important to the future of the Navy and Marine Corps. It's nice to have all these systems, but if you don't have good Sailors and Marines out there manning the systems, then you haven't got a lot.

The most significant thing we've accomplished here in N85 has been to get better systems out to the fleet. Our experiences in the past have given us pretty good goals and objectives to shoot for. I want to be sure that our Sailors and Marines riding in the amphibious ready groups are able to do the kinds of things they have been trained to do as efficiently and effectively as possible.

Although the Navy and Marine Corps are getting smaller, there will always be plenty of requirements we're going to have to meet. And with the quality of people we've got today, there's no question in my mind that we can take on anything and win, if we just give them the right kind of systems and the right kind of training and support they need. ⚓

> "I'm of the opinion that UAVs will eventually replace manned air reconnaissance because you can do the same thing much more efficiently, with better coverage, over longer periods of time with unmanned aerial vehicles."

BLK III: AFLOAT PLANNING SYSTEM (APS)
CONCEPT OF OPERATIONS
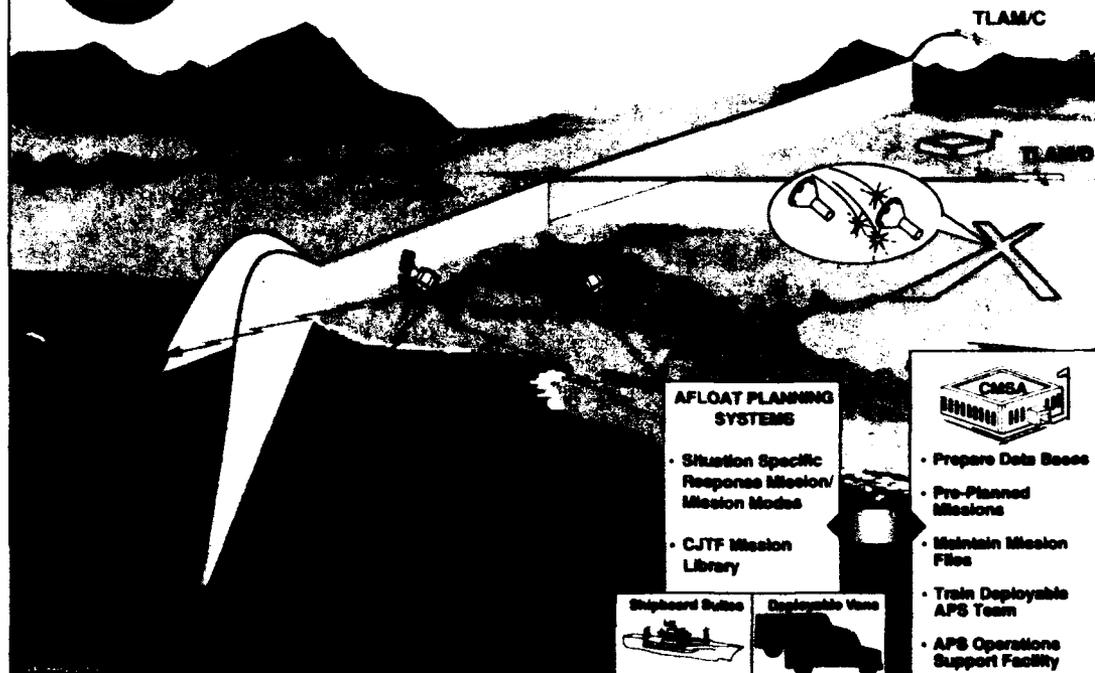
Tomahawk: What we don't see

By LCDR Kevin Baxter

As surface warriors, what we see of the Tomahawk system is the missile being fired and the damage it can do. We are the "King of Tomahawks" from the weapon station to their downtown target. What we typically don't see is the rest of the iceberg -- command and control, tactical interfaces, mission and strategic planning, etc. As promised in the last installment (SWM May/June 94:20), here is a glimpse into the rest of the story (with apologies to Paul Harvey).

Command and control (C²) is the link between the shooter and the decision makers. It includes the shipboard Tomahawk Weapon Control System (TWCS), the interface between the TWCS and radio, the formatted messages that tell us what to shoot, the Mission Distribution System (MDS), the Mission Data Distribution System (MDDS) and all of the satellites in between. For these C² developments, we will start inside the lifelines and work outward.

Advanced Tomahawk Weapon Control System

The use of commercial-off-the-shelf (COTS) equipment has brought about the development of the Advanced Tomahawk Weapon Control System (ATWCS). Within the next five years, the much faster ATWCS will replace currently used '70s technology with smaller TAC-3 computers and terminals familiar to anyone who has ever used a desktop. The new system will be extremely flex-

ible, with the capability to conduct Harpoon mission planning, interface with unmanned aerial vehicles (UAVs) and provide Block IV functionality to all Tomahawk-equipped ships.

The upgrade will be accomplished in two phases: Phase I will replace the track-control group, where database management, communications and the shipboard portion of mission planning are accomplished. The clumsy, cluttered OIDT will give way to the same color display used in the Navy Tactical Command System Afloat (NTCS-A), also known as JOTS II or JMCIS. The system will be interconnected by a fiber optic Local Area Network (LAN), increasing speed, security and reliability of data transfers.

The ATWCS console, shown on page 35, has been designed for comfortable operation, including a place to write and place a pub for reference, without mistakenly hitting a key in the process. The display will

feature pull-down menus, much like NTCS-A, and will guide the user to the correct parts of the program as required.

Phase II will be a complete replacement of the Launch Control Group (LCG), where mission data is stored and transferred to the missiles, missile health is monitored, and the TWCS interface to the launching system resides. As with Phase I, all hardware will be replaced with TAC-3 computers, linked by a fiber optic LAN. Phase II will provide the processing capacity and speed to accomodate the Block IV missiles discussed in the last article, and will significantly speed up the missile alignment and mission loading process for Block IIIs.

The first Phase I installation for operational testing afloat will occur later this year, with a planned Initial Operational Capability (IOC) of 1996. Phase II will start afloat testing in 1996, with an IOC of 1998, in time for Tomahawk Baseline Improvement (TBIP) testing.

Mission Distribution System

The Mission Distribution System (MDS) gives C² nodes access to all information regarding Tomahawk missions, and the ability to communicate not only with each other, but with ships, shore stations and Cruise Missile Support Activities (CMSAs). It is the key to strike planning and management.

Located in carriers, command ships, shore C² sites and fleet CinC headquarters, MDS permits the tactical and theater decision makers to quickly view all of the TLAM missions available to them. At the touch of a key, they can review missions for targets of interest, look at the planned routes, see a photo of the desired aimpoints, and determine the missions held by ships under their control and the missile inventories of those ships. They can then use that data to develop a strike package and transmit the required orders and data to their ships.

If necessary, any MDS site can transmit Mission Data Updates (MDUs), whereby new or modified TLAM missions are sent to the shooters over the air. At the same time, they can keep track of all necessary mission accountability through updates over the air, by secure telephone line or by delivery of a data tape.

Like ATWCS, MDS is hosted on a TAC-3 computer, permitting easy maintenance and simplifying phased replacement to keep the hardware current with the state of the art. Moreover, ATWCS will put MDS functionality aboard all Tomahawk shooters, giving the tactical decision makers increased flexibility in regard to delegation of command and control functions and selection of flagships.

Mission Planning

If the ships are the arm throwing the spear and MDS is the nervous system, then Theater Mission Planning Centers at the Cruise Missile Support Activities (CMSAs) are the brains of the outfit. This is where art, science, experience and intuition are mixed to create a program that will pilot an otherwise dumb missile hundreds of miles through hostile territory to hit a target with great precision.

Since the beginning of the Tomahawk program, mission planning has been accomplished at either CMSA LANT in Norfolk or CMSA PAC at Camp Smith in Hawaii. These are joint commands supporting the fleet CinCs, which are co-located with their supporting Joint Intelligence Centers. Planners are both military and civilian experts in route planning and/or imagery analysis, who are aided by several sophisticated computer systems.

Theater Mission Planning Center

A TMPC can be broken into three functional areas. The first is the TLAM Planning System (TPS). This is where the route from the first preplanned waypoint to the target is planned. The mission planner has detailed maps of the countryside over which he or she intends to fly the missile, both horizontally and vertically. This information along with a detailed knowledge of the flight characteristics of the missile allows the planner to design a route

Afloat Planning System (APS)
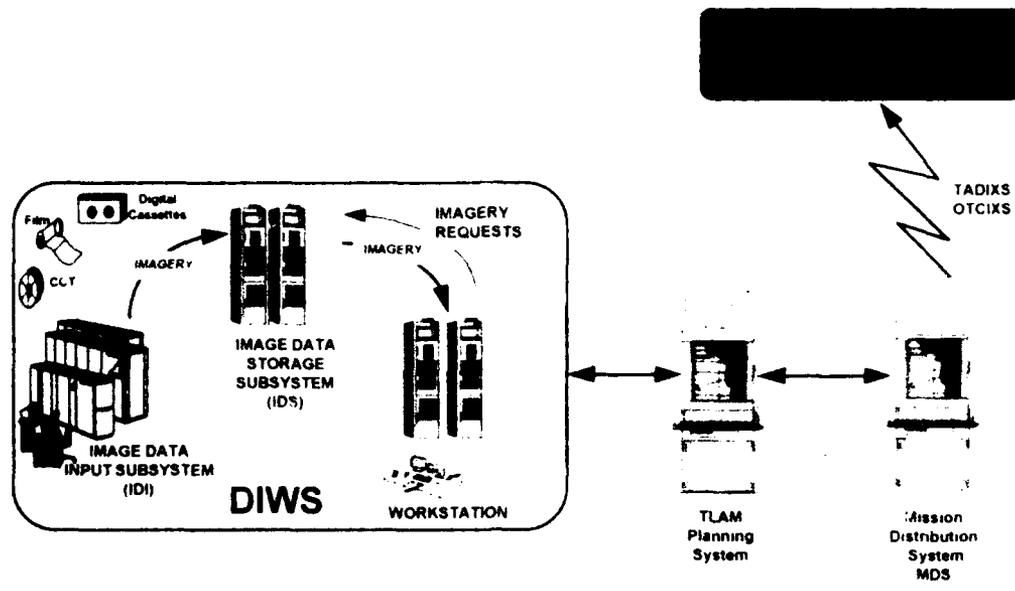
TADIXS
OTCIXS

IMAGERY
REQUESTS

IMAGERY

Digital
Cassettes

Film

CLT

IMAGERY

IMAGE DATA
STORAGE
SUBSYSTEM
(IDS)

IMAGE DATA
INPUT SUBSYSTEM
(IDI)

DIWS

WORKSTATION

TLAM
Planning
System

Mission
Distribution
System
MDS

that maximizes the probability of the missile's arrival in the target area.

Environmental considerations (weather, temperature, etc.) are accounted for, as are known threats and restricted areas. Actions taken early in the flight can have consequences that do not show up until much later in the mission. For this reason, mission planning is an iterative process that requires patience and a unique insight into what the missile will be doing under a vast number of conditions throughout its flight.

The mission planner is not alone in this effort. Recent improvements to the TPS software provide automated route planning assistance, quality assurance of the plan, and a system of mission verification that includes analysis of all possible permutations of the missile's performance at the target.

The Naval Doctrine Command also recently issued NWP 3-03.3 -- the CMSA Training and Operating Procedures Standardization (CTOPS) Manual, which provides standards and checklists for mission planners and supervisors.

The second functional area of the

TMPC is *imagery analysis*. Conducted on the Digital Imagery Workstation (DIWS), imagery analysis is required to generate the scenes in Digital Scene Matching Area Correlation (DSMAC) and to analyze the target to determine the *precise* position of the desired aimpoint.

The mission planner tells the DIWS analyst where a DSMAC scene is needed and the analyst examines the area for suitable scenes. Once the scenes are generated, they are incorporated into the mission plan, which then provide highly accurate, terminal-area navigational updates to the missile.

Additionally, the DIWS analyst is provided with a target folder detailing where, precisely, the targeteer wants the missile to impact. The analyst then uses the digital image of the target to determine where the exact point on the earth's surface that aimpoint is. This is then provided to the mission planner for incorporation into the mission plan. This method of target registration virtually eliminates the potential for error in aimpoint location, and permits precise re-creation of the targeting process if required.

Supporting the aimpoint regis-

Above: The relationships between various components of the Afloat Planning System.

---

tration process is analysis conducted at the Imagery Screening and Targeting Workstation (IS&TW). Here, the vast amount of imagery supporting TLAM targeting is reviewed, with the best images being screened, digitized and electronically stored for later retrieval. Electronic target folders for various target complexes also can be developed at the IS&TW, greatly simplifying the terminal-area planning process.

The third function area of the TMPC is *mission distribution*. This is the process by which missions and their supporting command and control data are distributed to shooters and staffs. At a CMSA, both the MDS and MDDS are used to distribute TLAM mission Data Transport Devices (DTDs), which contain the mission data to publish TLAM Command Information (TCI) and to send Mission Data Updates (MDUs).

DTDs are the primary method of mission distribution, and the only method of mission data storage on ships. Prior to deployment, TLAM

ships are outfitted with DTDs tailored to their theater of operations. They contain all of the latest missions for that theater, plus the Operational Flight Program (OFP) used by the TLAM guidance computer.

After the TLAM shooter deploys, missions continue to be developed or modified for targets in their theaters. These missions are transmitted to the ships and staffs through the MDS as a MDU. In addition to providing shooters with new or modified missions, the MDU gives C^2 nodes all of the supporting command information to permit them to employ new missions, if necessary.

The maintenance of mission accountability -- who has which missions and who has which missile variants -- is critical to TLAM command and control. For example, there are three TLAM variants, two baselines (Block II and Block III), differing fuel loads, two engines, exercise payloads, various warhead payloads, surface VLS and ABL and subsurface Torpedo Tube Launched (TTL) and Canister Launching System (CLS) missiles. Additionally, missions may be applicable only during certain times of the year or under certain meteorological conditions.

While the mission planners will strive to make every mission as robust as possible by planning it for the most difficult conditions, each mission is developed for and is compatible with only a specific set of these various configurations. The operational commander must know not only where his missions go, but who under his command has the missiles that support those missions. The TLAM Command Information and ship inventory messages available in MDS provide him with that information, while the CMSA ensures that this information is correct.

Looking over the horizon

All of the capabilities discussed in this article are being used today to support theater commanders all over the world. In the near future, the ability to plan and distribute TLAM mission plans will go to sea. The *Afloat Planning System* (APS) is

Tomahawk AQDs approved

With the advances in command and control and the increase in complexity of the Tomahawk system, it has become necessary for the Navy to keep close track of its Tomahawk talent pool -- both officer and enlisted, shipboard and staff. As a result, four new Additional Qualification Designators (AQDs) have been approved for surface warfare officers.

BV1 - Shipboard Tomahawk Strike Officer In Training: earned in an initial shipboard tour. It is designed to start the tracking process and to identify officers with a basic familiarity with the shipboard system for follow-on training and assignment.

BV2 - Staff Tomahawk Strike Officer in Training: earned in an initial staff strike planning tour. It is intended to identify officers having a basic familiarity with and experience in TLAM strike planning.

BV3 - Shipboard Tomahawk Strike Officer (Certified): earned after assignment of the BV1 code and 12 months as a Tomahawk Division Officer or higher and Engagement Control Officer or TAO on a Tomahawk ship. It is intended to identify officers with significant knowledge and experience in the shipboard aspects of the Tomahawk weapon system for senior assignments in Tomahawk-related billets.

BV4 - Tomahawk Strike Officer (Staff certified): earned after assignment of the BV2 code and 12 months on a Strike Ops staff, CMSA Planner or similar billet.

* For further information regarding these qualification or for assignment of any of these AQDs, contact your detailer.

expected to reach its IOC this summer. It will be permanently installed in CVs, providing mission planning and targeting support directly to the battlegroup commander and his staff.

Hosted on COTS computers, APS runs the same software as the Theater Mission Planning Centers, providing identical planning, imagery analysis and distribution capabilities. The only difference will be manning -- a detachment of ISs and DPs led by an officer in charge -- and the absence of facilities to load mission data on DTDs. Missions modified or created on APS will be distributed via MDS.

In addition to APS, the theater commander's staff will have its own planning center in Rapid Deployment Suites (RDSs), which are basically an APS in a box. RDSs are self-contained systems, housed in 3 vans, that can be loaded on a transport aircraft and delivered to the theater commander's headquarters. They will provide the theater commander and the JFACC with the ability to respond immediately to changing targets and priorities. APS and RDS will support theater CinCs both with access to imagery and targeting support. They will also provide a mission planning capability that can react within the planning window of an Air-Tasking Order.

This series of two articles has provided not only an introduction to the Tomahawk weapon system as a whole, but also a glimpse into the complexities of the system not often seen in the fleet. Of necessity, this has been a broadbrush overview. For a more detailed, classified treatment of the subject, the Tomahawk Technical Description Document (T^2D^2 for TLAM-C and TLAM-D) is an excellent source. Also, when Tomahawk-equipped ships are preparing to deploy and receive their DTDs, they should arrange for a brief on their mission and capabilities with their servicing CMSA.

As noted in the last issue, Tomahawk is *the* "weapon of choice" for the deep, precision-strike mission. In a world full of trouble spots, it gives the National Command Authority a flexible response capability anywhere the Navy sails.

LCDR Baxter is the Cruise Missiles Requirements Officer in OPNAV N86.

Beating the bad guys electronically

SLQ-32
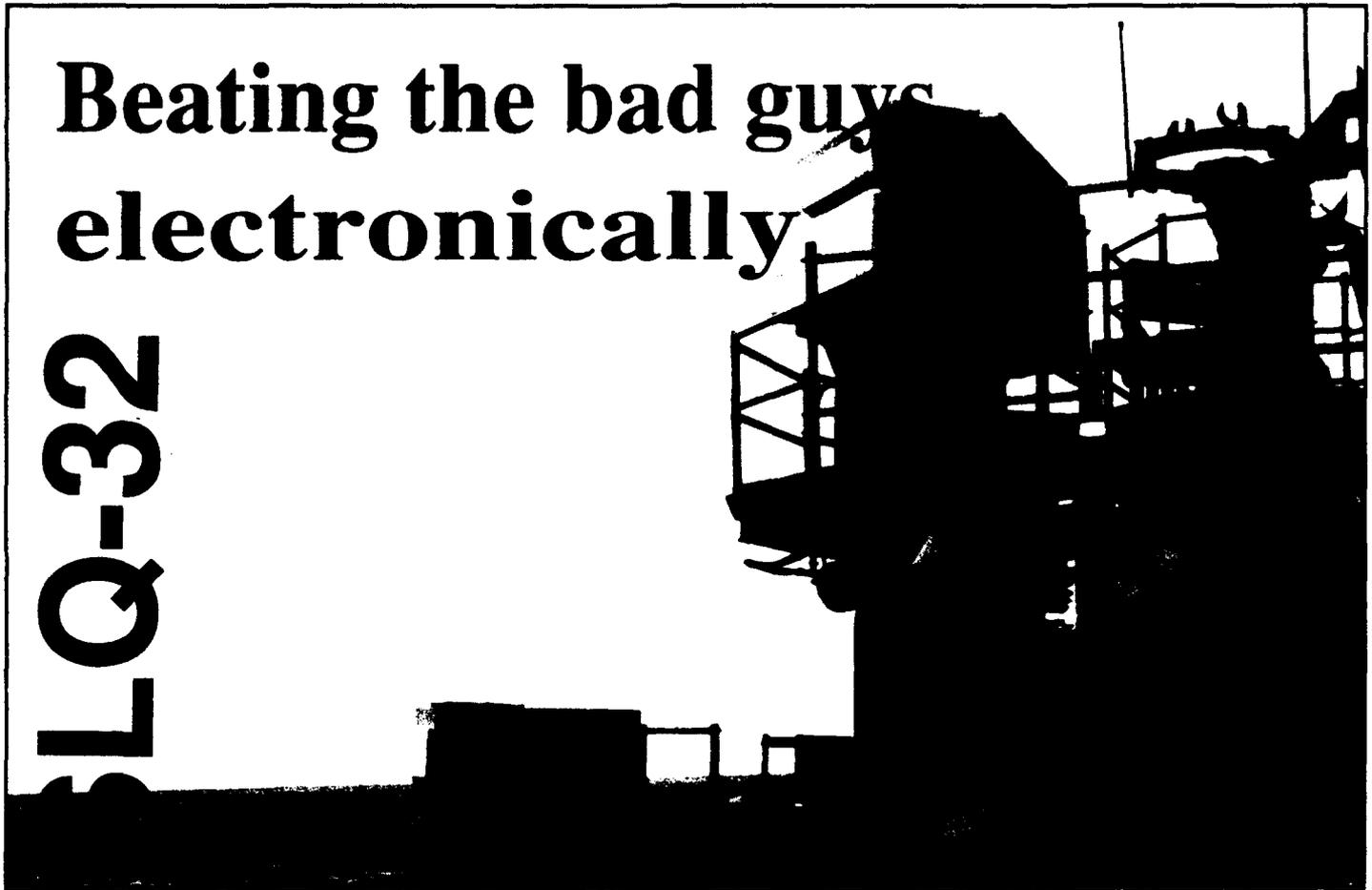
By Stephen R. Davezac

In the past 20 years, the AN/SLQ-32 electronic warfare system has evolved into one of the U.S. Navy's most technologically advanced combat systems. Lurking in the shadows of its widely reknown brethren of "hard-kill" systems, SLQ-32 quietly destroys enemy cruise missiles, using highly intelligent computer software and tactics of confusion, deception and seduction. Well-suited to the littoral warfare environment, SLQ-32 (and its continued refinement) is a critical element of the Navy's Ship Self-Defense System (SSDS).

SLQ-32 provides surface combatants with passive threat detection and analysis as well as electronic countermeasure (ECM) capabilities. It can detect and evaluate electronic emissions from surface, airborne, and land-based radars and, in some SLQ-32 variants, can initiate active countermeasures. The system is designed for use in conjunction with chaff, decoys, and flares to defeat anti-ship cruise missiles as well as other airborne threats.

SLQ-32 began development in 1973 as a cost-constrained, design-to-price system designed specifically for the Anti-Ship Missile Defense (ASMD) role. The Navy has since expanded its development by incorporating numerous upgrades and improvements in response to fleet requirements. SLQ-32 will remain the predominant electronic warfare system in U.S. Navy surface ships until the introduction of the Advanced Integrated Electronic Warfare System (AIEWS) after the turn of the century.

There are five variants of the AN/SLQ-32, each with different capabilities for different shipboard applications (See page 39). The V(1), V(2), V(3) and V(5) variants have been rigorously tested by the Navy's Operational Test and Evaluation Force (OPTEVFOR), having defeated a variety of threats in all electromagnetic environments. Developmental testing and a successful OPEVAL on the V(4) variant was conducted aboard USS *Kitty Hawk* (CV 63) in January 1994.

An aggressive improvement pro-

Editor's note: This is the fourth in a series of articles detailing the systems that make up the Ship Self-Defense System (SSDS) planned for installation in many non-Aegis platforms. Previous articles have featured an overview of SSDS (SWM Nov/Dec 93:26), CIWS (SWM Jan/Feb 94:34) and RAIDS (Mar/Apr 94:36). The next issue of SWM will cover the Rolling Airframe Missile system.

gram in response to fleet inputs has brought SLQ-32 to maturity. To make effective use of limited fiscal resources, however, fleet representatives and program officials agreed in 1991 to focus future spending for SLQ-32 improvements on only those that would directly affect fleet readiness and warfighting capabilities. Consequently, fixed research and development funds are being allocated to the development of AIEWS.

Upgrades to the SLQ-32 now in development and testing will increase signal processing and throughput capability to enhance system response time, integrate the Mk 36 Decoy Launching System, and provide active ECM and jamming waveform techniques that will enhance its ASMD capabilities and counter-targeting ECM.

R-17, DDI and ADCAP

Several evolutionary efforts in support of the SLQ-32 are in the development pipeline. Revision 17 (R17) of the SLQ-32 operational software will improve ECM techniques and reduce current operator workload through the use of "Windows-like" software for the display and control console.

The most significant change in R17 software will be an algorithm for Deceptive ECM/Decoy Integration (DDI). DDI integrates deployment of shipboard decoys with active electronic countermeasures, and replaces the current Basic Decoy Algorithm (BDA) now resident in the system software. DDI will recommend either active countermeasures and decoy employment to EW operators and Tactical Action Officers (TAOs), or will automatically implement approved tactics based on the tactical scenario, as selected by the TAO.

DDI requires a field change to the SLQ-32 console that will add control of additional launchers and a warning horn. These changes will be done at the Naval Surface Warfare Center, Crane Division in the summer of 1995.

Other R17 improvements will improve emitter identification, provide a single-source baseline for all SLQ-32 variants for both DDI and

non-DDI consoles, support Advanced-Capability (ADCAP) improvements now under development, and maintain a single world-threat database. Developmental and operational testing of R17 software is planned for next January.

In conjunction with the R17 software, ADCAP improvements for SLQ-32 V(3) systems will use new ECM techniques to work cooperatively with decoys to enhance overall system performance. Upgraded V(3) systems will support DDI, improve counter-targeting ECM capabilities as well as retain or improve existing techniques and control functions.

Specifically, ADCAP refinements will enhance the programmability and flexibility of ECM waveforms and control functions, upgrade RF sources through the use of digitally tuned oscillators, and improve circuitry to allow continuous-wave transmissions for greater periods of time. Developmental and operational testing of the SLQ-32 V(3) ADCAP system is slated for completion by spring 1995.

Phase E

ADCAP will be followed by the Phase E improvement program. At the heart of the Phase E program is a state-of-the-art distributed processing system that will replace the SLQ-32's current special-purpose processor with multiple 68040 micro-processors using ADA-based software.

The new system will provide noticeable improvements for operators. The pulse processing will be increased by an order of magnitude, greatly expanding the number and complexity of emitters that can be processed. Both Direction Finding (DF) and frequency accuracies will increase and the overall response time of the system will be markedly faster.

Other improvements included in the Phase E program consist of an open architecture that will provide growth for networked interfaces to other on-board systems and im-

SLQ-32 Variants

• (V)1, for smaller amphibious ships (LSD,LPD,LST) and some auxiliaries (AE, AFS), provides warning, identification and bearing of radar-guided missiles and launch platforms along with chaff and flare launcher coordination.

• (V)2, for destroyers (DD,DDG) and frigates (FF,FFG), has expanded passive-only capabilities: the V(5) variant, called "Sidekick," is an active ECM modification for (V)2 systems installed in guided-missile frigates.

• (V)3, for cruisers (CG,CGN), new DDGs, large amphibious ships (LCC,LHA,LHD, LPH), and auxiliaries (AOE, AOR), combines the passive ECM capabilities of (V)1 and (V)2 with active jamming to counter or deceive incoming missile-guidance radars.

• (V)4 is the aircraft carrier version of (V)3.

proved system diagnostics in the emitter tracking unit.

Phase E hardware and software is presently undergoing critical design review. The improvement package will then undergo follow-on test and evaluation with operational testing beginning in 1996.

Continued improvement of SLQ-32 is critical, particularly in light of the Navy's new emphasis on joint littoral warfare. Surface combatants operating along the world's distant shores must be capable of precisely pinpointing, identifying, and electronically neutralizing diverse threats within the crowded and dangerous sea-shore interface. SLQ-32 upgrades, together with other elements of SSDS, will provide these needed capabilities well into the 21ˢᵗ century.

Mr. Davezac is the Head of the Sensor Equipment Engineering Branch in the Program Executive Office, Theater Air Defense at the Naval Sea Systems Command.

SPECIFIC ASPECTS OF PERFORMANCE

29 GOAL SETTING & ACHIEVEMENT	A	30 SUBORDINATE MGMT & DEVELOPMENT	A	31 WORKING RELATIONS	A	32 MATERIAL MGMT	

A message from Admiral Quast

		36 REACTIONS IN STRESSFUL SITUATIONS		35 EQUAL OPPORTUNITY	A	36 SPEAKING ABILITY		37 WRITING ABILITY	A

WARFARE SPECIALTY SKILLS

38 SEA-MANSHIP	N	39 AIR-MANSHIP	N	40 WATCH-STANDING	N	41 TACTICAL PROFICIENCY	N	42 LEADER-SHIP	A	43	

Officer Screening: "It's up to you!"

44 SUBSPECIALTY CODE		REQUIRED BY BILLET 45 YES	46 NO	UTILIZATION 47 CURRENT		48 INFREQUENT		49 NONE	50 PERFOR	N

MISSION CONTRIBUTION	NOT OBS	A	B	C	D	E	F	G	H	I

51 EVALUATION	X									

52 SUMMARY						D		D	D	D

TREND OF PERFORMANCE

[ ] 53 FIRST REPORT	[ ] 54 CONSISTENT	[X] 55 IMPROVING	[ ] 56 DECLINING*

DESIRABILITY

57 COMMAND	A	58 OPERATIONAL	A	59 STAFF	A	60 JOINT/OSD	A	61 FOREIGN SHORE	A

RECOMMENDATION FOR PROMOTION

[X] 62 EARLY	[ ] 63 REGULAR	[ ] 64 NO*	RANKING FOR EARLY PROMOTION 65 NUMBER RECOMMENDED 1	66 RANKING	

PERSONAL TRAITS

67 JUDGMENT	A	68 IMAGINATION	A	69 ANALYTIC ABILITY	A	70 PERSONAL BEHAVIOR	A	71 FORCEFULNESS	A	72 MILITARY BEARING	A

		73 PHYSICAL READINESS P/10	[ ] 74	[ ] 75	76 PROMOTION STATUS REG

We've all heard the advice, undoubtedly more than once, "You'd better get your service record in order and update your official photograph for your upcoming board." It's time to react, that is, if you're seriously interested in "being all you can be" as you present yourself to your next screening board. As we continue to downsize, competition for key career assignments is becoming ever more keen; so don't unnecessarily hurt your selection opportunities by making a poor impression.

Having recently presided over the FY-95 Surface Lieutenant Commander Executive Officer/Commanding Officer Screening Board, I gained a first-hand perspective on how today's officer screening process really works. I would like to share some of my observations and identify some of the key points considered by the board.

I shouldn't have to emphasize that XO screening is critical to the career progression of all officers in the surface community. It should be the *top priority* of all mid-grade,

"I shouldn't have to emphasize that XO screening is critical to the career progression of all officers in the surface community. It should be the *top priority* of all mid-grade, surface warfare officers . . . "

surface warfare officers just as department head screening should be to all junior officers. As is the case with any screening, performance at sea is the principal criteria considered in the selection process.

Surface officers get their initial

"look" for XO in the spring board following their selection for lieutenant commander, and most officers will have 8 to 11 years of commissioned service at that point.

Department head fitness reports receive the most attention by the XO screening board which is why it is vitally important that officers not wait too long to commence their department head school training. Officers should plan to attend department head school no later than the 7.5 year point of commissioned service; this will permit sufficient time to gain the experience needed to show sustained superior performance as a department head.

For officers who haven't performed to the level considered appropriate for XO selection after accumulating 30-36 months as a department head, they would be best off not going ashore to start their subspecialty development or joint tour. Instead, they should stay at sea in

a meaningful billet in order to show improved performance and professional determination.

Detailers can provide you with billet opportunities that will better your chances for getting selected. So if in doubt, stay at sea and continue to compete. In this year's XO board, we selected a number of officers who were in this category.

There are a number of demanding department head-level and post-department head-level jobs available to senior lieutenants and lieutenant commanders. Most noteworthy are operationally intensive billets such as staff officers in operational staffs. These billets can also give an officer the opportunity to complete various professional qualifications such as TAO, EOOW or surface command qualification. In this year's board, it was expected that officers had their EOOW qualification to successfully compete for XO.

It is not only important to perform well at sea, but officers need to seek challenging billets ashore as well. For pre-department head officers, some of these assignments include duty as: a flag aide, a staff officer (particularly in a Washington tour), an instructor at the USNA, SWOS or NROTC unit, or a student at PG School. Participating in the Personnel Exchange Program (PEP) is also held in high regard, although an officer can ill-afford to spend more than two years out of the mainstream.

If an officer goes to a shore tour considered to be less than challenging, then pursuing a postgraduate education during off-duty hours is highly desirable. The board did recognize, however, that attaining an advanced degree can be very difficult, particularly at the post-department head level,

as there are many competing requirements for an officer's time and talent (i.e. joint, major staff, JPME).

An officer's failure to ensure accuracy and currency of both the record and photo can leave the board with some erroneous impressions -- sometimes wondering how serious the officer's professional desires might be.

Obviously, the more impressive an officer's fitreps (i.e. breaking out, ranking, etc.), the better chance of being screened. What's not obvious is that because such a high number of fitness reports fall into the questionable category, it is often the little things that can make the difference.

One of the most important steps you can take is to ensure your service/performance record is accurate in every detail. You should request a copy of your service record microfiche and OSR (Officer Summary Report) annually and submit an up-to-date photo of yourself. During this year's XO board, about 25 percent of the official photographs were well over the two-year-old requirement. An officer's failure to ensure accuracy and currency of both the record and photo can leave the board with some erroneous impressions -- sometimes wondering how serious the officer's professional desires might be.

Other signals to the board that could seriously impact on selection include an overweight problem which is not corrected or legal involvements, particularly DUI charges. Cases like these drew attention away from the officer's

professional performance and often killed his or her opportunity for selection.

Screening boards encourage officers who have experienced adverse circumstances, in either their professional or personal lives, to submit a letter to the president of the board that might help explain their situation. Keep in mind, however, that letters are most useful when an officer has some constructive information which brings out something not evident in the record.

Conversely, hastily prepared letters with typos, long letters that attempt to explain a poor grade, and obvious last-minute efforts faxed to the board can be counterproductive. Letters from commanding officers changing a grade or explaining poor fitness reports were also considered questionably constructive.

The number of officers selected by this year's board was nearly 60 percent, an improvement over the 50 percent selected last year. XO screening opportunity is expected to remain relatively stable over the next three to four years, after which year-group sizes will become smaller and selection opportunity will start to increase.

Finally, it's important to realize that officer screening is a very dynamic process that employs our very best people, who are committed to making the system work properly and professionally, and who are sincerely concerned about the welfare of each officer. Our community does not want this process to be a mystery to anyone. Have faith in the system. It may not be perfect, but it's highly respected by the other communities and services. Our goal is to keep faith with those competing, while selecting the best officers based principally on their performance at sea.

Comstock wins PACFLT Marjorie Sterrett competition
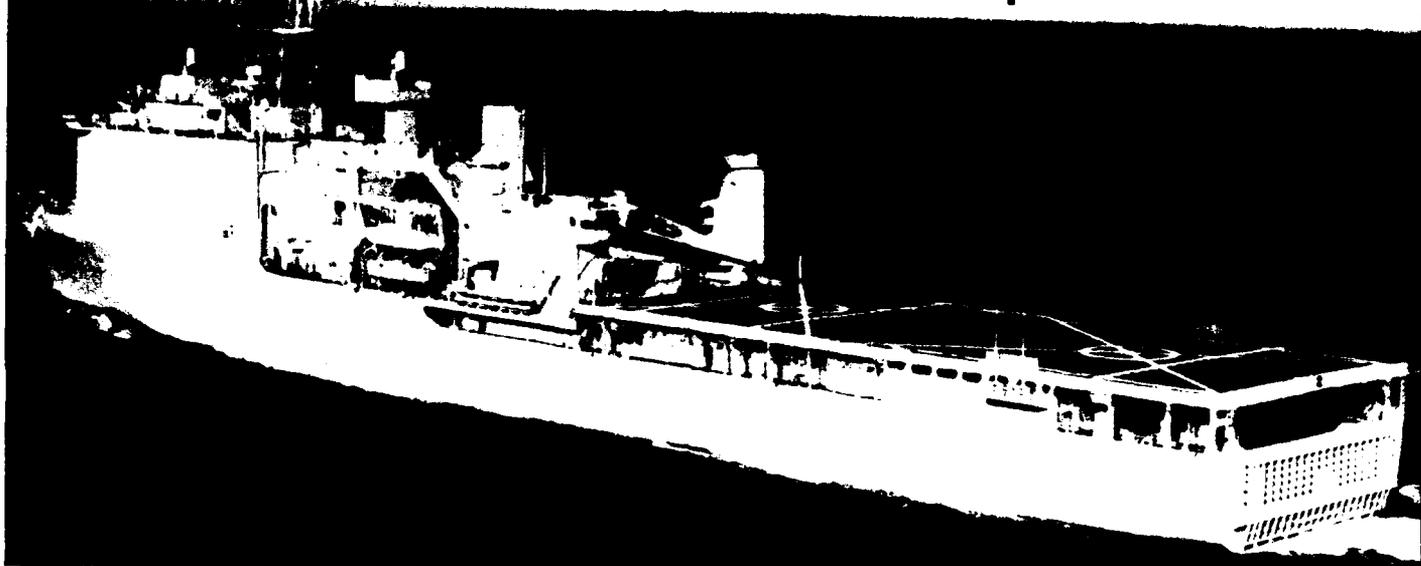
By LT Jon P. Walman

The dock-landing ship USS **Comstock** (LSD 45), commanded by Edward W. "Ned" Hebert III, was recently awarded the 1993 Marjorie Sterrett Battleship Fund Award for excellence in battle efficiency, overall readiness and performance in contingency operations.

The fund was established in 1917 by the New York Tribune Association. It was initiated by a contribution which accompanied the following letter:

Brooklyn N.Y.
February 2, 1916

"To the Editor of the New York Tribune"

"Dear sir:

I read in your paper every morning about preparedness. My grandpa and my great grandpa were soldiers. If I was a boy I would be a soldier, too, but I am not, so I want to do what I can to help. Mama gives me a dime every week for helping her. I am sending you this weeks dime to help build a battleship for Uncle Sam. I know a lot of other kids would give their errand money if you would start a fund. I am 13 years old, and go to Public School No. 9, Brooklyn.

Truly yours,
Marjorie Sterrett"

Prior to World War II, income from this fund was used to pay prizes annually to turret and gun crews making the highest scores in short-range battle practice, and to submarine crews making the highest scores in torpedo firing.

Today the award, presented in the form of a monetary contribution, serves as tangible recognition for the Atlantic and Pacific Fleet ships that best exemplify a superb level of combat readiness. This year's fund amount, donated to **Comstock's** Morale, Welfare and Recreation fund, was $694.00.

Captain George V. Galdorisi, Commodore of Amphibious Squadron 7 remarked, "This highly competitive award recognizes combat readiness in an amphibious ship only once every five years. The crew can be justifiably proud of their significant contributions to **Comstock's** impressive record of accomplishments."

During the award cycle, **Comstock** took part in many contingency operations while on deployment and off the coast of Somalia. These operations included UNISOM II, Operation Show Care and Operation Real Care.

Embarked aboard **Comstock** during last year's deployment, LT Scott Davies, Officer in Charge of the LCAC detachment from ACU 5, said, "The teamwork exhibited between the crew members, embarked Marines and assault-craft unit personnel was a big reason for our success. This was my first time serving on an amphibious ship, and I was completely impressed by the ship's dynamic operations and the professional attitude of the crew."

When fully loaded, **Comstock** can support a landing force of over 500 Marines in addition to her crew of 340. The ship is also among the first surface combatants to have permanently assigned women aboard.

A record year in surface safety

Last year was the best safety year ever for the surface Navy. In recognition, the Chief of Naval Operations Surface Ship Safety Award was awarded for outstanding contributions to fleet readiness, increased morale, efficiency and economic use of resources through enhanced safety awareness.

Naval Safety Center records indicate that by the end of fiscal year 1993, there had been only 11 afloat Class A mishaps Navy-wide, well below the most recent 10-year average of 26.3 and the five-year average of 17.4.

RADM A.A. Granuzzo, Commander, Naval Safety Center, attributes the record year to following safety procedures, wearing personal protective equipment, publishing lessons learned quicker, conducting better safety standdowns and staying alert.

"We have also begun to incorporate better risk-assessment and risk-management programs," he said. "Our safety officers are better trained now as they attend the afloat safety officer course during the department head course at SWOS."

RADM Granuzzo warned, however, against complacency. "We must maintain the full-court press. Supervisors and workers must continue to identify hazardous conditions and alert the chain of command."

The winners of the safety award, he said, "do an excellent job of listening and communicating."

Winners entitled to wear the green "E" are:

SURFPAC

Cruiser USS *Arkansas* (CGN 41)

Destroyer USS *Leftwich* (DD 984)

Frigate USS *Rodney M. Davis* (FFG 60)

Amphibious (large) USS *Tripoli* (LPH 10)

Amphibious (med/small) USS *Rushmore* (LSD 47)

Combat Logistics (large) USS *Sacramento* (AOE 1)

Combat Logistics (med/small) USS *Mauna Lea* (AE 22)

Repair USS *Acadia* (AD 42)

Support USS *Conserver* (ARS 39)

SURFLANT

Cruiser USS *Vicksburg* (CG 69)

Destroyer USS *O'Bannon* (DD 987)

Frigate USS *Gallery* (FFG 26)

Amphibious (large) USS *Guam* (LPH 9)

Amphibious (med/small) USS *Gunston Hall* (LSD 44)

Combat Losgistics (large) USS *Savannah* (AOR 4)

Combat Logistics (med/small) USS *Merrimack* (AO 179)

Repair USS *Puget Sound* (AD 38)

Support USS *Grasp* (ARS 51)

COMINEWARCOM:

Mine Warfare/PAC USS *Gallant* (MSO 489)

Mine Warfare/LANT USS *Devastator* (MCM 6)

NAVY-WIDE:

Floating Drydock *Steadfast* (AFDM 14)

Repair USS *Frank Cable* (AS 40)

Support USS *Ortolan* (ASR 22)

SITREP
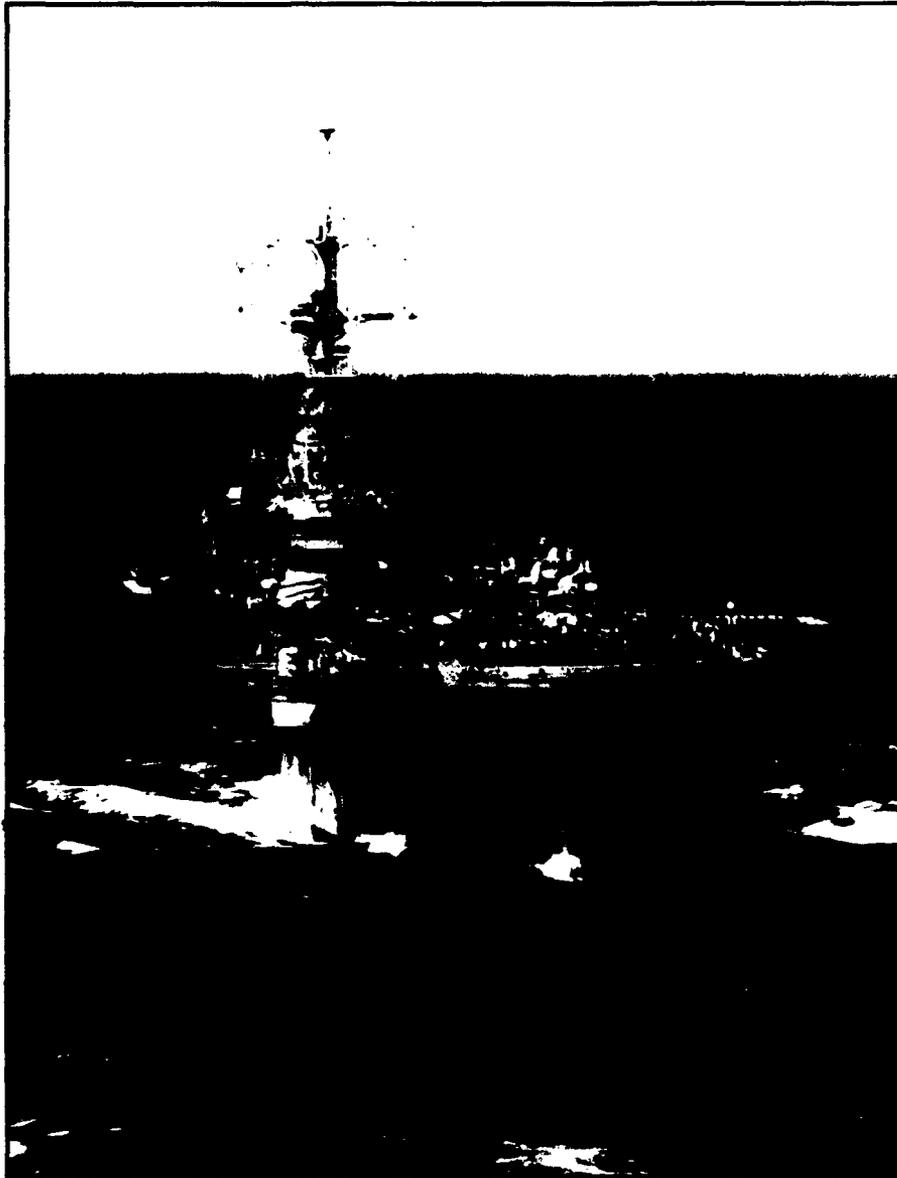
D-Day Fleet '94

U.S. Navy ships recently pulled into the United Kingdom, Italy and France to commemorate the 50th anniversary of D-Day. Forming the D-Day fleet to mark the largest amphibious assault in history were ships of the *George Washington* Joint Task Force *(see On Station on page 45)* and USCGC *Dallas*.

President Clinton paid tribute to the men who fought on Normandy beaches, saying, "We gather in the calm after sunrise today to remember that fateful morning. The pivot point of the war, perhaps the pivot point of the 20th century."

The crew of USS Guam participated in the D-Day commemoration.

Secretary of the Navy John H. Dalton, also speaking at the sunrise service, said, "Fifty years ago Allied vessels brimming with determined warriors, uncertain of their fate but clear in their purpose, sailed across these very waters. Today we honor them. They made the ultimate sacrifice then, so that we can be free now."

In messages to the commands involved, Secretary Dalton and ADM Mike Boorda, CNO, both expressed their deep appreciation to the sailors and Marines who helped to plan and carry out the D-Day ceremonies. ADM Boorda said, "You played a key role in this success. Your real reward comes from knowing an important job was well done and that you were a part of it. On behalf of the veterans, thanks and well done. It was truly a special and historic time." -- NNS

D-Day Retrospect: June 6, 1944 -- The Allies invade Europe at Normandy. Nearly 2,500 U.S. Navy ships and craft were involved in the largest amphibious assault ever. At one beach alone, 21,328 troops, 1,742 vehicles and 1,695 tons of supplies were landed in 12 hours -- NNS

WWII in the Pacific

Surface warriors are invited to participate in a three-day conference presenting a comprehensive analysis and review commemorating the 50th anniversary of World War II in the Pacific.

Sponsored by the Naval Order of the United States, the Naval Institute, the American Society of Naval Engineers, the Naval Historical Center and others, the event will be held at the Crystal City Hyatt Regency in Arlington, Va., August 10-12.

Highlights include presentations on key events, battles, strategies, technology and allied participation

Surface Warfare

Sea Shadow in FleetEx

The Navy's formerly super-secret surface ship test platform, *Sea Shadow*, recently slipped into San Diego for its first participation in a fleet exercise. In three separate underway periods of about two days each, Commander Cruiser Destroyer Group 5, RADM Dennis C. Blair, integrated the stealth ship into pre-deployment work-up exercises with the *Kitty Hawk* Battle Group off the coast of southern California.

For the first time ever, a small Navy detachment embarked in the test ship to exercise its special characteristics in both friendly and adverse tactical roles. Although fitted with a limited communications suite, *Sea Shadow* also demonstrated proof-of-concept support to the battle group by transiting to an objective area and performing typical frigate and patrol-craft missions in littoral waters.

In its adversary role, *Sea Shadow* provided a challenging problem by simulating a number of new classes of reduced-signature surface combatants being developed by various industrialized nations. As anti-surface warfare sponsor for Commander Third Fleet, COMCRUDESGRU 5 obtained an operational perspective on low-observable technology and gained valuable insight into the future of anti-surface warfare requirements. -- CDR Michael D. Besancon, COMCRUDES-GRU 5

during the four years of fighting in the Pacific. For registration and other conference details call (703) 836-6727.

Destroyer *Ramage*, amphib *Oak Hill* christened

The guided-missile destroyer *Ramage* (DDG 61) was christened April 23 at Ingalls Shipbuilding, Pascagoula, Miss. Barbara Ramage, above right, wife of the ship's namesake, is the ship's sponsor. Nora Slatkin, above center, Assistant Secretary of the Navy for Research, Development and Acquisition, was the principal speaker.

Oak Hill (LSD 51) was christened June 11 at Avondale Industries, New Orleans, La. GEN Walter E. Boomer, Assistant Commandant of the Marine Corps, was the principal speaker and his wife, Sandi, is the ship's sponsor.

Flag announcements

Secretary of Defense William Perry announced recently that the President has nominated the following flag officers for upcoming moves:

VADM J. Paul Reason, for reappointment to the grade of vice admiral and assignment as Deputy Chief of Naval Operations (Plans, Policy and Operations) N3/5.

VADM Ronald J. Zlatoper, for appointment to the grade of admiral and assignment as Commander in Chief, U.S. Pacific Fleet.

VADM William J. Flanagan, Jr., for appointment to the grade of admiral and assignment as Commander in Chief, U.S. Atlantic Fleet.

On Station

These surface units are now on overseas deployments:

George Washington JTG -- Mediterranean

Thomas S. Gates (CG 51), *San Jacinto* (CG 56), *Barry* (DDG 52), *Conolly* (DD 979), *Deyo* (DD 989), *Doyle* (FFG 39), *Guam* (LPH 9), *Austin* (LPD 4), *Tortuga* (LSD 46), *Harlan County* (LST 1196), *Kalamazoo* (AOR 6), *Santa Barbara* (AE 28)

Kitty Hawk BG -- Persian Gulf

California (CGN 36), *Cowpens* (CG 63), *Vincennes* (CG 49), *Crommelin* (FFG 37), *Roanoke* (AOR 7), *Flint* (AE 32)

Carl Vinson BG -- Persian Gulf

Arkansas (CGN 41), *Antietam* (CG 54), *Reuben James* (FFG 57), *Camden* (AOE 2)

Peleliu ARG -- Somalia

Peleliu (LHA 5), *Duluth* (LPD 6), *Anchorage* (LSD 36), *Frederick* (LST 1184)

Tripoli ARG -- Somalia

Tripoli (LPH 10), *Cleveland* (LPD 7), *Fort McHenry* (LSD 43), *Rushmore* (LSD 47)

MIDEASTFOR

Briscoe (DD 977), *Stephen W. Groves* (FFG 29), *Shiloh* (CG 67), *Paul F. Foster* (DD 964), *Thach* (FFG 43), *Fletcher* (DD 992), *Harry W. Hill* (DD 986), *Oldendorf* (DD 972)

Changes of Command

SURFLANT

COMDESRON 2, CAPT J. Michael Fahey relieved CAPT Don P. Pollard in June.

COMDESRON 6, CAPT Francis D. Meyer relieved CAPT William J. Donnelly in April.

COMDESRON 8, CAPT Oliver K. Spears III relieved CAPT Stephen A. Jarecki in April.

COMDESRON 20, CAPT William H. Sadler III relieved CAPT Oliver K. Spears in March.

COMPHIBRON 4, CAPT Charles C. Buchanan relieved CAPT Stephen H. Ries in June.

USS *Antrim* (FFG 20), CDR Daniel D. Sloss relieved CDR Robert O. Kedney in May.

USS *Caron* (DD 970), CDR Steven W. Nerheim relieved CDR Peter D. Squicciarini in May.

USS *Conolly* (DD 979), CDR Gary J. Ellis relieved CDR Robert L. Holt in April.

USS *Gunston Hall* (LSD 44), CDR Ronald W. Brinkley relieved CDR Michael P. Nowakowski in May.

USS *Hoist* (ARS 40), LCDR Jonathan D. Kurtz relieved LCDR Peter R. Kendrick in May.

USS *McInerney* (FFG 8), CDR Ronald Y. Heath relieved CDR Robert D. Jenkins III in May.

USS *Moosbrugger* (DD 980), CDR Stephen C. Nimitz relieved CDR Christopher M. Moe in April.

USS *Mount Whitney* (LCC 20), CAPT Gene R. Kendall relieved CAPT Malcom P. Branch in May.

USS *Nicholson* (DD 982), CDR Paul E. Stanton relieved CDR Lawrence M. Jones, Jr. in June.

USS *Oliver H. Perry* (FFG 7), CDR Ricky L. Carper relieved CDR Robert A. Bullock in April.

USS *Philippine Sea* (CG 58), CAPT James J. McTigue relieved CAPT John J. Becker in April.

USS *Shenandoah* (AD 44), CAPT Larry W. Darling relieved CAPT Philip F. Shullo in April.

USS *Shreveport* (LPD 12), CAPT John M. Carter relieved CAPT Alfred G. Harms, Jr. in May.

USS *South Carolina* (CGN 37), CAPT Michael G. Gaffney relieved CAPT John S. Craighill in May.

USS *Spruance* (DD 963), CDR J.W. Stevenson relieved CDR Richard P. Foster in June.

USS *Tortuga* (LSD 46), CDR William D. Daniels relieved CDR Stephen D. Gilmore in May.

USS *Underwood* (FFG 36), CDR Victor Guillory relieved CDR Archibald C. Halsall in June.

USS *Vicksburg* (CG 69), CAPT Thomas J. Wilson III relieved CAPT Paul K.A. Vosseler in May.

USS *Yellowstone* (AD 41), CAPT Ronald C. Bogle relieved CAPT Ronald C. Berning in June.

Assault Craft Unit 4, CAPT David C. Rollins relieved CAPT Joseph M. Greene Jr. in June.

SURFPAC

COMPHIBRON 11, CAPT Edward M. Kline relieved CAPT John C. McKinley in April.

COMDESRON 9, CAPT Barry V. Burrow relieved CAPT James F. Shanahan in May.

USS *Anchorage* (LSD 36), CDR Paul C. Cassani relieved CDR Thomas J. Brown in May.

USS *Bunker Hill* (CG 52), CAPT Gary W. Schnurrpusch relieved CAPT E. Richard Diamond in May.

USS *Curts* (FFG 38), CDR Thomas A. Delery relieved CDR Martin L. Moody in May.

USS *Dubuque* (LPD 9), CAPT Kenneth E. Golden relieved CAPT Ronald L. Christenson in April.

USS *Elliot* (DD 967), CDR Lee H. Rosenberg relieved CDR Barry M. Costello in April.

USS *Hewitt* (DD 966), CDR Ralph E. Janikowski relieved CDR John C. Meyer in May.

USS *Mahlon S. Tisdale* (FFG 27), CDR Ronald E. Madeen relieved CDR Leslie J. Schaffner in May.

USS *Roanoke* (AOR 7), CAPT Ronnie L. Barrow relieved CAPT Larry E. Cook in April.

Assault Craft Unit 1, CDR Richard Hascup relieved CDR Joseph R. Hugill in July.

VADM Timothy W. Wright, for reappointment to the grade of vice admiral and assignment as Chief of Naval Education and Training/Director Naval Training, N7.

VADM Douglas J. Katz, for reappointment to the grade of vice admiral and assignment as Commander, Naval Surface Force, U.S. Atlantic Fleet.

RADM Jay L. Johnson, for appointment to the grade of vice admiral and assignment as Commander Second Fleet/Commander, Striking Fleet Atlantic.

RADM William A. Earner, Jr., for appointment to the grade of vice admiral and assignment as Deputy Chief of Naval Operations, Logistics, N4.

RADM Paul E. Tobin, Jr. to Deputy Chief of Naval Education and Training from Assistant Chief of Naval Personnel Readiness and Community Support, PERS-6.

RADM Philip A. Dur to Assistant Deputy Chief of Naval Operations, Plans, Policy and Operations, N3/5B,

OPNAV from director, Strategy and Policy Division, N51.

RADM William J. Hancock to Director of Budget and Reports, NAVCOMP/N82, from Director CINC Liaison Division, N83.

RADM James B. Perkins III to Deputy Commander in Chief/Chief of Staff, U.S. Southern Command, Panama, from Commander Amphibious Group 3.

RADM Francis K. Holian to Commander Training Command U.S. Pacific Fleet from Commander Naval

Fleet Week commemorates liberation of Europe

On June 2, the Navy's high-speed LCACs landed on the shores of Fort Wadsworth in an early morning mini-assault on the Staten Island shores. The beach assault was the beginning of dozens of events that took place during Fleet Week '94, a week-long celebration and commemoration of activities honoring the 50th anniversary of the liberation of Europe.

The celebration was highlighted by ceremonies commemorating each of the three fronts of the European theatre: the Eastern Front, the Italian Front (liberation of Rome on June 5) and the Western Front (D-Day).

U.S. Navy ships participating in the event included USS *Guadalcanal* (LPH 7), USS *Ashland* (LSD 48), USS *Kearsarge* (LHD 3), USS *O'Bannon* (DD 987), USS *Shreveport* (LPD 12) and USS *De Wert* (FFG 45). Also participating were ships from Brazil and Mexico. -- *Vince Elias, NavSta NY Public Affairs.*

Qualified for Command at Sea

LCDR Gregory E. Antolak, USS *McClusky* (FFG 41)

LCDR Jonathan C. Bess, USS *Elliot* (DD 967)

LCDR William S. Beyer, USNR, ex *Sylvania* (AFS 2)

LCDR William W. Crow, USS *Peterson* (DD 969)

LCDR Albert Curry Jr., USS *Nicholson* (DD 982)

LCDR Stephen A. Cushanick, USS *Mt. Vernon* (LSD 39)

LCDR Kevin W. Doty, USS *Haleakala* (AE 25)

LCDR Brian J. Gerling, USS *Jarrett* (FFG 33)

LCDR William G. Hughen, USS *Kiska* (AE 35)

LCDR Wilfred P. Quintong, USS *Cleveland* (LPD 7)

LCDR Martin S. Simon, USS *George Washington* (CVN 73)

LCDR James L. Waters, USS *Rentz* (FFG 46)

Base San Diego.

RADM William D. Center to Deputy, International Negotiations, J5, Joint Staff in Washington DC from Assistant Deputy Director, International Negotiations, J5, Joint Staff. -- *Navy News Service*

Seaman to Admiral

ADM Mike Boorda has brought back the program which helped him move from seaman to CNO. Eligible applicants for the Seaman to Admiral Program will be considered by a board convened by the Chief of Naval Personnel on November 14, 1994. Selectees will be appointed as permanent ensign after indoctrination at OCS.

To be eligible for appointment, all applicants must meet the following basic requirements:

• Have a superb record and be recommended by their commanding officer.

• Be a U.S. citizen.

• Be serving on active duty in the U.S. Navy or Naval Reserve, including the TAR program, at the time of application and remain on active duty until commissioned.

• Be serving in pay grade E-5 or above with at least four years of continuous active duty as of November 25, 1994.

•Have not reached their 27th birthday by November 25, 1994. (No waivers will be granted.)

• Have a minimum officer aptitude rating of 40.

• Be physically qualified for appointment in the unrestricted line per physical standards outlined in the Manual of the Medical Department, Chapter 15.

•Meet physical fitness and body fat standards.

• Be a high school graduate or possess a GED.

• Have no record of conviction, court-martial, NJP or civil court for any offense other than minor traffic violations since age 17.

• Be of good moral character and of unquestioned loyalty to the United States as determined by interview and investigation.

• Students in other accession programs are not eligible.

• Personnel in humanitarian/ hardship or limited duty assignments will not be commissioned until the special situation is completely resolved.

All eligible candidates must submit a formal written application to: Chief of Naval Personnel, (PERS-251), 2 Navy Annex, Washington D.C. 20370-2510, via their commanding officer. Applications must reach BUPERS NLT September 16, 1994.

Application format and other details are in NAVADMIN 096/94, DTG CNO WASHINGTON DC 090004Z JUN 94.

Comfort, PCs to Haiti

USNS *Comfort* and two coastal patrol ships, USS *Cyclone* (PC 1) and USS *Tempest* (PC 2), recently deployed as part of Operation Support Democracy, the maritime interdiction

Decommissionings planned through
December 1994

Decommissioning dates provided by NAVSEA Surface Ship
Logistics Division (PMS 333) and are subject to change.

___ ___ County (LST ___), July 8	USS Hoist (ARS 40), September 30
___ ___ Brown (FFT 1089), July 27	USS Reclaimer (ARS 42), September 30
___ ___ (FF 1097), July 28	USS Recovery (ARS 43), September 30
___ ___ (FF 1053), July 30	USS Saratoga (CV 60), September 30
___ Cayuga (LST 1186), July 30	USS Implicit (MSO 455), September 30
___ Fairfax County (LST 1193), August 17	USS Hunley (AS 31), September 30
___ Guadalcanal (LPH 7), August 31	USS Kansas City (AOR 3), October 7
___ Luce (CG 5), September 22	USS Suribachi (AE 21), December 2
___ Niagara Falls (AFS 3), September 23	USNS Maury (T-AGS 39), December 15
___ Bolster (ARS 38), September 24	USS Frederick (LST 1184), December 16
___ Spartanburg County (LST 1192), September 29	USS Acadia (AD 42), December 16
___ Wabash (AOR 5), September 30	USS Duncan (FFG 10), December 17
___ Kittiwake (ASR 13), September 30	

___ in the waters around Haiti.

The PCs are a new class of Navy ship with a primary mission of conducting coastal patrol and interdiction surveillance. They also provide full mission support for naval special warfare forces.

USNS Comfort, one of two hospital ships in the Navy, is processing Haitian immigrants at sea and providing basic medical care from a large contingent of Naval medical and support personnel.

Sirocco commissioned

USS Sirocco (PC 6) was commissioned June 11 at the Washington Navy Yard, Washington, D.C.

Secretary of the Navy John Dalton was the principal speaker and Kathy Smith, wife of RADM Ramond C. Smith, Jr., Commander, Naval Special Warfare Command, is the ship's sponsor.

LCDR(Sel) David Caldwell is the ship's commanding officer.

Humphreys' frigates

June 28, 1994 marked the 200th anniversary of the authorization to build Joshua Humphreys' frigates.

A prominent Philadelphia shipbuilder, Humphreys was asked to design the two classes of frigates authorized by the Navy Act of March 27, 1794, which officially founded the

U.S. Navy. His plans, developed in collaboration with draftsman William Doughty, an English emigrant, produced the the largest and most powerful frigates afloat, at no sacrifice to speed. These revolutionary vessels proved their worth in the Quasi-War with France and during the War of 1812.

The first six officers of the new Navy were also appointed on June 28, 1794. The six captains included Joshua Barney, John Barry, Richard Dale, Samuel Nicholson, Silas Talbot and Thomas Truxtun. -- taken from "American Naval History-- an illustrated chronology of the U.S. Navy and Marine Corps " by Jack Sweetman.

Princeton hailed

The crew of USS Princeton (CG 59), CAPT G.M. Farrell commanding,

was recognized for their outstanding achievements and performance recently when RADM J.B. Yakeley, Jr., COMCARGRU Three, presented the Golden Anchor Award, Spokane Trophy and Type Commander's Ship Safety Pennant.

A 33-percent participation rate in the National Apprenticeship Program, over 200 crew members receiving Asset Testing through DANTES and Navy Campus programs, and PACE courses -- among other programs -- allowed Princeton to exceed all other ships in rate of advancement, opportunities for commissions, and education to win the Golden Anchor.

An outstanding record of combat readiness, demonstrated warfighting ability and teamwork as an integral part of the Abraham Lincoln Battle Group earned Princeton the Spokane Trophy.

Through all the exercises, battle-group workups and a six-month deployment, the ship met all commitments on time, with an unprecedented record of safety and success, earning Princeton the Safety Pennant.

Navy ships save Egyptians

USS Briscoe (DD 977), CDR Andrew J. Pitts commanding; USS Stephen W. Groves (FFG 29), CDR Gary M. McKinley commanding; and USNS Henry J. Kaiser (T-AO 187) recently responded to a distress call

from an Egyptian ferry after a boiler explosion in the Gulf of Suez. The ferry had nearly 500 passengers and 86 crew members, according to the distress call.

By the time the ships began to arrive on scene, many of the passengers and crew from the ferry had abandoned ship, and the ships arriving to render aid had to pull the survivors from the water as the fire engulfed the ferry. --NNS

LCAC trainer in Little Creek

The Naval Air Warfare Center Training Systems Division and the Naval Amphibious School, Little Creek, Va., recently dedicated a new operations trainer for the Landing Craft Air Cushion vehicle (LCAC). The LCAC full-mission trainer will be used to train LCAC operators, engineers, navigators and group commanders at one-tenth the cost of actual LCAC operations (SWM Jul/Aug 93:10). The Naval Air Warfare Center Training Systems Division is the principal Navy center for the development and acquisition of training systems.

Correction

In the May/June 94 issue of *Surface Warfare Magazine* a series of articles was presented on the permanent assignment of women to surface combatants. In addition, a chronology detailing the history of women at sea in the United States Navy appeared on page 5.

There are two significant errors in that chronology: the Navy Reserve Act of 1938 did *not* "authorize the enlistment of qualified women." Instead, it merely provided "that female registered nurses may be appointed in the Volunteer Reserve under regulations prescribed by the Secretary of the Navy." Otherwise, the rest of the Act repeatedly specified that membership is limited to "males" and "men."
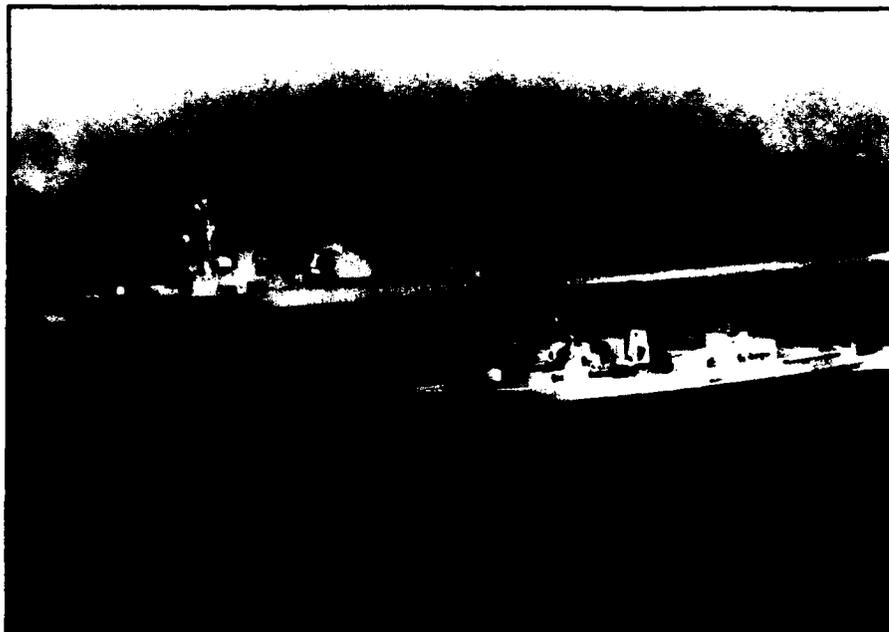
History repeats itself

Two naval greats were reunited in the southern Adriatic after last sailing together more than 200 years ago. This unusual event saw the French destroyer *La Motte-Piquet* (D 645) and the U.S. Navy's USS *Comte De Grasse* (DD 974) sailing side by side as they worked together during Operation Sharp Guard, the multi-national enforcement of United Nations sanctions against the former Republic of Yugoslavia.

La Motte-Piquet is named after the French Admiral Toussaint Guillaume Piquet De La Motte (1720-1791), who fought the English in the Caribbean during the American Revolutionary War. He was victorious in several key engagements and made an important 1779 visit to Savannah, Ga., in support of American independence.

Comte De Grasse honors Francois Joseph Paul De Grasse (1722-1788), a direct contemporary of La Motte-Piquet. He also served in the Caribbean before going north to the Virginia Capes where he won a crucial 1781 victory over the British fleet under Admiral Graves.

The Adriatic reunion served as a symbolic reminder for sailors in both navies of the long-standing ties between France and the United States, but it was not without an ironic twist. Both ships were operating under the command of British Commodore Alastair Ross, who was flying his flag in *Comte De Grasse!*

Additionally, the acronym "WAVES" (Women Accepted for Volunteer Emergency Service) was *not* established by a 1942 amendment to the 1938 Navy Reserve Act. Instead, this title was coined by LT Elizabeth Reynard and was eventually accepted as quasi-official; but the law cited uses only the term "Women's Reserve."

These errors were pointed out by one of the nations leading experts on women in the Navy, Jean Ebbert, a former naval officer, herself, and the spouse of a retired Navy captain. Along with her co-author, Mary-Beth Hall, Ebbert recently published a well-timed book entitled *Crossed Currents: Navy Women from WWI to Tailhook.* The book is a painstakingly researched labor of love that details the contributions of Navy women from World War I to the present, touching on everything from the logistics problems caused by pregnancy to the struggle by women for complete career acceptance in the Navy.

The book is published by Brassey's Books (US), c/o Macmillan Publishing Co., 100 Front St., Box 500, Riverside, NJ 08075.