

...MOVE FORWARD WITH THE WARFIGHTING CONCEPTS...

Chapter 2

BRIDGING VISION AND PROGRAM DECISIONS



Sea Power 21 began the process of translating theory into practice for a wide range of advanced naval concepts and technologies. This process will ultimately increase the warfighting effectiveness of the joint force. We continue to move forward with the warfighting concepts of Sea Strike, Sea Shield, Sea Basing, and FORCENet to transform the way we fight. To do so requires constant review and support and also means that each of our three priorities must be rigorously examined to guide our key decisions. Our priorities are:

- > Sustain Combat Readiness... with the right combat capabilities—access, speed, agility, adaptability, persistence, awareness and lethality—at the right cost.
- > Build a Fleet for the Future... balanced, rotational, forward-deployed and surge-capable... of the proper size and mix of capabilities to empower our enduring and emerging partners, deter our adversaries and defeat those who will not be deterred.
- > Develop 21st Century Leaders... through a transformed manpower, personnel, training, and education enterprise that better competes for the talent our country produces and creates the processes, action, and initiatives which allow for the full growth and development of every man and woman serving our Navy. These processes, actions, and initiatives are combined into a single guiding philosophy in the Strategy for our People.

The Chief of Naval Operations' annual Guidance and these priorities provide the links between vision and strategy in a broad sense, and more specifically between the Independent Capability Analysis and Assessment and the CNO's Investment Strategy Options (ISO). Associated with these is the Naval Capabilities Development Process (NCDP), which places decisions within a capability-focused context.

To address our emerging naval operating concepts and the technologies, systems, and future platforms that will be used in the 21st Century's broader range of roles, missions, and tasks, we rely on the work of the Navy Warfare Development Command (NWDC). NWDC reports to the Commander, Fleet Forces Command, in Norfolk, Virginia. In addition, the Navy's Fleet Battle Experiments (FBEs), which began in 1997, have proven to be excellent vehicles for innovation and change and will continue to be a vital element in our Sea Trial initiatives, as articulated in *Sea Power 21*.

FLEET BATTLE EXPERIMENTS

The Navy's FBEs examine innovative warfighting concepts and emerging technologies and systems. They are true operational experiments in which failure is an option; there is important value in learning concepts that do not work. The service has conducted 11 FBEs through 2005.

Fleet Battle Experiment Alpha (FBE-A), conducted March 1997, used a special, sea-based Marine Air-Ground Task Force (MAGTF) that employed advanced technology and conducted dispersed operations on a distributed, non-contiguous battlefield.

Fleet Battle Experiment Bravo (FBE-B), conducted September 1997, focused on the joint fires coordination process known as "Ring of Fire" and the Joint Task Force targeting process for Global Positioning System (GPS)-guided munitions, including a supporting command-and-control (C2) architecture known as "Silent Fury."

Fleet Battle Experiment Charlie (FBE-C) conducted April and May 1998, during the USS *Dwight D. Eisenhower* (CVN 69) CVBG Joint Task Force Exercise, and addressed the Area Air Defense Commander and "Ring of Fire" concepts, in addition to the development of a Single Integrated Air Picture and air-missile engagements across a large area of operations.

Fleet Battle Experiment Delta (FBE-D), conducted October and November 1998 in conjunction with Foal Eagle '98, an annual exercise sponsored by Combined Forces Command Korea, focused on four warfighting priorities: joint counter fire, joint counter special operations, joint theater and air missile defense, and amphibious operations.

NAVY PROGRAM ASSESSMENT AND PLANNING

Navy program assessment and planning documents and processes are developed in conjunction with the Defense Secretary's "Strategic Planning Guidance" and, internal to the Department of the Navy, with the Secretary of the Navy's annual "Planning Guidance." Such top-level guidance focuses on required capabilities instead of specific threat assessments, using a capabilities-based planning process to ensure that readiness, operational availability, and warfighting requirements are satisfied in the most efficient and effective manner possible to meet both persistent and emerging strategic challenges, including:

- > Traditional threats
- > Irregular threats
- > Disruptive threats
- > Catastrophic threats

To further expedite the capabilities-based planning process, the Deputy Chief of Naval Operations (DCNO) for Information, Plans, and Strategy works with the Marine Corps to develop a prioritized list of warfighting capabilities based on *Sea Power 21*. This list outlines the four Naval Capability Pillars (NCPs) of *Sea Power 21* (Sea Strike, Sea Shield, Sea Basing, and FORCEnet) into more detailed Mission Capability Packages (MCPs), which are further refined into listings of specific enabling capabilities developed collaboratively by the Navy and Marine Corps.

A panel of flag and general officers, representing the various mission and warfare areas, then subjectively evaluates the list of capabilities. This panel—chosen for recent operational experience—employs an iterative process to compare capabilities and determine rank-order priority to the warfighter, based on expected future mission requirements. The result is a list of prioritized capabilities tied directly to the NCPs and providing the Naval Capabilities Development Process (NCDP) with more input for determining the types and numbers of platforms. This input complements the adequacy assessments conducted as part of the NCDP by the Director, Warfare Integration.

PLANNING AND PROGRAMMING

During the past five years, innovation and transformation have characterized the Navy's program-planning process. In 2003, the Department of Defense's Management Initiative Decision (MID) 913 modified DoD's former Planning, Programming, and Budgeting System (PPBS) to a revised process, known as Planning, Programming, Budgeting, and Execution (PPBE). PPBE is now the Department of Defense's process for strategic planning, resource allocation, program integration and budget formulation. In the PPBE process, the Secretary of Defense establishes policies, strategy, and prioritized goals for the Department, which are

subsequently used to guide resource allocation decisions that balance the guidance with fiscal constraints. The PPBE process directly links strategy to programmatic decisions through analysis of warfare capabilities, while adding emphasis to program execution. The Prioritized *Sea Power 21* Warfighting Capabilities List provides a framework for the Navy to establish capability roadmaps developed by the NCDP. This new planning process is helping ensure program synchronization, balance, and integration across all naval warfare areas within fiscal constraints.

The result of this process is the Navy's input to the Defense Department's Program Objective Memorandum (POM) and, ultimately, the President's Budget submission to Congress.

INDEPENDENT CAPABILITY ANALYSIS AND ASSESSMENT

A primary objective of the planning process is to develop a thorough understanding of how naval forces contribute to the nation's joint warfighting capabilities. In 1992, "...From the Sea" outlined four key operational capabilities: command, control, and surveillance; battle space dominance; power projection; and force sustainment. These capabilities are required to execute operations in littorals. Today, the Navy's strategic planning guidance focuses on the overarching capability architectures that can enable the projection of offensive and defensive naval power: Sea Strike, Sea Shield, and Sea Basing. This capability structure is linked together by a seamless FORCEnet and the missions they represent are carried out by Carrier Strike Groups, Expeditionary Strike Groups, Expeditionary Strike Forces, and other naval forces under the Fleet Response Plan, by which the Navy executes U.S. national security policy. Within this conceptual architecture, the Navy's program planning process by the DCNO for Warfare Requirements, Resources, and Assessments relies on broad-based analyses that capture the complexity of naval warfare requirements, while balancing them within available resources.

Starting from the capability objectives, current and future technologies, systems and platforms are assessed against their desired effectiveness in the joint-service environment; a process that addresses the balance and warfighting capability of the planned force structure and support areas. The analysis and review of the "health" of the individual warfare and warfare support capabilities is an ongoing, iterative process linked to the development of the Navy Program Objective Memorandum (POM) and Program Reviews (PRs).

FLEET BATTLE EXPERIMENTS

Fleet Battle Experiment Echo (FBE-E), conducted March 1999, employed both real and simulated forces-and future concepts for command, coordination, communications, fires, and sensors-to address innovative operational concepts for defeating asymmetric threats, precision engagement, network-centric submarine warfare, information superiority, and casualty management.

Fleet Battle Experiment Foxtrot (FBE-F), a joint and combined exercise in the Arabian Gulf conducted November and December 1999, examined the concept of assured joint maritime access in protecting air and sea lines of communication.

Fleet Battle Experiment Golf (FBE-G), conducted April 2000, assessed emerging technologies in a network-centric, joint and combined forces environment to support theater ballistic missile defense and time-critical targeting in the Mediterranean theater.

FLEET BATTLE EXPERIMENTS

Fleet Battle Experiment Hotel (FBE-H), conducted August and September 2000, focused on the application of network-centric operations in gaining and sustaining access in support of follow-on joint operations.

Fleet Battle Experiment India (FBE-I), conducted in the San Diego operational area June 2002, had the principal goal of operationalizing net-centric warfare. FBE-I tested a netted C4ISR architecture that provided participating joint forces with wide-area connectivity, enhanced bandwidth, and “reach-back” for enhanced situational awareness and decision-making.

Fleet Battle Experiment Juliet (FBE-J), conducted July and August 2002, developed and refined command and control processes for future joint maritime forces. This included defining in detail the functions and planning process for the Joint Forces Maritime Component Commander, improving ship-based command and control, and enhancing the integration of networks and databases serving forward sea-based forces, as well as those in the rear.

Fleet Battle Experiment Kilo (FBE-K), a joint warfighting exercise including both live field forces and computer simulation, was conducted April and May 2003 in various locations around the United States and the 7th Fleet Pacific area of operations. The experiment, conducted concurrently with Exercise Tandem Thrust 2003, developed and refined processes supporting joint command and control from the sea, which will be used in future operations. There were a total of 11 transformational initiatives within FBE-K, all designed to combine experimental tactics, techniques, and procedures (TTP) with new technologies or existing technologies used innovatively.

WARFARE CAPABILITY ANALYSIS

- > Sea Strike
- > Sea Shield
- > Sea Basing
- > FORCENet

The number of ships, submarines, and aircraft in the Fleet is the most visible manifestation of the Navy’s operational capabilities. The Independent Capability Analysis and Assessment assists Navy leadership in matching available resources with desired capabilities in the near-, mid-, and far-terms. In addition to the numbers and types of ships, submarines, surface and amphibious warships, mine countermeasures (MCM) vessels, aircraft, and special-purpose platforms, the Independent Capability Analysis and Assessment considers force posture, lifecycle support, presence, and engagement requirements of the regional combatant commanders. Evolving threats, desired capabilities, developing technologies, doctrinal and operational concepts, and fiscal realities all play roles in shaping resource-allocation decisions leading to deployed naval forces. Force structure analysis examines the resources required to recapitalize or modernize the force, develops alternative force structure paths and subsequent consequences of the tradeoffs, and frames relevant issues via integrated decision timelines.

Our capabilities-based approach selects and prioritizes the proper capabilities to ensure strategic objectives can be satisfied in diverse future crises and conflicts, while simultaneously focusing on meeting current requirements. Driven by warfighting and combat needs, which include assuring our allies while dissuading and deterring our enemies, these capabilities must also support Joint Force Commanders and work with allied and coalition forces. The capabilities must be fiscally affordable and provide a continuum of peace-time presence, crisis-response, and combat capabilities to support naval and regional combatant commanders and national commitments. The force planning approach articulated in the Defense Strategy guides decisions on the overall shape, size, and global posture of U.S. military forces. The U.S. Navy will organize, train, maintain, and equip combat-ready naval forces capable of...

- > Winning the global war on terror and any other armed conflict;
- > Deterring aggression by would-be foes;
- > Preserving freedom of the seas;
- > Promoting peace and security.

SEA STRIKE

Sea Strike Independent Capability Analysis and Assessment includes naval fires, strategic deterrence, and amphibious warfare (the latter more appropriately characterized today as Expeditionary Maneuver Warfare). When naval fires are required, the Joint Task Force Commander has a variety of naval weapons to choose from, including accurate standoff munitions delivered from aircraft, gun-fired precision-guided munitions, and sophisticated cruise missiles launched from surface warships and submarines. The essence of this capability is aircraft carriers, long-range attack aircraft, surface warships, and submarines capable of launching a variety of responsive, accurate, long-range precision weapons and providing robust Naval Fire Support (NFS). In addition, the USS *Ohio*-class ballistic missile submarines, armed with the D5 missile system, provide the nation with the most survivable leg of the nuclear deterrence triad, thus making it a key element of the Navy's overall Sea Strike capabilities.

Expeditionary Maneuver Warfare includes the ability to mass overwhelming naval, joint, and allied military power, and deliver it ashore to influence, deter, contain, or defeat an aggressor. Naval expeditionary forces provide the Joint Task Force Commander with the ability to conduct military operations in an area of control, extending from the open ocean to the shore, and to those inland areas that can be attacked, supported, and defended directly from the sea. It is important to note that "littoral" operations are not exclusively "brown water" or "riverine." Today, littoral operations can commence hundreds of miles from an adversary's coast and continue into an adversary's internal waters, as was clear in Operations Enduring Freedom and Iraqi Freedom.

The Navy established the Naval Expeditionary Combat Command in October 2005 to align and bolster Navy's land-force capabilities under one command. This new command will include the Naval Construction Force Command, or Seabees, Naval Expeditionary Logistics Support Force, Maritime Force Protection Command, and the Master at Arms force. Navy and Marine Corps expeditionary forces—acting independently, or jointly with the Army, Air Force, and Coast Guard, or combined with allied forces—provide the backbone of America's ability to quickly and affectively project credible military power throughout the world.

FLEET EXPERIMENTATION: SEA TRIAL

With the advent of Sea Trial in 2003, the Fleet assumed responsibility for leading the Navy's efforts to identify new concepts and technologies that could be transitioned rapidly into new warfighting capabilities. Through a rigorous process of experimentation, analysis, and assessment, Sea Trial has begun to deliver quantifiable enhancements in all four *Sea Power 21* pillars.

SSGN CONOPS experimentation (Silent Hammer October 2004). The focus of this experiment was to explore the SSGN's ability to command, control, and support a variety of forces and operations. The experiment highlighted the utility of embarked Command-and-Control (C2) in a small or covert platform. While the results were derived from experimentation with the SSGN, they would be equally germane to the Littoral Combat Ship or Joint High-Speed Vessel. A number of promising technologies were recommended for accelerated acquisition.

Trident Warrior series (initiated in 2004). This series of annual events is focused on providing an increase in near-term FORCEnet capability to the Fleet, and looks at a number of possible technology solutions within a wide array of focus areas. Each of the experiments to date has produced recommendations to accelerate the acquisition of, or the development of, a number of systems. They have also labeled as promising some immature technologies that require further experimentation.

FLEET EXPERIMENTATION: SEA TRIAL

Biometrics Experimentation (September 2004 - June 2005). The goal of these efforts was to test the concept of identifying potential terrorists during maritime vessel boarding operations by gathering biometric identification data and subsequently relaying that information to government agencies with access to intelligence and criminal databases. Experiment initiatives focused on the speed and modalities of information exchange, the associated communications architecture, the requisite inter-agency coordination, and equipment reliability. A suitable communication architecture was identified, the interagency cooperation proved effective, and the data flow was adequate once wireless capability was incorporated in later events. As a result of these efforts, this capability is being acquired and incorporated into the Fleet.

SEA SHIELD

The Sea Shield Independent Capability Analysis and Assessment focuses on naval warfighting capabilities required to project defensive power from the sea. It assesses and analyzes emerging technologies designed to extend naval defensive firepower far beyond the Carrier Strike Group to dominate the sea and littoral battle space, project defense deep overland against cruise and ballistic missile threats, and provide the United States with a sea-based theater and strategic defense. Sea Shield integrates the alignment of the Joint Full-Dimensional Protection and Strategic Deterrence Joint Warfare Capability Assessments with the Sea Shield capabilities inherent in *Sea Power 21*. In addition, Sea Shield enables the extension of homeland security to the fullest extent possible by including: intelligence, surveillance, and reconnaissance (ISR) assets; surface ships, maritime patrol aircraft, guided missile submarines (SSGNs), attack submarines (SSNs) and ballistic missile submarines (SSBNs); and, a mix of manned and unmanned systems operating on, above, and below the sea's surface.

Persistent supremacy of the sea and littoral battlespace continues to be at the heart of U.S. national strategy. Forward-deployed naval forces will assure access for the joint force through surface warfare and anti-submarine warfare (ASW) superiority, air supremacy, Mine Countermeasures (MCM), and the employment of naval mines in offensive and defensive operations. Next-generation naval mines, or what some have described as Mobile Autonomous Undersea Weapons (MAUWs), linked to distributed and dispersed undersea FORCENet sensors could provide critical defense of the Sea Base, in conjunction with more traditional concepts of barrier and area-denial operations.

Surface warfare superiority involves those actions necessary to neutralize an adversary's efforts to employ his surface warships against friendly forces. Anti-submarine warfare superiority includes capabilities that decisively neutralize or defeat an adversary's use of his submarines, thereby assuring access, permitting the use of the sea as a maneuver space, and allowing sea-based operations. Air superiority provides naval forces the capability of assured access to theater airspace by U.S. and coalition forces. Defensive Counter-Air (DCA) operations focus on maintaining air superiority with the capability to detect, identify, intercept, and destroy enemy air forces with aircraft or air-warfare-capable surface warships before they attack or penetrate the friendly air environment. Sea mining and offensive/defensive MCM include those capabilities used to employ mines against an adversary's forces or to neutralize an enemy's efforts to use mines against U.S. or allied forces. Acting either independently or as a joint force component, naval forces provide capabilities critical to ensuring freedom of maneuver and power projection from the sea.

SEA BASING

The Sea Basing Independent Capability Analysis and Assessment focuses on strategic sealift and airlift, the Combat Logistics Force (CLF), transportation, and ordnance inventory. It includes the capability to move items both intra- and inter-theater. It also includes assessment of the overall health of the Navy ordnance inventory against combat, theater and homeland security, and training requirements.

The specific naval surface and air logistics functions, which enable the movement, maneuver and support of U.S. combat forces and other friendly forces afloat and ashore, remain areas of emphasis and are keys to successful seabasing capabilities. In combat operations in the Arabian Gulf—from Desert Shield/Desert Storm in 1990 to Operation Iraqi Freedom in 2005—sealift transported 95 percent of all supplies and equipment to and from the area of operations. Limited access during Operation Enduring Freedom in Afghanistan in 2001-2002 was overcome by operations based and sustained from the sea. The Navy's strategic sealift fleet includes prepositioned, surge, and other support ships. Prepositioned ships include the Maritime Prepositioning Force (supporting the Marine Corps), Combat Prepositioning Force (supporting the Army), and Logistics Prepositioning Ships (supporting the Navy, Air Force, and Defense Logistics Agency). The surge fleet consists of Fast Sealift Ships (FSS), Large Medium-Speed Roll-On Roll-Off (LMSR) ships, and ships of the Maritime Administration's Ready Reserve Force (RRF). Other assets include hospital ships and aviation maintenance ships as well as commercial sealift assets if contracted to support specific mission requirements.

Prepositioned ships and surge sealift vessels directly support Marine Corps Assault Echelon and Assault Follow-On Echelon operations, as well as Naval Construction Force (Seabee) units. Sealift also carries Navy sustainment supplies and ammunition from storage sites to forward logistics bases, where the Navy's CLF shuttle ships pick up and deliver this material to combatant forces at sea. Likewise, sealift is vital to Army and Air Force regional operations, as the nation's land-based armed services are almost totally dependent upon the "steel bridge" of sealift ships to deliver everything a modern fighting force requires to accomplish its missions.

Sealift and the protection of in-transit ships by naval forces allow joint and allied forces to deploy and sustain operations, without dependence on shore-side infrastructure in forward areas. In the near future, sea-based assets will increasingly support emerging concepts for operational maneuver and ship-to-objective maneuver—the essence of Expeditionary Maneuver Warfare—and provide a full-spectrum of logistics, command and control, communications, and offensive and defensive fires for Joint Force Commanders while reducing the footprint ashore.

FLEET EXPERIMENTATION: SEA TRIAL

Joint Force Maritime Component Commander (JFMCC)/Distributed Staff Experimentation (MARCOLE Series 2005). The series of experiments focused on the organization, processes, and technologies required to support a Joint Force Maritime Component Commander staff in a variety of operating environments and C4ISR architectures. MARCOLE #1 focused on the processes and utilized existing and near-term collaborative information tools. It identified limitations of current processes and tools, highlighted required revisions to the current draft TACMEMO, and spelled out items to be investigated in future experiments. MARCOLE #2 added the challenge of operating in a coalition environment, with C2F acting as a Combined Force Maritime Component Commander (CFMCC). MARCOLE #2 leveraged the staff's growing familiarity with the prescribed tools to concentrate more on C2 processes. MARCOLE #3 was a discovery event conducted in conjunction with Trident Warrior 2005, and focused on developing and refining staff standard operating procedures (SOPs) for the fires and targeting team within the Future Operations Cell. Applicable portions of the SOPs developed in MARCOLE #3 will be tested during JEFX-06.

Theater ASW Wargame (Thundering Dolphin 5 May 2005). The purpose of the wargame was to examine the Theater ASW Commander Concept of Operations (CONOPS) in a taxing operational scenario. As a result of this wargame, the Fleet captured salient lessons that drove corresponding changes to affected operational plans.

FLEET EXPERIMENTATION: SEA TRIAL

Distributed Mobile ASW Sensors (DMAS) experimentation (DMAS LOE July 2005). This experiment, built upon earlier initiatives, tested the concept of using low-cost, remote, mobile, autonomous sensors capable of collaborative actions to detect and track diesel-electric submarines. The experiment used unmanned surface vehicles equipped with sonobuoys, remotely controlled from a helicopter. Analysis revealed the concept to be promising, and follow-on experimentation will be conducted after required system modifications are completed.

Tactical Unmanned Aerial Vehicle (UAV) experimentation (Scan Eagle deployment with Expeditionary Strike Group (ESG) One, 2005-2006). ESG-1 is using the Scan Eagle tactical UAV in an operational environment. Upon ESG-1's return from deployment, the Sea Trial Executive Steering Group will assess the utility of a small, tactical UAV in an array of operational scenarios.

Maritime Dynamic Targeting/Digital Time Sensitive Targeting experimentation. This series of wargames, simulation exercises, and exercise spirals are planned to culminate in JEFX-06 in April 2006. This series will examine both the JFMCC staff's reaction to pop-up and time critical targets, as well as the flow of targeting information from sensor to decision maker to trigger-puller.

FORCENet

The FORCENet Independent Capability Analysis and Assessment team assesses capabilities underpinning network-centric warfare, including communications and data networks; the common operational and tactical picture; and ISR concepts, systems and programs. Many of these are key milestones on the Naval Transformational Roadmap. FORCENet capabilities are key to the execution of effects-based operations, enabling the commander to achieve "Full Spectrum Dominance" over an enemy, exploit his weaknesses, and counter his strengths during rapid, decisive operations.

WARFARE SUPPORT ANALYSIS

- > Infrastructure
- > Manpower and Personnel
- > Readiness
- > Training and Education

INFRASTRUCTURE

While it seldom receives high visibility, infrastructure which includes bases, facilities, training areas, ranges, laboratories, buildings, piers, hospitals, and the like comprises the essential framework for naval force readiness at home and abroad. Although it is not essential that the Navy have access to overseas facilities to carry out its worldwide missions, having facilities at key forward locations provides logistics support benefits and facilitates rapid response to threats and contingencies. Unlike other services, however, the Navy, has the ability to bring its immediate logistics sustainment capabilities to forward operating areas. Beyond the first 30 days of conflict, advanced logistics bases provide fuel, ammunition, and maintenance sustainment support. Ashore infrastructure includes land, buildings, structures, and utilities within ports and air stations, as well as repair and communication centers, storage and training areas, medical centers, and community support centers. This infrastructure is found at homeports as well as at forward locations.

The Navy Ashore Vision (NAV) 2030 is the Navy's roadmap for transforming the Navy shore infrastructure over the next 25 years. During the 1990s, our shore-side inventory did not downsize in proportion to the operating forces. Current facility sustainment and recapitalization rates are insufficient to maintain this infrastructure, much of which is more than 50 years old, including numerous historical buildings maintained for heritage-preservation purposes. The Navy must shift its focus ashore from the current *status quo* to reshaping regional footprints and advanced logistics bases to ensure affordable, quality support for future naval operations.

Critical to sustaining readiness is our ability to train as we fight, through continued access to ranges, exercise areas and operating

areas (OPAREAs). Our military training ranges are national assets that allow our forces to train in a controlled, realistic and safe environment. But our ranges and OPAREAs are increasingly surrounded by urban development and subject to increasing environmental challenges that have begun to affect the Navy's ability to execute realistic training. The Navy is therefore implementing a fully integrated, systematic strategy at our training ranges and our exercise and operating areas, which balances the dual goals of national security and environmental stewardship.

Key to this training range containment effort is the Navy's commitment to the Tactical Training Theater Assessment Planning (TAP) initiative supported by the "At-Sea Policy" and the Navy doctrine publication "Environmental Protection" (NWP 4-11). With funding that started in FY 2004, the TAP initiative is providing a sound environmental range investment strategy for sustainable ranges/OPAREAs. This overarching sustainability program will seize the environmental high ground, ensuring effective stewardship of the Navy's ranges/OPAREAs and allow our forces to conduct realistic training in an environmentally-sound manner. The Navy will continue to remain a good steward of the environment, while preserving the flexibility necessary for the Navy and Marine Corps to train and exercise ashore and at sea.

Infrastructure also includes shore capabilities necessary to support operational units, such as providing waterfront and air operations; ranges; shore force protection; community support, including housing, medical, child-care, and Morale, Welfare and Recreation (MWR) services; and readiness support, including shipyards and Naval Air Depots (NADEPs). Our challenge is to find ways to support an infrastructure that uses a smaller percentage of Navy resources, while maintaining acceptable Quality of Service for our Sailors and their families, and force-wide readiness. An additional round of Base-Realignment and Closure recommendations continued in 2005, and the Navy is ready to shed excess and over-age infrastructure as one means of enhancing both operational readiness and our Sailors' Quality of Service.

The Navy's logistics transformation vision is captured in our High-Yield Logistics Transformation strategy. This strategy seeks responsive, timely, and high-quality support to forward-stationed forces throughout the world, while reducing the Navy's total ownership costs. The focus areas of this strategy are: optimization through best-value acquisitions; customer support and communication; process innovation; and, workforce productivity. The strategy has three overall objectives. The first is to ensure extraordinary support to the warfighter. The second is to strategically source infrastructure, maintenance, and service functions, as well as our supply inventory, to maximize operational effectiveness and reduce business inefficiency. The third and final objective is to optimize resource effectiveness and reduce redundancy within our remaining infrastructure.





MANPOWER AND PERSONNEL

The Navy's military and federal civilian personnel are the most essential element of our warfighting capability and are complemented by our partners in industry and academia. Our capacity to provide sufficient operational forces and shore support, which will sustain a force structure with credible and responsive naval combat power, is indispensable to meeting the missions of the Navy. Among other things, we must address critical naval capabilities to support national strategic requirements for homeland security and defense, persistent presence with a purpose in forward areas, deterrence, prompt and assured crisis response, and warfighting. The personnel system must provide for the acquisition, development, retention, and management of the civilian and military workforce, including programs for recruiting, quality of life, community management, and distribution of personnel.

Finally, we must take human factors into account in the design, engineering, integration, and operation of our weapon systems and platforms. This focus on human-factors engineering and human-systems integration has implications for recruiting, training, compensation, detailing, and development of our Sailors' careers. The fundamental principle that will continue to shape our approach is "Mission First... Sailors Always." Moreover, our *Sea Power 21* vision demands a highly educated, experienced, and flexible force capable of using our technical advantage to successfully defeat our enemies. The critical bridge to the future is the Sea Warrior initiative, which seeks to maximize the growth, development, and career management through transformed manpower processes. The Navy has integrated Manpower, Personnel, Training, and Education (MPT&E) into a single enterprise, creating a single integrated business process to deliver optimally trained and motivated manpower to the Fleet. Sea Warrior reinforces the Navy's commitment to the growth and development of its most valuable resource—people—and ensures mission success by delivering the right Sailors, at the right time, and to the right places.

READINESS

The 21st Century's strategic environment requires that we increase the operational availability of our forces. We have to get to the fight faster to seize and retain the initiative. Every part of the Fleet will be organized around a "surge" operational concept, including our training, maintenance, and logistics processes. We are adapting our warfare doctrine, supporting procedures, training, and schedules to take best advantage of the Fleet Response Plan and other emerging constructs. Included in the readiness area are Navy operating funds, force operations, flying-hour/steaming-day programs, all levels of maintenance, spares, ordnance and fuel, and safety and survivability.

The Sea Enterprise initiative is the resource enabler for *Sea Power 21*. It provides a vehicle for harvesting resources for recapitalization. We are changing the way the Navy does business by finding

innovative and less costly methods, while supporting the critical training, supply, and maintenance programs essential to readiness. By taking prudent risks and attacking costs, we will fund essential requirements and optimize the operational impact of today's Navy, while we create a future force that can rapidly field new technology and surge ahead to meet all challenges.

TRAINING AND EDUCATION

Training and education capabilities as part of Sea Warrior are provided in four major functional categories: accessions, skills, professional development, and unit/force training. Programs include the staff, facilities, equipment, and services required for training. The objective of naval training and education programs is to efficiently and effectively deliver high-quality training and education using Navy Knowledge Online, which provides a career-long continuum supporting Navy operational readiness and personal excellence.

NAVAL CAPABILITIES DEVELOPMENT PROCESS

The DCNO for Warfighting and Resource Requirements (N8) is the executive agent and lead for implementing the Naval Capability Development Process (NCDP). Through the NCDP, the Navy has sharpened its focus on capability-driven warfighting requirements to enhance the ability to communicate a long-term warfighting vision that shapes the capabilities needed from research and development, procurement, force structure, and modernization to counter threats and achieve mission success. The NCDP addresses requirements both within and beyond the current Future Years Defense Plan (FYDP) programming horizon. The process looks to establish an affordable long-range Integrated Capability Plan (ICP) and a Warfighting Sponsor's Program Proposal (SPP) that will meet the operational needs of the fleet and regional combatant commanders. Our goal is to develop integrated, executable, and realistic sponsors' resource allocation proposals that deliver the greatest degree of balanced warfighting capability within available resources. If resources are insufficient to deliver warfighting wholeness, the process will quantify the remaining risk and determine the unfunded priorities to mitigate it.

To support the NCDP process, the Navy established Warfare Sponsors within OPNAV who are responsible for developing Joint Capability Area requirements within the four naval capability pillars—Sea Strike, Sea Shield, Sea Basing, and FORCEnet—that cross and link platform-specific communities (e.g., Naval Aviation, Surface Warfare, Submarine Warfare) and coordinate these with resource sponsors, fleet commanders, and the acquisition community. Each of the naval capability pillars is supported by multiple Joint Capability Areas, which serve as the primary mechanism to identify the current baselines of capabilities and to forecast capability evolution, thus contributing to comprehensive planning and programming for integrated systems capabilities identified in Navy





and joint-service strategies. Critical issues to be addressed include redundancy among systems, joint interdependencies, interoperability, cost and performance, and program schedule.

The Integrated Capability Plan provides the priorities for the Navy's warfare investment strategy for programming operational capabilities. The Sponsor's Program Proposal, which translates this strategy into programming, is approved by N8 and presented to the CNO as a consolidated program proposal that integrates all warfare areas within a specific Program Review or Program Objective Memorandum approved by CNO.

NAVY PROGRAM IMPLEMENTATION

Even as the Navy continues its transformation to the capabilities and forces needed for the future, we must balance the costs of modernization and recapitalization for future readiness with the compelling need to maintain current readiness for missions and tasks that may arise at any time. This requires balancing recapitalization and modernization of aircraft, ships, submarines, and infrastructure with funding for today's operating forces, while providing a high Sailor-centric Quality of Service for our entire Navy family.

Based on previous experience, we know we must put in place the resources to attract, train, and retain the people we need for the future. That said, we must also ensure that our highly skilled and dedicated Sailors have the necessary tools for the complex and demanding jobs that lie ahead. By finding and keeping talents that reflect the diversity of our Sailors, investing in their education, and providing a satisfying work-life balance, the Navy commits to attracting and retaining Sailors that compete to serve and strive to stay.

Balancing priorities and the requisite resource allocation decisions comprise the key portion of the Navy's PPBE process. The result is a program that allocates resources to meet the Navy's highest priorities at some level of risk, funding critical needs refunded at the expense of lower-priority programs. These difficult decisions are based on intensive analysis, informed reviews, and critical projections constrained by the reality of limited resources.

QUALITY OF SERVICE

Quality of Service is a balanced combination of Quality of Life and Quality of Work. Ensuring a high Quality of Service for our Sailors, their families, and our civilian workforce is an essential element of the Navy's ability to attract and keep the best and brightest people, and is a top priority in carrying out our mission. We are fostering innovation and support technologies that will enable our people to do their jobs more efficiently and effectively. The Navy's *Strategy for our People* will address the Quality of Service for our people by engaging the total force in that effort and enabling a positive work-life balance.



QUALITY OF LIFE

Quality of Life programs are a vital part of our people's Quality of Service and are essential to our overall readiness and retention. Our wide variety of programs include those dealing with compensation, safety and health, medical care, (military accommodations both shore- and sea-based), recreation, and Personnel Tempo (PERSTEMPO) limits. They also encompass legal, chaplain, community, and family services that offer our Navy families deployment support, employment assistance, and, through publications like COMPASS, assist spouses in adjusting to the complexity of Navy life. Our Quality of Life programs are rooted in the awareness that although we recruit Sailors, we retain families.

QUALITY OF WORK

Our Sailors have chosen a lifestyle of service to their country. Recognizing this, we know we must offer them an excellent Quality of Work standard—meaningful work, the professional and personal tools to succeed, sufficient supplies, modern facilities, and a physical working environment that is not only important to our mission, but is also competitive with those offered by careers in private industry. Their work must be centered on honing their professional skills and enhancing mission effectiveness. A meaningful and satisfying Quality of Work standard is critical if we are to attract, develop, and retain a talented cadre of professionals. Our efforts this year will focus on development of the *Strategy for our People*, which includes the pursuit of new technologies and competitive personnel policies to streamline combat and non-combat personnel positions. We will also continue our focus on improving the integration of active and Reserve missions, and reducing our total manpower structure. We will further root out “make work” tasks and do away with unfulfilling work. We will enhance our diversity framework, and change policies and structures that inhibit the growth and development of our people.

Quality of Life and Quality of Work are indispensable elements of the Navy's ability to attract and retain the talented people we need for the 21st Century. Both our current and future force readiness depend on them. Job satisfaction, ongoing professional growth, high-quality training and education, personal recognition, confidence in our promises to them and their families—all are integral to the Quality of Service we offer our people. Our Sailors must be confident that the tasks they take on will make a difference that is worth the personal sacrifices they make to serve their nation.

FORCE READINESS

Numbers will always matter, because quantity has a quality all its own. However, in the sensor-rich net-centric construct of 21st Century operations, the numbers of platforms are no longer the sole meaningful measure of combat capability. The capabilities posture of the Fleet is what is most important. Indeed, our Navy can deliver significantly more combat power, more quickly and





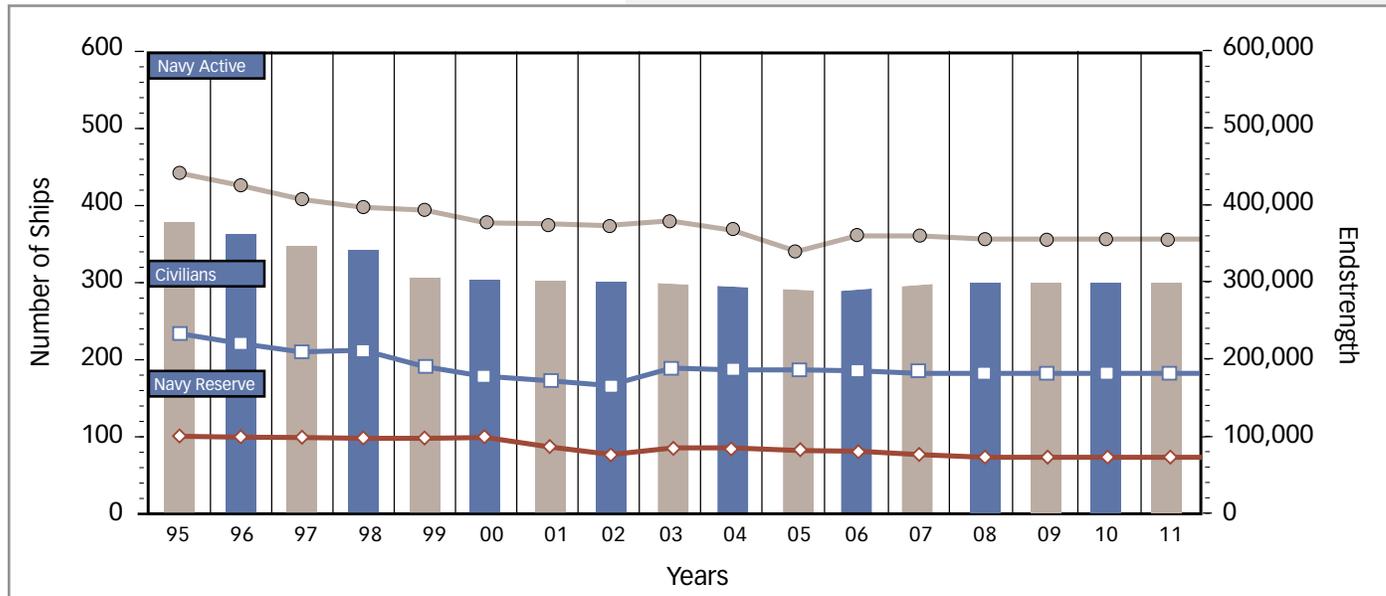
accurately today than we could 20 years ago—when we had more ships and more people.

It has become evident that the current low rate of ship construction will constrain the future size of the Fleet. Therefore, the Navy must invest in the right capabilities for the ships we are procuring in the future, and it must properly posture its forces to provide the speed and agility for seizing and retaining the initiative in any fight. We are building a Fleet for the future. The application of transformational new technologies, coupled with new manning concepts, including Sea Swap crew rotation and multi-crewing, and innovative distance support concepts will enable us to attain the desired future combat capability. Since the changing global environment indicates that predictability is a liability, the Navy is introducing greater flexibility into its deployment patterns and formations. Variations on the traditional six-month deployments of Navy ships will decrease the force's predictability. These variations are being facilitated by use of longer-term deployments with Sea Swap crew rotation and forward home-porting of additional ships.

Nevertheless, our Carrier Strike Groups, Expeditionary Strike Groups, and Surface Action Groups must be properly trained and equipped whenever they deploy. Even when combat or other contingencies do not occur, shortages can greatly compound the work required of our Sailors. Older equipment—kept operating beyond its intended service life—and shortages force the “cross decking” of equipment, spares, supplies, and ordnance—and sometimes people, as well.

The ultimate requirement for Navy shipbuilding will be shaped by the potential of emerging technologies, the amount of forward basing, and innovative manning concepts such as Sea Swap. We are now building entirely new types of ships, with modular and open-architecture systems to provide unprecedented flexibility

Figure 1: U.S. Navy Force Structure and Endstrength

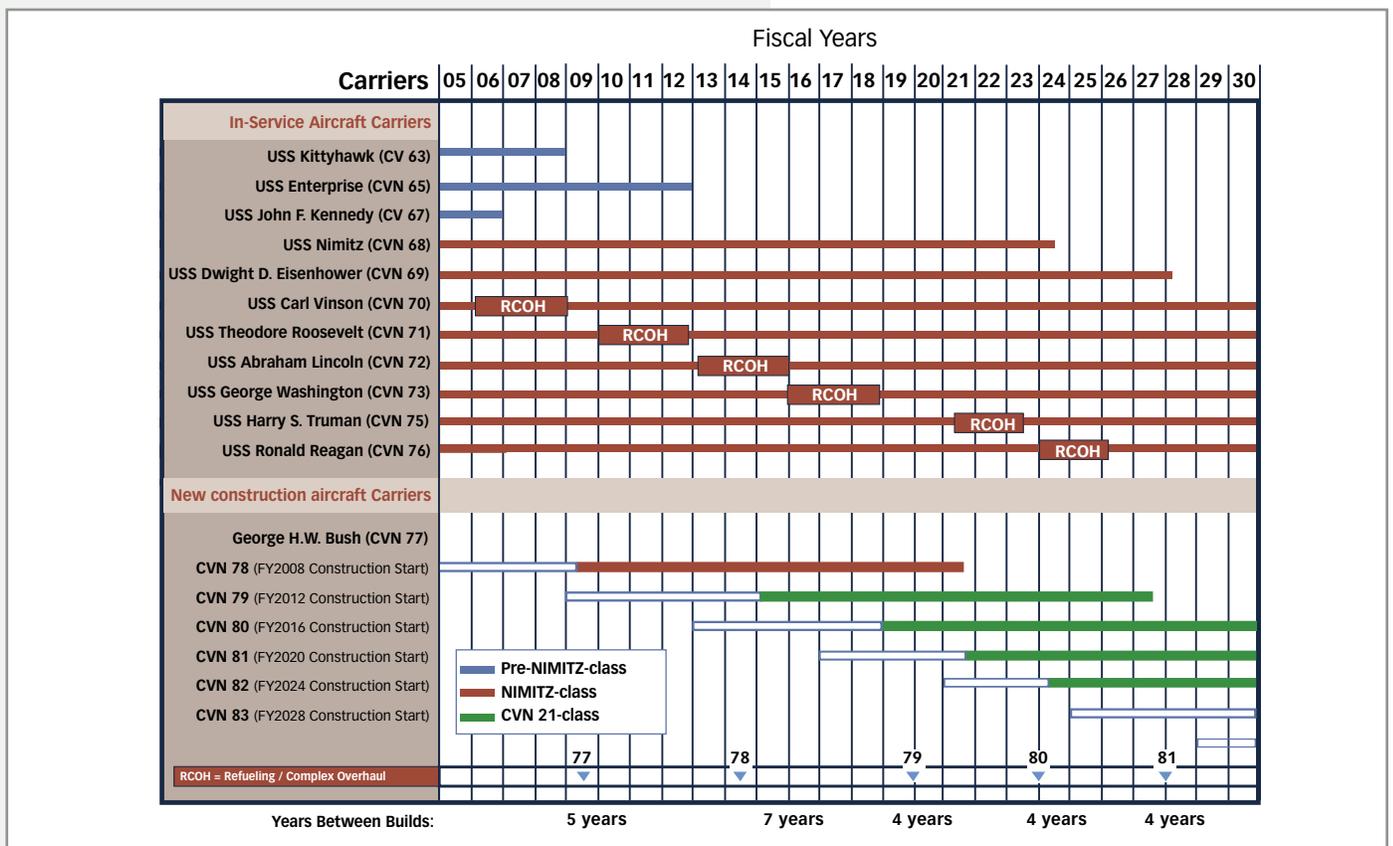


and adaptability to fight in diverse environments against a variety of possible enemies. This flexibility and adaptability will also allow us to dramatically expand these ships’ growth potential with less technical and fiscal risk.

Force structure studies since 1990 have assessed requirement levels between 10 and 15 aircraft carriers driven by national strategy and the future global political climate. Since 11 September 2001 however, the Navy has postured its forces for the Global War on Terrorism and contingencies elsewhere in the world—from minor threats to major theater war. Optimal flexibility, agility, and rapid turnaround have become the order of the day. The Fleet Response Plan was created to reshape a force structure that is more agile and responsive, bringing combat power for regional combatant commanders in support of the National Military Strategy—anyplace, anytime, against any adversary. The FRP is supportable by an 11-carrier force.

We are also growing critically short of certain “low-density/high demand” (LD/HD) aircraft, particularly the EA-6B Prowler electronic-warfare (EW) aircraft. The demands of today’s chronic-crisis and combat-threat environment, in which even minor countries can have sophisticated air defenses, drive the need for effective electronic warfare and suppression of enemy air defenses. The decision to retire the Air Force EF-111A Raven EW aircraft and to assign all DoD radar-jamming missions to the Prowler adds to the significance of the EA-6B in joint warfare. With its

Figure 2: Aircraft Carrier Build Schedule (Calendar Years)





jamming and High-Speed Anti-Radiation Missile (HARM) capability, the Prowler provides capabilities to deny an adversary's use of radar and communications unmatched by any other airborne platform worldwide. These capabilities were amply demonstrated during the 12-year enforcement of "no-fly" zones in Iraq and by experiences in Operations Allied Force, Enduring Freedom, and Iraqi Freedom. Its proven effectiveness in combat underscored the Prowler's role as an indispensable element of coalition air operations. To meet future Airborne Electronic Attack (AEA) requirements, the EA-18G "Growler" variant of the F/A-18 Hornet Strike Fighter will replace the Navy carrier-based EA-6B force, with a "Growler" Initial Operational Capability (IOC) in 2009.



A force structure study conducted by the Navy in 2005 identified 48 attack submarines as the minimum warfighting requirement to meet the 2001 Quadrennial Defense Review (QDR) force-sizing construct. The first *Virginia* (SSN 774)-class submarine was commissioned in 2004 as a replacement for the *Los Angeles* (SSN 688)-class submarine, and incorporates new capabilities, including unmanned vehicles and the ability to support special operations forces. The *Virginia* class will be an integral part of the joint, networked, dispersed 21st Century fleet. Seven additional *Virginia*-class submarines are under construction, and two more are under contract for what eventually will be a 30-submarine class.



The Navy is also focused on a guided missile submarine conversion program with the first SSGN becoming operational in 2007. Our future SSGN capability will provide covert strike platforms, which are capable of carrying 154 Tomahawk missiles and have the capacity/capability to support special operations forces for an extended period—ultimately enabling clandestine insertion and retrieval by lockout chamber, dry deck shelters, or the Advanced SEAL Delivery System (ASDS). These ships will be arrayed with a variety of unmanned vehicles to enhance the joint force commander's knowledge of the battlespace. The inherently large internal capacity of these submarines will enable us to leverage future payloads and sensors for years to come.

The service is transforming to provide naval and joint force commanders with a range of warfighting capabilities across the spectrum of warfare. Our flexible and adaptable surface combatant family of ships allows us to dramatically expand the growth potential of our surface combatants with less technical and fiscal risk. The Navy's future surface warships will be designed from their keels up to operate as critical elements of a forward-stationed, distributed, networked joint force. We are developing the next-generation surface combatants as "sea frames" (analogous to "airframes") that are part of a modular system. We have decided upon three entirely new ship classes. The first to premier will be the Littoral Combat Ship (LCS) in 2007. The advanced, multi-mission guided missile and strike destroyer, DD(X), will

follow around 2012. A few years later, the keel will be laid on the first CG(X)—the next class of cruiser—designed specifically for theater air and ballistic missile defense.

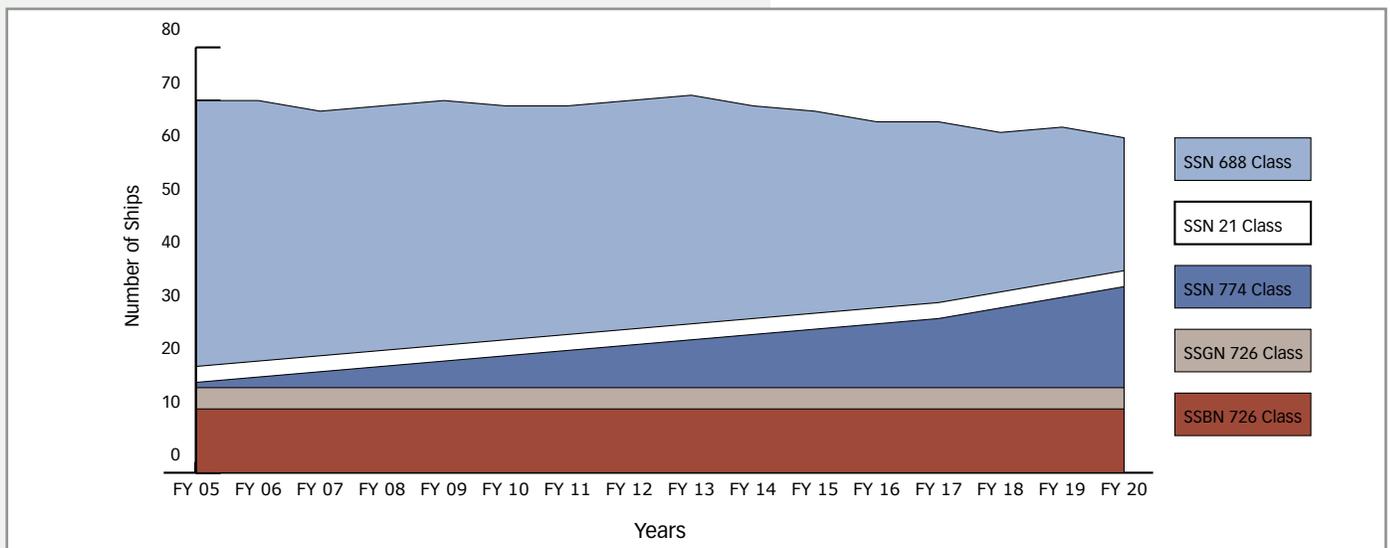
To help meet near- and mid-term needs, the Navy is upgrading the in-service Aegis cruisers and destroyers with selected leading-edge technologies, some of which are being developed during the DD(X), CG(X), and LCS design and production processes. This will ensure that this vital core of the multi-mission fleet will maintain operational effectiveness throughout their lifetimes and until the DD(X) and CG(X) programs come to fruition. The USS *Curtis Wilbur* (DDG 54), with an upgraded Aegis system, assumed a Long-Range Surveillance and Track role in late 2004, as part of the nation’s ballistic missile defense system. Four other DDG 51s have also received this upgrade and five more will be upgraded in 2006.

The Navy’s remaining *Oliver Hazard Perry* (FFG 7)-class frigates are being modernized. Hull, mechanical, and electrical (HM&E) systems are being enhanced, and a limited combat-systems upgrade will improve their survivability in the littoral combat environment. Because of their high operational costs and limited room for combat system growth or modernization, the Navy has been decommissioning *Spruance* (DD 963)-class destroyers since 2002. The final decommissioning took place on 22 October 2004. Two *Spruance*-class ships are being reserved: one as a Self-Defense Test Ship and the other as a development hull for the DD(X) program.

We will continue to focus on the transformation of our amphibious warfare shipping—large-deck/aviation-capable amphibious assault ships, dock landing ships, and landing platform dock ships—to a force that can affordably meet future needs. Critical elements of our plan include the acquisition of *San Antonio* (LPD 17)-class amphibious platform docks; the design, engineering, and acquisition of the next-generation amphibious assault ship (LHA R); and modernization of in-service ships.



Figure 3: Attack, Guided -Missle, Ballistic-Missle Submarines



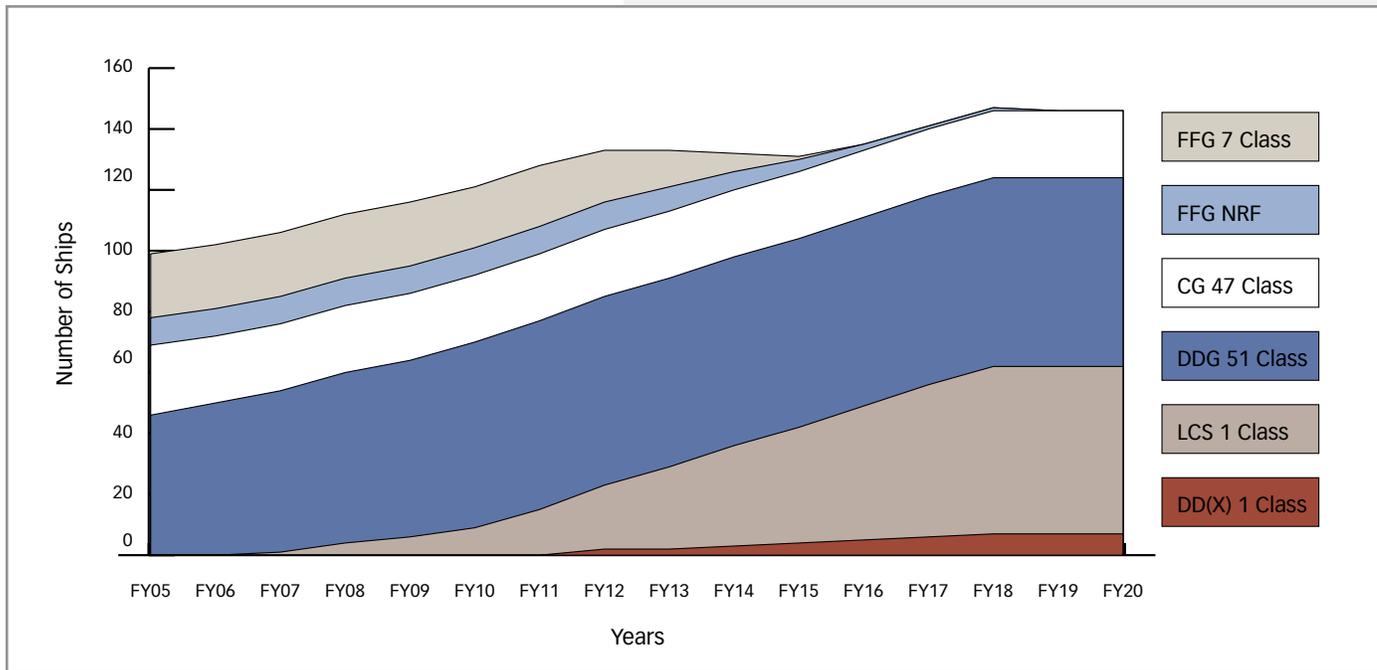


Figure 4: Surface Warship Projections



The requirement for our amphibious warfare forces continues to be the capability to lift the assault echelon of 3.0 Marine Expeditionary Brigade (MEB) equivalents. This 3.0 MEB equivalent encompasses the troops, aircraft, vehicles, equipment and cargo of a Marine Expeditionary Force (MEF), which is the primary Marine Air-Ground Task Force (MAGTF) element organized to fight and win in conflicts ranging from smaller contingencies to regional war.

Our Combat Logistics Force has been well represented in Operations Enduring Freedom and Iraqi Freedom, and has provided outstanding service to the ships in the Mediterranean, Arabian Gulf, and Red Sea. To increase the peacetime availability of these ships, the four Navy-manned supply (AOE-6) fast combat support ships transitioned to the Military Sealift Command with the last of the four making that transition in June 2004. The *Lewis and Clark* (T-AKE) stores/ammunition ship program is on track for replacing the aging T-AFS and T-AE store ships-with a projected delivery date of the lead ship in May 2006.

Strategic sealift capabilities continue to meet requirements for the near term according to the OSD/Joint Staff co-sponsored Mobility Capability Study. Additionally, the Defense Science Board Task Force on Mobility recommended that a Research and Development program be established to determine whether it is feasible to develop an affordable high speed sealift vessel capable of deploying heavy or medium forces to areas of operations with only austere ports. The Navy is addressing the mid-to long-term strategic mobility needs by merging Navy's requirement to close rapidly non-self deployable Marine Corps aircraft to the sea base with Army's requirement for austere high-speed sealift into a Joint High-Speed Sealift (JHSS) program that also would ultimately replace the existing Fast Sealift Ships by the end of the next decade.

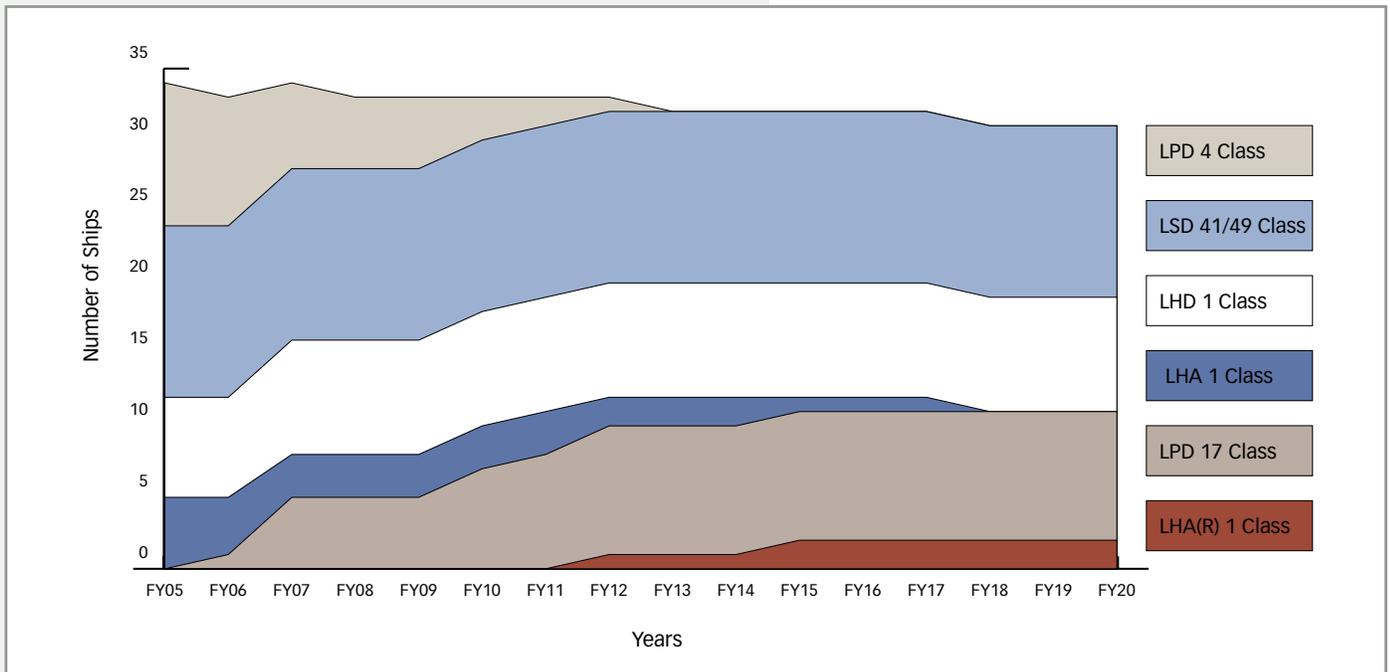


Figure 5: Amphibious Ship Projections

Mission accomplishment must always be our top priority, and, therefore, our focus on current and long-term readiness must not waver. The FRP will support our nation’s security needs with persistent naval capabilities that are both rotational and surgeable. The FRP accelerates the Navy’s advantage in responding whenever and wherever the President needs our naval forces, and harnesses the Navy’s enhanced speed and agility to ensure we can respond to a crisis with overpowering force.

CURRENT READINESS

On average, one-third of America’s fleet is deployed every day, and we are focused on ensuring that deployed readiness remains high. We have made significant improvements these last few years in reducing major ship depot maintenance backlogs and aircraft depot-level repair back orders; improving aircraft engine spares; adding ship depot availabilities; ramping up ordnance and spare parts production; maintaining steady “mission capable” rates in deployed aircraft; fully funding aviation initial outfitting; and, investing in reliability improvements. Throughout FY 2007, we will continue to seek improved availability of non-deployed aircraft and the ability to meet our 100 percent availability of deployed-airframe goals.

Prior to 2001, naval aviation metrics were unreliable, inconsistent, and lacked a common language (e.g., sorties, parts, dollars). There was limited predictability in parts requirements, and full-mission-capable/mission-capable (FMC/MC) were used as readiness metrics. The focus supported near-term solutions, i.e., buying supplies and parts vice integrating all support elements.





The solution to these problems came as the Naval Aviation Readiness Integration Improvement Program (NAVRIIP) in August 2001 when the CNO tasked Commander, Naval Air Forces Pacific (CNAP) with the responsibility for overseeing the entire spectrum of naval aviation. This responsibility included implementing a comprehensive program to make fundamental process changes in the way the Navy provides manpower, equipment, and training to stateside naval aviation commands between deployments. Led by flag officers from 17 commands, NAVRIIP has been defining and executing changes to sustain near- and long-term aviation readiness goals. The primary goal is to achieve “cost-wise” readiness by balancing and aligning interactions between operational-level maintenance, intermediate-level maintenance, and the logistics infrastructure that supports them. In January 2004, the scope of NAVRIIP grew to include deployed units and the operational metric of cost-wise aircraft ready for tasking. For the last four years, NAVRIIP has been conducting events like “Boots on the Ground” to give its leadership face-to-face interaction with Sailors and Marines from all parts of the enterprise... from the depots and maintenance facilities to the warfighters serving in Operation Enduring Freedom and Operation Iraqi Freedom.

Continued military readiness depends on reliable access to all necessary training, testing, and operational exercise areas. Our forces must get their first experience with live arms before they engage in actual combat, a goal implicit in our “train as you fight” philosophy. Our military training ranges are national assets that allow our forces to train in a controlled, realistic, and safe environment. Urban encroachment, the obligations of environmental compliance on land and at sea, concerns about noise and airspace congestion require a comprehensive approach to sustain access to training ranges. Inappropriately trained people perform poorly in combat and increase risk in peacetime. Compliance with legal regulatory requirements combined with forward leaning environmental strategies provides us the greatest flexibility with the use of our testing and training ranges. The CNO’s staff continues to develop processes and procedures to allow our troops to train as they fight.

Through the processes and procedures, Navy is instituting strategies that combat urban encroachment, bring Navy into environmental compliance and manage our overall land and sea resources effectively. Actions taken during the last three years have addressed critical Navy needs regarding encroachment and future training challenges. Readiness-specific changes to the Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA), and Migratory Bird Treaty Act (MBTA) have helped the Navy meet training and operational challenges. The Navy and Marine Corps will continue to demonstrate leadership in both their military readiness role and as an environmental steward of the oceans and the lands on which we train. The Navy has initiated a comprehensive training range and operating area sustainment program to ensure continued access to its at-sea ranges and operating areas. The

Director, Material Readiness and Logistics (N4) has established a Navy Range Office to oversee this important effort.

The 21st Century Navy's highly flexible and effective Carrier Strike Groups, Expeditionary Strike Groups, and Expeditionary Strike Forces are designed to satisfy the requirements of the nation's security and military strategies. Coupled with independent operations by missile defense Surface Action Groups and nuclear-powered guided missile/special operations submarines, our future Fleet will dramatically increase the operational flexibility, global reach, and striking power of today's forces.

With the operational flexibility of the Navy's Fleet Response Plan—which emphasizes our determination to sustain “Presence with a Purpose”—we optimize our warfighting effectiveness. The funding we seek this year reflects the increasing capabilities and evolving operational concepts of our forces. A thorough analysis revealed an operational flexibility and increased capability that allowed the retirement of an older aircraft carrier without risk to national security. In addition, the cost avoidance of this action will increase additional investment in transformational programs that further enhance our capabilities.

FUTURE READINESS

Although sustaining current operational readiness is a top priority, maintaining aging equipment and infrastructure and modernizing our forces are growing concerns. The need to pay for current readiness must be balanced with the imperatives to improve and ultimately replace the equipment we have in the Fleet today. Modernization enables our current forces to continue to be valuable warfighting assets in the years ahead, while concurrently trying to mitigate escalating support costs of aging equipment. Also, as technological cycle times are now shorter than platform service life, it is fiscally prudent to modernize the force through timely upgrades and, when it makes good operational and business sense to do so, to incorporate commercial open-source technologies and systems.

Adequate readiness can only be sustained in the future with modernization and recapitalization programs that deliver adequate numbers of technologically superior platforms and systems to the Fleet. This has become a challenging task. The Fleet is aging, and there is real and growing tension between maintaining near-term readiness, while supporting future modernization and recapitalization.

Our Sea Enterprise initiatives, under the auspices of *Sea Power 21*, will lower our cost of doing business so we can maintain near-term readiness and still invest more in the future. Sustained future naval readiness begins with a recapitalization program that delivers the right number of technologically superior platforms and systems for the Fleet. We therefore need to invest in a focused and expanded program to maintain naval superiority throughout the



first half of the 21st Century. The current low rate of ship construction and the resultant escalation of platform cost will constrain the future size of the Fleet. It is imperative that we buy the correct kinds of capabilities in the future ships we are procuring, and that we properly position our force to provide the speed and agility for seizing and retaining the initiative in any fight. The ultimate requirement for shipbuilding, however, will be shaped by the potential of emerging technologies, the amount of forward basing, and innovative manning concepts such as Sea Swap and Optimal Manning. Additional variables range from operational availability and force posture to survivability and war plan timelines.

The Navy has reinvigorated its aggressive effort to realign its shore establishment and thereby free up funds for future readiness and modernization of the operating forces. There are three primary components of this effort: the reduction of infrastructure costs and consolidation of redundant services and functions; the establishment of Navy-wide standards and metrics for all shore installation functions; and, the identification and implementation of best business practices, particularly under the Sea Enterprise initiative.

The Navy fully supports the Base Re-alignment and Closure (BRAC) 2005 as an “engine” to help accelerate structural change ashore needed to recapitalize the force. BRAC is an opportunity to reduce overall operational costs through consolidation of functions and facilities both across Navy and across DoD. Our goal is to implement the BRAC V law requirements as quickly and cost-effectively as possible. This will be accomplished in coopera-



Figure 6: FY2006 - 2011 Aircraft Procurement Plan

	FY06	FY07	FY08	FY09	FY10	FY11
F-35 Joint Strike Fighter	0	0	8	32	36	33
F/A-18E/F Super Hornet	38	30	24	20	22	14
EA-18G	4	12	18	22	20	10
E-2C/D Hawkeye	2	2	0	4	4	4
MH-60R Seahawk	12	25	25	31	32	31
MH-60S Seahawk	26	18	20	26	26	26
P-8A Maritime Multi-Mission Aircraft	0	0	0	0	6	8
KC-130J Hercules	5	4	4	0	0	0
MV-22 Osprey	9	14	19	31	35	37
VXX Executive Transport Helicopter	0	0	0	4	3	4
UH-1Y/AH-1Z Super Cobra/Huey	10	18	19	23	23	23
T-45 Goshawk	6	12	0	0	0	0
T-6A Texan II JPATS	0	21	48	48	48	48
C-40 Clipper	0	0	0	5	1	1
C-37B	0	0	0	0	0	1
Broad Area Maritime Surveillance UAV	0	0	0	0	0	4
VTUAV Fire Scout	0	4	7	11	11	10
F-5 TacAir Aggressor	9	5	0	0	0	0
Total	121	165	192	257	267	254

	FY06	FY07	FY08	FY09	FY10	FY11
CVN-21 Next-Generation Aircraft Carrier	0	0	1	0	0	0
SSN-774 Virginia Class	1	1	1	1	1	1
DDG-51 Arleigh Burke Class	0	0	0	0	0	0
DD(X) Next-Generation Destroyer	0	2	0	1	1	1
LPD-17 San Antonio Class	1	0	1	0	0	0
LHD/LHA(R) Amphibious Assault Ship	0	1	0	0	1	0
LCS Littoral Combat Ship	3	2	3	6	6	6
CG (X) Next Generation Cruiser	0	0	0	0	0	1
T-AKE Lewis and Clark Cargo/Ammunition Ship	1	1	1	1	1	1
Maritime Prepositioning Force Future (MPF(F))	0	0	0	1	1	3
Total	6	7	7	10	11	13

tion and full regard for the operational mission of DON and other Services, achieving the highest return on investment within those operational bounds.

INVESTING IN FUTURE READINESS

The CNO's Guidance for 2006 reemphasizes that *Sea Power 21* is the service's vision and programmatic framework to deliver enhanced capabilities through new concepts, technologies, organizational initiatives, and improved acquisition processes. The future requires two primary attributes of the Navy: speed and agility. Speed and agility must also apply to the way we run the business of putting combat power to sea. This means expediting efforts to achieve true integration with our joint partners and to align more closely our requirements and procurement decision processes. Concurrently, we must reshape the technological and industrial bases to deliver the faster, more agile Navy we are becoming. While we have made important steps forward in *Sea Enterprise*, we still have more to do to generate the resources that will implement the *Sea Power 21* vision. Innovation, elimination of unnecessary costs, and increasing efficiency and effectiveness will help us find those resources.

Our mobility, adaptability, flexible deployments, and capabilities matched with our knowledge of the battlespace and immense firepower make the Navy an especially useful force for assuring security, at home and abroad. The challenges facing us today, and those emerging just over the horizon, confirm that ready, modern and capable naval forces will remain vital to the nation's security, its interests, its citizens, and its friends. By balancing our present needs and future imperatives with the enhanced capabilities provided by technological and innovative advancements, we will bridge to the future of a transformed Navy.

Figure 7: FY 2006 - 2011 Shipbuilding Plan





MEETING TODAY'S AND TOMORROW'S NEEDS

Chapter Three provides summaries of the Navy's programs for our people, our sensor and weapon systems, and our ships, aircraft, and submarines. Balanced against competing priorities within available resources, these programs set our course for the future to ensure that the vision of *Sea Power 21* is realized.