

## Record of Achievement

---

# THE UNITED STATES NAVY\* 1981-1987

\*Excerpts drawn from Report to the Congress, Fiscal Year 1988, Posture Statement by the Secretary of the Navy, J. F. Lehman, Jr.

## WHAT HAS BEEN ACCOMPLISHED IN SIX YEARS WITH 4.1 PERCENT ANNUAL BUDGET GROWTH?

### Personnel

The past six years have seen the most dramatic change in the manning of the Navy and Marine Corps in the 211 years of our history. From the worst retention and recruiting in postwar history in 1979 and 1980, we have achieved the highest figures ever recorded. We are meeting 100 percent of our accession goals, and have achieved 97 percent non-prior-service high school diploma graduates in the Marine Corps and 85 percent in the Navy. In virtually every category we have increased retention to near-record highs: in skilled enlisted ratings, in pilots and naval flight officers, in nuclear-trained and surface warfare officers. From a situation six years ago when some of our ships could not deploy on schedule because the fleet was manned at only 91 percent, we are now at 100 percent ship manning for a Navy that has grown by more than 75 ships. Sustaining 100 percent manning afloat has not come easily. The increase in new ships has created a heavy demand for petty officers coming on top of a shortage of 22,000 petty officers inherited in 1981. We have not only increased our petty officer inventory by more than 64,000 but have also improved our rating distribution effectiveness by more than 200 percent. As you can see below, in 1980 only 24 percent of our ratings had the proper balance of people. Today, 76 percent of our ratings are properly balanced.

In order to maintain our required manning levels, and to keep the fleet ready to respond when called on, we will require a solid and intensive commitment to our recruiting efforts. A well-developed media and advertising campaign are essential to success. We will need your continued support in this area.

Applications to the U.S. Naval Academy at Annapolis, Md. are at record levels, reflecting the new pride in American youth in serving our country. For the Class of 1990, 14,282 applications were received - the highest number of applications ever. Eighty-two percent of the men and women enrolled in the Class of '90 were in the top one-fifth of their high school classes; 55 percent were members of the National Honor Society, and 12 percent were either high school senior class presidents or vice presidents.

## Naval Reserve

The Naval Reserve contains several components which exist only in the Reserve: 100 percent of the Navy's U.S.-based logistics support squadrons; 100 percent of light-attack helicopter squadrons; 100 percent of our combat helicopter search and rescue capability; and 100 percent of naval mobile inshore/ undersea warfare units - the "Brown-Water Navy" - structured for combat on inland waterways. Upon mobilization, the Naval Reserve provides 99 percent of naval control of shipping organization manning for merchant ship mobilization and convoy formation for overseas operations; 86 percent of our ocean-going minesweepers; 86 percent of the cargo-handling battalions vital to port management and loading operations in combat theaters; 85 percent of Military Sealift Command military personnel; 68 percent of naval mobile construction battalions, the famed Seabees; 66 percent of special boat forces; 35 percent of maritime ASW patrol aircraft squadrons; 34 percent of naval intelligence personnel; 21 percent of ASW helicopter squadrons needed for fleet and convoy antisubmarine defense efforts; and 14 percent of our tactical sea-based aviation capabilities.

Reorganization of the Naval Reserve to a "horizontal integration" with the active force, begun in 1982, has had the effect of shifting a substantial portion of our force structure manning to the Ready Reserve. Increased reliance on the Ready Reserve has enabled us to reduce our original estimates of required active end-strength growth.

- In FY 1988 and 1989, 48 ships will be manned by Selected Reserves, in addition to the augmentation of essentially all naval units by Selected Reserves upon mobilization.
- The 15<sup>th</sup> active carrier air wing has been deleted from the program and the 15<sup>th</sup> carrier will carry a reserve air wing.
- Seventeen modern *Oliver Hazard Perry-and-Knox* –class frigates have been transferred to the Naval Reserve Force, with a total program of 26 frigates planned by 1990.
- By the mid-1990s, 14 MCM and 10 MHC mine warfare ships will join the Naval Reserve.
- The first reserve squadron has now completed transition to the F/A-18 with a second squadron transitioning this year. Two squadrons have transitioned to the F-14A, with the remaining two scheduled for transition this year. The first Reserve A-6E squadron will stand up in FY 1988 and the second one will follow in FY 1990.
- Modern A-7E, E-2C. and SH-2F aircraft have been or are being transferred or acquired for Reserve units this year, with other fleet aircraft to follow during the current five-year plan.

The Marine Corps relies heavily on a fully trained and capable Reserve component to complement its active force. Upon mobilization, this Reserve component provides up to 33 percent of the Marine Corps' wartime manpower requirements. The Reserves provide 40 percent of Marine tanks; 33

percent of the heavy artillery; 30 percent of the light attack aircraft; and 33 percent of the anti-aircraft missile capability.

The Marine Corps Reserve has made great progress over the past six years. Enhancements in military capability include equipping the Marine artillery battalions with the M-198 howitzer in FYs 1988 and 1989, increasing the deliveries of the TOW missile systems in FY 1988, and the activation of a light armored vehicle (LAV) battalion in FYs 1987 and 1989. Marine Reserve aviation assets also have been the subject of an intensive modernization effort. Increased combat capability has been gained by the activation of an additional AH-1J (*Cobra*) attack helicopter squadron and a new KC-130 refueler squadron in FY1988. Additional enhancements include the employment of the F-21A KFIR aircraft by a Reserve squadron to provide adversary training for Marine tactical air assets. In 1989, the Marine Reserve will begin transitioning to an all F/A-18 Reserve fighter/attack force, providing advanced aircraft and commonality and interoperability with the active wings.

### **Aviation Safety**

Naval aviation has just completed its safest year since our record-setting performance in calendar year 1984. There are three areas of achievement in 1986 which were particularly noteworthy.

- Naval aviation safety in 1986 was the best it has ever been. Initial data indicates that the overall aviation mishap rate per 100,00 flight hours matched our previous best rate set in calendar year 1984.
- The Marine Corps recorded the safest year in its aviation history with 19 mishaps and a rate of 4.43 accidents per 100,000 flight hours.
- Fatalities in naval aviation were at an all-time low of 60. While even one is too high, this is 19 percent lower than our previous best, set in calendar year 1982.

### **Families**

With people having the highest priority in Navy and Marine planning, family quality of life has been steadily improved. We now have 82 Family Service Centers, 26 Spouse Employment Assistance Program Centers (Navy), and 12 Employment Resource Centers (Marine Corps). We expect to continue to expand our family service programs and to develop the tools to help ameliorate the family hardships encountered in frequent relocations. We have improved off-duty recreational opportunities which support physical fitness and healthy lifestyles, and are improving our efforts to provide adequate and affordable child care. The emphasis we place on caring for our military personnel and their families greatly enhances our ability to retain a quality force ready to respond to the call to arms quickly and with unquestioned dedication. Navy's highest priority will continue to be its personnel and their families.

### **Readiness**

The fleet is more ready to go in harm's way than at any time in peacetime history. In the past six years, overall combat readiness for surface ships has improved by 111 percent, for nuclear attack submarines by 69 percent and aviation squadrons by more than 200 percent. The importance of sustaining this level of readiness is demonstrated by our nation's reliance on the Navy to respond with flawless performance to contingencies such as the *Achille Lauro* episode and the strike on facilities that supported terrorism in Libya.

The net increase in spare parts and ammunition has been far greater than the actual increase in funding applied to it. The reason has been the dramatic reforms in the way we have managed these funds. Despite the misinformation provided by self-appointed experts on defense procurement, the Navy initiated a major reform of its spare parts buying under the direction of the secretary of defense. Nearly all of the horror stories appearing in the press were the result of a vigorous pursuit of abuse by Navy personnel at all levels. We have been able, for instance, to raise competition on our purchase of aviation spares from a deplorable low of 6.9 percent in 1982 to the current level of 40 percent. As a result, the increase of end items to the fleet is substantially more than the increase in funding would suggest. The funding applied to spare parts procurement in this year's budget reflects application of these economies.

### **Sea-based Nuclear Deterrent**

The modernization of our sea-based leg of the strategic deterrent is proceeding well. We have added eight *Ohio* - class *Trident* SSBNs to the fleet since 1981, with six others authorized. The latest addition to the fleet was USS *Nevada* (SSBN 733), commissioned in August 1986. During sea trials, *Trident* submarines have met or exceeded all of their design specifications. The next *Trident*, *Tennessee* (SSBN 734), will be the first ship capable of carrying the *Trident II* (D-5) missile. Launched in December 1986, it will be commissioned in January 1989. With these developments, the strategic submarine force builds on continued success and remains the most cost effective and survivable leg of the strategic triad.

The first eight Ohio-class *Trident* SSBNs are outfitted with *Trident I* (C-4) missile, joining 12 *Poseidon* SSBNs currently equipped with *Trident I*. Over the past six years, the development of the *Trident II* (D-5) has progressed well and an accelerated deployment schedule was programmed; missile development is on track for an additional operational capability (IOC) of 1989. The initial flight test in January 1987 at Cape Canaveral was highly successful. In addition, we have greatly strengthened command and control of our strategic forces, including construction of the Extremely Low Frequency (ELF) communications system, and have begun to procure a follow-on *TACAMO* command and control aircraft. Three years ago we began deploying *Tomahawk* sea-launched cruise missiles equipped with nuclear warheads for theater nuclear deterrence. They are now operationally capable on attack submarines, cruisers, destroyers, and reactivated battleships. This highly reliable, accurate, low cost weapons system is a tremendous force multiplier that adds a new and very stabilizing dimension to our deterrent posture, and matches a capability inherent in the Soviet fleet since the early 1960s.

## Shipbuilding

Six years ago the President set a goal of doubling the naval shipbuilding program. We have maintained that ambitious goal despite continuing cuts from the original budget estimates. We have brought dramatic new efficiency, discipline, and cost savings to the management of Navy shipbuilding.

- From the 479 battle force ships in the fleet when President Reagan took office, the fleet has grown to 555 ships today and 564 by the end of FY 1987, reaching 600 by the end of 1989.
- In 1986, we took delivery of 19 new ships, including an aircraft carrier delivered over a year early, two *Aegis* cruisers, battleship, a *Trident* submarine, two attack submarines, two frigates, an amphibious landing ship, a fleet oiler, two ocean surveillance ships, two salvage ships, a hospital ship, a fast logistics sealift cargo ship, a crane ship, and an aviation repair ship.
- The third maritime prepositioning ship (MPS) squadron became operational in the Pacific Ocean this year, completing deployment of these vital stores ships and bringing to 13 the number of maritime prepositioning ships constructed and deployed in the last four years. The maritime prepositioning ships program progressed from concept to fruition in *just seven years* and provides a force deployment capacity equal to approximately 4,500 C-141 sorties that significantly enhances our global crisis response capability.
- From 1984 to 1986 we procured and converted eight commercial SL-7 cargo ships to fast sealift ships. These eight highly versatile ships are together capable of transporting an entire heavy mechanized Army division to Europe at speeds approaching 30 knots.
- Our FY 1988-1989 five year plan calls for a total of 102 new ships and reflects the proper balance of ship types and capabilities needed to sustain and modernize the 600-ship Navy.

## Aircraft

In each of the eight years preceding the Reagan rearmament program, the Department of the Navy was not able to procure enough aircraft to replace those lost through peacetime attrition. In each of the past six years, however, naval aircraft procurement has exceeded by nearly 1 1/2 times – the average number of aircraft procured during each of the preceding four, and procurement of aircraft spares has more than tripled. These high rates of procurement have been maintained because of a historic reversal of cost trends in naval aircraft programs. For the fifth straight year, all naval aircraft procurement programs are on a firm-fixed-price contract basis, precluding the possibility of production cost overruns, and the annual prices of our new tactical aircraft have actually been coming down. Competitive pressures have been maintained through imaginative acquisition strategies and strengthened contractual commitments from program start.

In 1987, we continue to increase the force levels and deploy our newest weapon systems, the F/A-18 *Hornet* and the LAMPS MK III SH-60B helicopter. The *Hornet* demonstrated superb readiness and

combat capabilities during our highly successful 1986 Libyan operations. Current force levels include 10 U.S. Navy and six U.S. Marine Corps fleet squadrons. The LAMPS MK III continues to meet or exceed readiness and reliability goals as the force level has expanded to four fleet squadrons. This year we have continued the successful development of the following major programs: T-45 *Goshawk*, V-22 *Osprey*, F-14D *Tomcat*, and the A-6F *Intruder*. All will be procured under fixed-price contracts.

### **Weapons and Ammunition**

In the decade preceding the Reagan administration, the Marine Corps was unable to procure sufficient ammunition to replace the stocks expended in normal peacetime training. As result, sustainability and war reserves disappeared. During that same period, the Navy was held to such low levels of procurement of ammunition, missiles, and torpedoes that five years ago we did not have sufficient stocks to load out the reduced fleet of 479 ships – even once – with full magazines. We had less than a week's supply of the most important air defense munitions. Such enormous shortages created over a decade of unilateral disarmament in the 1970s, are not going to disappear overnight. But six years of sustained growth in our ammunition accounts now has begun to refill our munitions stockpiles.

Despite the fact that there is a two-to-three-year lag between funding and delivery, our overall ordnance stocks have grown between 20 and 80 percent larger than they were in 1981, and are increasing literally every day as deliveries reach the fleet. For example, the number of in-bin cruise missiles has more than doubled.

### **Overhauls**

The application of competitive bidding procedures between the public and private sectors for all surface ship and submarine overhauls has resulted in substantial dollar savings, improved quality, and timely completion. At the same time, we have been able to relieve the inherited backlog of ships awaiting overhaul to zero today, while at the same time increasing the fleet to 76 ships.

### **Management Initiative Results**

These management initiatives have produced dramatic results. A few highlights are listed below:

*The disputes, litigation, claims, cost overruns, and schedule delays that characterized naval shipbuilding in the 1970s have been eliminated. Over the last five years (CY 1982-1986), 114 ships have been delivered to the Navy, 40 of which were ahead of schedule, 50 on schedule, and only 24 behind schedule. The net of all five years is 33 months ahead of schedule for all ships. After years of bitterness and massive cost overruns and claims in our submarine programs, all submarines have been delivered on or under budget. For the sixth straight year there has not been a single new construction contract shipbuilding claim outstanding against the Navy.*

*Aircraft Carrier Savings.* Our acquisition strategy for nuclear aircraft carriers has been very effective in reducing the cost of achieving airpower at sea and in accelerating the growth to a 15-carrier battle

group force level. Originally, a split buy of two new aircraft carriers in separate annual procurements for *Abraham Lincoln* (CVN 72) and *George Washington* (CVN 73) was estimated to cost \$8,024 million. Our multiple ship award strategy in FY 1983 brought these costs down to \$7,270 million, a savings of \$754 million. Furthermore, since contract award, sound management practices and the success of the administration's national economic policies have achieved further cost savings of another \$1,274 million, bringing the estimated end cost to \$5,996 million for the two CVNs. These savings permitted us to return \$450 million from the carrier account alone for reprogramming to the MX program.

In addition to saving more than \$2 billion by our CVN 72/73 acquisition strategy, we also will deliver these ships earlier than a traditional split annual procurement approach. We estimate that CVN 72 and CVN 73 will each deliver 22 months earlier than with a traditional approach. We estimate that CVN 72 and CVN 73 will each deliver 22 months earlier than with a traditional approach. USS *Theodore Roosevelt* (CVN 71) was recently commissioned more than 16 months earlier than the original schedule through incentives we have established in the CVN 71 construction contract. Thus, a total of five additional nuclear aircraft carrier ship years will be achieved through our acquisition strategy.

*Aegis cruisers.* Bath Iron Works was selected as a second source to compete with Litton for procurement of *Aegis* cruisers. Contracts were signed in December 1983 for the first three cruisers to be competitively awarded: two to Litton and one to Bath. In November 1984, the second year of competition resulted in Bath winning two FY 1985 ships and Litton one. In December 1985, the third year of competition resulted again in Bath winning two FY 1986 ships and Litton one. Contract savings from this new competitive approach in shipbuilding have been enormous. In the FY 1982 five-year defense plan submitted in March 1981, nine cruisers in FY 1984, 1985 and 1986 (of the 12 cruisers then proposed) were estimated to each cost more than an average of \$1.2 billion. After second sourcing in the FY 1987 budget, the estimated cost is now less than an average of \$890 million for each of these nine *Aegis* cruisers. This second source initiative has therefore, contributed to about \$3 billion in cost reductions for those nine ships.

*Amphibious Ships.* Our competitive acquisition strategy for the LHD program has achieved significant cost savings with favorable effects on force level attainment and overall savings. The FY 1986 President's Budget requested \$3,496.5 million for the FY 1986, 1987, and 1989 LHD ships. Our acquisition approach introduced shipbuilder competition into this previously sole source program and called for advance procurement up-front for the FY 1988 and 1989 ships to achieve economies of scale in ship equipment and material procurements. We also maintained rigid specification control to contain costs. This acquisition approach has resulted in significant cost savings with the recent contract award of the LHD 2 with options for the LHD 3 and LHD 4 in FY 1988 and 1989. The estimated end costs for these three ships is now \$2,506.3 million for a total savings of almost 1 billion dollars over the five-year shipbuilding plan.

The near term savings in FY 1986 and FY 1987 associated with the LHD 2 construction contract and advanced procurement for the LHD 3 and LHD 4 were \$338 million in FY 1986 and \$197 million in FY 1987 for a total of \$535 million. The timely award allowed us to apply these savings immediately during the FY 1987 appropriations deliberations in Congress.

*Build/Convert and Charter Programs.* All 13 Maritime Prepositioning Ships (MPS) and five T-5 tankers have been delivered. These ships provide a dramatic new capability to preposition the equipment and supplies to support three Marine amphibious brigades in areas of potential crisis around the world. The first six of the MPS ships were completed two months ahead of original schedule and under budget. The first of two U.S. Navy hospital ships converted from tankers was delivered in December. The primary mission of the 90,000-ton *Mercy* will be to provide full medical support to the Department of Defense's Rapid Deployment Task Force. Its secondary role will be to provide full Medical support to other government agencies involved in disaster relief. *Mercy* will be part of Military Sealift Command's (MSC) Strategic Sealift Force. *Mercy's* sister ship, *Comfort* (T-AH 20) is due to be delivered in San Diego in July 1987. Both *Mercy* and *Comfort* will be manned and operated by MSC civilian mariners and will also have a naval medical detachment on board. *Mercy* will deploy to the Philippines in early 1987 and call on various Philippine ports to provide humanitarian assistance.

*Aircraft Unit Costs.* Navy management initiatives continue to be extremely effective in controlling the price of combat aircraft. In 1981, the Navy implemented vigorous cost management programs which emphasized competition and required improved production efficiency by major contractors. These efforts helped reverse the rising trend in Navy aircraft prices experienced between 1950 and 1981. Since 1982, the overall downward trend in the price of Navy combat aircraft has resulted in real savings. In constant 1980 dollars, the average recurring unit price of FY 1986 combat aircraft, as a group, dropped 33 percent from the average price paid in FY 1982. In FY 1986 alone, this has resulted in savings relative to the President's budget of approximately 11.3 percent.

Consolidated Automatic Support System (CASS). A prime example of the benefits achieved through competition is the Navy's Consolidated Automated Support System (CASS). CASS, designed to be a total program directed towards electronic testing, will accommodate new-generation technology, overcome obsolescence problems of current automatic test equipment, be reconfigurable to fit changing operational workloads/ scenarios, and be totally self-supportable. We estimated that during the next 20 years, CASS would save the Navy more than 50 percent in development costs, substantially reduce automatic test equipment unit costs, and save several billion dollars in life cycle costs. As a result of the acquisition strategy, which focused on industry teaming, maintaining competition through all phases of the acquisition process, and a two-phased fixed-price full-scale engineering development (FSED) effort, the cost savings to the Navy are even greater than earlier anticipated. The FSED effort will cost 40 percent less than earlier estimated and the first three years of production show an additional 40 percent cost savings.

*Small and Disadvantaged Business Utilization.* Navy small business program performance, again, was outstanding during FY 1986. Contract awards to small businesses totaled \$7.42 billion, or 16.6 percent of our total awards. This small business share, which includes awards to women-owned and minority-owned concerns, is the highest ever achieved by the Navy. From FY 1982 to FY 1986, contract awards to small businesses increased by 63 percent in dollar value, representing a

continuing commitment to bring the benefits of competition and the small business industrial base to Navy acquisition programs.

*Navy Acquisition Reporting System.* This new system has been a dramatic success. It involves a new, simple, and straightforward acquisition reporting system for the top 60 programs. It requires quarterly reports on any changes of estimated cost for R&D or production or changes in schedule for each of those 60 programs and provides early warning of performance difficulties. While this system is primarily meant for senior Navy management, its effectiveness makes it a prime candidate for eventual replacement of the current Selective Acquisition Reporting System.

*Assignment Policy for Program Managers and Industrial Facilities Commands.* The minimum tour length for officers serving in these important acquisition billets has been lengthened to four years. Arrival and departure from these assignments now is planned to coincide with major Department of the Navy Systems Acquisition Review Council (DNSARC) milestones and/or program starts or completions.

*BOSS.* Fiscal year 1986 was the third successive year of unqualified success for Project BOSS (Buy Our Spares Smart), our initiative to correct problems in the procurement of spare parts. We set challenging goals and met them. Hard work and dedication at all levels of the Navy, from fleet sailor to industrial artisan and from procurement specialist to program manager, continues to yield high returns:

- Spare parts competition at our inventory control points has tripled from the 1983 rate of 13.5 percent to 41 percent in 1986.
- We review more than 100,000 parts annually to identify those that we can buy more economically through the use of competition or direct procurement from the actual manufacturer.
- Military and civilian personnel are increasing their use of our Pricing Hotline to tell buyers when a part appears overpriced. Our Price Fighter team helps the buyers determine how much such parts *should* cost. When we find parts with excessive prices we *demand* and get a refund.
- The combined result of these and hundreds of individual initiatives is cost avoidances totaling more than \$900 million since 1983 - \$381 million in FY 1986 alone. This is a nearly five-to-one return on our \$188 million investments over the three years.

The most fundamental change caused by Project BOSS is one of attitude. Competition and buying parts directly from the manufacturer are replacing the traditional reliance on sole source weapon system prime contractors for spares. Buyers and spare parts consumers, alike, challenge prices, which fail the common sense test. Industry believes us when we say we will not stand for unreasonable prices. Our message on spares pricing is clear and well understood. It is an integral part of our drive to apply common sense business practices to all aspects of Navy and Marine Corps acquisition management.

*Depot Level Repairable (DLR) Components.* In a major innovation in the management of maintenance funding, we have instituted a decentralization of the management of DLR components to the ship and the air station level. From 1981 to 1984, we tested financing the procurement and repair of non-aviation DLRs through the Navy Stock Fund. This means that fleet units must budget and pay for repairable components instead of receiving them “free” from a centrally financed fund. Stock fund financing of non-aviation repairables improved material availability by 46 percent, reduced casualty response time by 27 percent, and increased the number of components being returned to depot repair by 36 percent. We then began testing financing the procurement and repair of aviation DLRs through the Stock Fund in April 1985. Although still early, we have already recorded an 8 percent improvement in aviation repairable material availability, a 3 percent increase in components being returned for depot repair, and a 27 percent reduction in back-ordered requirements. We are also seeing more components repaired at the lowest authorized (and therefore least costly) level, saving the taxpayers’ money and returning the assets to the fleet more quickly. The end result of these initiatives is the establishment of a buyer/seller relationship between the stock fund and its customers, who in turn are being held accountable for their expenditures. This results in a much more frugal approach to ordering and repairing these critical and valuable parts.

Our management and acquisition reforms are not intended to affect the system for a few brief years only and then be buried under the weight of bureaucratic inertia and free-spending reaction. They are being *institutionalized* into the very fabric of Navy life by such measures as our acquisition policy instruction which codifies our acquisition reforms and ensures their institutionalization at all levels of the Department of the Navy.