

CHAPTER 2

BRIDGING VISION AND PROGRAM DECISIONS

SEA POWER FOR A NEW ERA

S*ea Power 21* began the process of translating theory into practice for a wide range of advanced and innovative naval concepts, technologies, systems, and platforms, which will ultimately increase the effectiveness of the joint force. We are moving forward with the fundamental concepts of Sea Enterprise, Sea Strike, Sea Shield, and Sea Basing to produce and deliver the most effective warfighting force to combatant commanders and to transform the way we fight.



To do so requires us to constantly review and when necessary update our strategic priorities. In 2006, we defined our priorities as:

- *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 our enemies.*
- *Develop 21st Century Leaders through a transformed manpower, personnel, training and education organization that better competes for the talent our country produces and creates the conditions in which the full potential of every man and woman serving our Navy can be achieved.*

We have made good progress in all three priorities. In 2006, the Navy met our Combatant Commanders' demands for well-trained and equipped forces and contributed to combat operations, international disaster-relief operations, exercises, humanitarian missions, and homeland-defense initiatives. To ensure we are getting the most readiness and capability for the nation's tax payers, we established the Navy Enterprise Framework.

As described in Chapter 1, we prepared a new 30-year shipbuilding plan that will provide a balanced fleet of approximately 313 ships by 2020. The Navy Strategic Plan (NSP) further aligns budgetary decisions with future operations and risk assessments, while the Resources and Requirements Review Board continues to help us curb cost and requirement growth.

The merger of Navy's Manpower, Personnel, Training, and Education in 2006 yielded more efficient and effective workforce management structure assuring the fleet remains fully manned at sea.

Our progress has led us to review and update our priorities for this year to include:

READINESS: *Strengthen continuous readiness to ensure combat ready, surge-capable forces are available to meet any contingency. Natural disasters abroad and hurricanes here at home taught us valuable lessons. We must extend the Fleet Response Plan (FRP) philosophy of "continuous readiness" to our shore commands, our people, and our families. We will execute the Navy's new employability/deployability policy to balance properly the time at-sea with time at-home tempo.*

FORCE STRUCTURE: *Fund and build a balanced, effective fleet to guarantee the long-term strength and viability of U.S. naval air and sea power. We must continue to curb costs and requirements as we build to the 313-ship fleet, complete a long-range aviation procurement plan, and strengthen our*

strategic partnership with industry.

WARFIGHTING: *Improve core warfighting competencies to defend the homeland and win the nation's wars as part of the Joint Force. We must strengthen our ability to conduct the enduring missions this nation expects of its Navy. We will improve our performance in surface warfare, submarine and mine warfare, air warfare, strike warfare, and ballistic missile defense, as well as other traditional maritime supremacy mission areas. Preeminence at sea still matters.*

PEOPLE: *Shape the Navy's workforce to develop 21st-Century leaders with the skills required to meet the demands of modern military operations. We must deliver the Strategy for our People, further streamline the Individual Augmentee process and execute the Diversity CONOPs.*

PARTNERSHIPS: *Advance the Global Maritime Partnership Initiative (i.e., the "1,000-Ship Navy") to promote stability, prevent conflict and enhance maritime security. We must look for more and better opportunities to work collaboratively with federal, international, and non-governmental agencies.*

The CNO's 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 (ICAA) and the CNO's Investment Strategy Options (ISO). Associated with this 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 broader range of roles, missions, and tasks, we rely on the work of Navy Warfare Development Command (NWDC). NWDC reports to the Commander, United States 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*.

NAVY PROGRAM ASSESSMENT AND PLANNING

Navy program assessment and planning documents and processes are developed in conjunction with the Defense Secretary's Defense 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. It uses a capabilities-based planning process to ensure readiness, operational availability, and warfighting requirements are satisfied as efficiently and effectively as possible to meet persistent and emerging strategic challenges. These challenges include:



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.

- **Traditional threats**
- **Irregular threats**
- **Disruptive threats**
- **Catastrophic threats**

To facilitate the capabilities-based planning process, the Deputy Chief of Naval Operations (DCNO) for Information, Plans, and Strategy (N3/N5) works with the Marine Corps to develop a prioritized list of warfighting capabilities based on the *Sea Power 21* construct and the 2006 Naval Operational Capabilities publication. This list of coordinated warfighting capabilities translates 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). The MCPs 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, subjectively evaluates the list of capabilities. This panel, chosen for recent operational experience, employs an iterative process comparing capabilities and determining their order of priority 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 entered into the program. This input complements the adequacy assessments that are conducted as part of the NCDP by the Director, Integrated Warfare Division.

PLANNING AND PROGRAMMING

Innovation and transformation have characterized the Navy's program-planning process throughout the service's history, but neither received the level of emphasis they have during the past five years. Through Management Initiative Decision (MID) 913, the Navy modified the Department of Defense (DoD) Planning, Programming, and Budgeting System (PPBS). This revised process, known as the Planning, Programming, Budgeting, and Execution (PPBE) process, improves the overall effectiveness of the program-planning process. The PPBE process directly links strategy to programmatic decisions through a single organization responsible for analysis of warfare capabilities, while also adding additional emphasis to program execution. The Navy's Prioritized *Sea Power 21* Warfighting Capabilities List provides a framework to establish the capability roadmaps developed by the NCDP. This new planning process ensures program synchronization, balance, and integration across all naval warfare areas and 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 (ICAA)

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—required to execute operations in littorals. Today, the Navy's strategic planning guidance focuses on the overarching capability architectures enabling the projection of offensive and defensive naval power: Sea Strike, Sea Shield, and Sea Basing. These capability pillars are linked together by a seamless FORCENet and carried out by carrier strike groups, expeditionary strike groups, expeditionary strike forces, and other naval forces under the Fleet Response Plan (FRP). Within this conceptual architecture, the DCNO for Warfare Requirements, Resources, and Assessments program planning process relies on broad-based analyses capturing the complexity of naval warfare requirements, while balancing them within available resources.

Starting with 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 that is linked to the development of the Navy POM and Program Reviews (PRs).

WARFARE CAPABILITY ANALYSIS

The number of ships, submarines, and aircraft is the most visible manifestation of the Navy's operational capabilities. The ICAA assists Navy leaders 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 ICAA considers force posture, life-cycle 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 and/or modernize the force, develop alternative force structure paths and subsequent consequences of the tradeoffs, and frame relevant issues via integrated decision timelines.

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 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 Experiments

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.

Our capabilities-based approach selects and prioritizes the proper capabilities to ensure strategic objectives are satisfied in diverse future crises and conflicts while simultaneously focusing on meeting current requirements. Driven by warfighting needs, which include assuring our allies while dissuading and deterring our enemies, these capabilities must also support Joint Force Commanders and be compatible with allied and coalition forces. The capabilities must be fiscally affordable and provide a continuum of crisis-response options and combat capabilities to support naval and regional combatant commanders and fulfill national commitments. The force planning approach articulated in the National Defense Strategy will guide decisions on the overall shape, size, and global posture of U.S. military forces. In short, the 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 adversaries**
- **Preserving Freedom of the Seas**
- **Promoting Peace and Security**

SEA STRIKE

The Sea Strike ICAA includes naval fires, strategic deterrence, and amphibious warfare (the latter more appropriately characterized 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).

Additionally, *Ohio*-class ballistic missile submarines (SSBNs) provide the nation with the most survivable leg of the nuclear deterrence triad, thereby making it a key element of the Navy’s overall Sea Strike capability.

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 littorals, and to accessible 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, as was clear in Operations Enduring Freedom and

Iraqi Freedom. Navy and Marine Corps expeditionary forces—acting independently, jointly with the Army, Air Force, and Coast Guard, or combined with allied forces—provide the backbone of America’s ability to quickly and effectively project credible military power throughout the world.

SEA SHIELD

The Sea Shield ICAA focuses on naval warfighting capabilities required to project defensive power at and from the sea. It assesses and analyzes emerging technologies designed to extend naval defensive firepower far beyond strike groups 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 capability. 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; and a mix of manned and unmanned systems operating below, on, and above the sea’s surface.

Persistent supremacy at sea and in the littorals continues to be at the heart of the U.S. National Military Strategy. Naval forces will assure access for the joint force through surface warfare (SUW) and anti-submarine warfare (ASW) superiority, air supremacy, and mine countermeasures and the employment of naval mines in offensive and defensive operations (MIW). Next-generation naval mines, or 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 offensive and defensive tactical mining concepts of barrier and area-denial operations.

Anti-submarine warfare superiority includes capabilities to neutralize or defeat an adversary’s use of submarines, thereby assuring access, permitting the use of the sea as a maneuver space, and allowing sea-based operations. Offensive and defensive sea mining and MCMs 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. Surface warfare superiority involves actions necessary to neutralize an adversary’s efforts to employ surface warships against friendly forces. Air superiority provides naval forces the capability to assure 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. Acting either indepen-

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.



dently or as a joint force component, naval forces provide capabilities that are critical to ensuring freedom of maneuver and power projection from the sea.

SEA BASING

The Sea Basing ICAA focuses on sealift, airlift, the Combat Logistics Force (CLF), transportation, and ordnance inventory. It includes the capability to move items both intra-theater and inter-theater. It also includes 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 enabling the movement, maneuver and support of U.S. combat forces and other friendly forces afloat and ashore remain areas of intense interest and are keys to attaining successful seabasing capabilities. In combat operations in the Arabian Gulf—from Desert Shield/Desert Storm in 1990 to Operation Iraqi Freedom in 2003 and continuing—sealift transported 95 percent of all supplies and equipment to and from the areas of operations. In 2001-2002 we achieved and sustained access during Operation Enduring Freedom in landlocked Afghanistan from naval forces and assets at 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 Battalion (Seabee) Force 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 upon 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, com-

munications, and offensive and defensive fires for Joint Force Commanders while reducing the footprint ashore.

FORCENET

The FORCENet ICAA 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 Navy's transformational roadmap. FORCENet capabilities are the key to the execution of effects-based operations, enabling the commander to achieve "Full Spectrum Dominance" over the enemy, exploit his weaknesses, and counter his strengths during rapid, decisive operations.

SEA ENTERPRISE

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 that are 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 creating a future force that can rapidly field new technology and surge ahead to meet all new challenges.

Sea Enterprise includes the establishment of executive and Navy corporate business courses for our senior leaders, increased focus on command accountability for efficient as well as effective mission accomplishment, and the beginnings of an Enterprise framework centered around our primary warfare communities (Air, Surface, Undersea, Netwar/FORCENet, and Expeditionary Combat).

WARFARE SUPPORT ANALYSIS

INFRASTRUCTURE

Ashore infrastructure includes land, buildings, structures, and utilities within ports and air stations, as well as repair and maintenance centers, communication sites, storage facilities, laboratories, piers, ordnance magazines, hospital and medical centers, training areas, and community support centers. This infrastructure is found at homeports as well as at overseas locations. While "infrastructure" seldom receives high visibility, the Navy's installations, are essential for naval force readiness at home and abroad. Although it is not essential for the Navy to have access to overseas facilities to carry out its worldwide missions, having facilities at key forward locations provides logistics support with rapid response capability for any threat and contingency. Unlike other services, the Navy has the ability to carry its immediate logistics

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.

sustainment capabilities to forward operating areas. Beyond the first 30 days of conflict, however, advanced logistics bases provide fuel, ammunition, and maintenance for sustained presence and high-tempo operations.

The Navy has a significant investment in installations—more than \$110 billion in facilities replacement value in early 2007. During the downsizing through the 1990s, this inventory was not adjusted in similar proportion to the Navy's operating forces. Consequently, current facility sustainment and recapitalization rates are insufficient to maintain existing infrastructure, much of which is inappropriate for 21st-Century needs. Aging infrastructure greater than 50 years of age, numerous historical buildings maintained for heritage-preservation purposes, and the increase of new mission support infrastructure home and overseas without top-line relief exacerbate this problem. The Navy is working to shift its focus ashore from the current situation to reshaping regional footprints and advanced logistics bases to ensure the right capability is in the right place at the right price to support future naval operations.

Critical to sustaining readiness is our ability to train as we fight, through continued access to ranges and operational exercise areas (OPAREAS). Our military training ranges are highly valued national assets that enable our forces to train in a controlled, realistic, and safe environment. However, our ranges and OPAREAS are increasingly surrounded and encroached by urban development and subject to increasing environmental challenges impacting the Navy's ability to execute realistic training. We are therefore implementing a fully integrated, systematic strategy for our training ranges and exercise areas, balancing 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). Implemented 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 allowing our forces to conduct environmentally responsible realistic training. Accordingly, the Navy will continue to serve as a good steward of the environment while preserving the flexibility to train and exercise ashore and at sea.

Infrastructure also includes shore capabilities necessary to support operational units, such as waterfront and air operations facilities, 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 using a smaller percentage of Navy resources, while maintaining acceptable Quality of Service for our Sailors and their families, and force-wide readiness. The 2005

round of Base-Realignment and Closure (BRAC) identified excess and over-age infrastructure for disposal as one means of enhancing operational readiness and Quality of Service for our Sailors and families.

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:

- **To ensure extraordinary support to the warfighter**
- **To strategically source infrastructure, maintenance, and service functions, as well as our supply inventory, to maximize operational effectiveness and reduce business inefficiency**
- **To optimize resource effectiveness and reduce redundancy within our remaining infrastructure.**

MANPOWER AND PERSONNEL

The Navy's Active, Reserve, and civilian members are the most essential element of our warfighting capability. Our capacity to provide sufficient operational forces and shore support to sustain a credible and responsive naval force structure 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 in forward areas, deterrence, prompt and assured crisis response, and warfighting. The personnel system must provide for the acquisition, development, retention, and management of a diverse 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 workforce potential through transformed manpower processes. 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 facet 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 FRP 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.

TRAINING AND EDUCATION

Training and education capabilities 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 objectives of naval training and education programs are to deliver high-quality training and education efficiently and effectively and to provide 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 shaping 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 Avia-

tion, Surface Warfare, Submarine Warfare, and Mine 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 (JCAs). These JCAs serve as the primary mechanism to identify the current baselines of capabilities and to forecast capability evolution. In doing so, the JCAs contribute 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.

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 emergent missions and tasks. 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. In that context, we must also ensure our highly skilled and dedicated Sailors have the necessary tools for the complex and demanding jobs we expect them to perform. By finding and keeping talents reflecting the diversity of our Sailors, investing in their education, and providing a satisfying work-life balance, we are committed 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 allocating resources to meet the Navy's highest priorities at some level of risk, funding critical needs at the expense of lower-priority programs. These difficult decisions are based on intensive analysis, informed reviews, and critical projections shaped by the reality of constrained 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, families, and civilian workforce is an essential element of the Navy's ability to attract and retain the best and brightest people, and is a top priority in carrying out our roles, missions, and tasks. We are fostering innovation and support technologies to 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 all of our people.





QUALITY OF LIFE

Quality of Life programs are a vital part of 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 offering our Navy families deployment support, employment assistance, and, through programs like COMPASS, assist spouses in adjusting to the complexity and challenge 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, 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 enhancing mission effectiveness and honing their professional skills. 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. This strategy includes the pursuit of new technologies and competitive personnel policies to streamline combat and non-combat personnel positions. We will also focus on improving the integration of active and Reserve missions, and reducing our total manpower structure. We will enhance our diversity and change policies and structures inhibiting the growth and development of our people. Our Strategy for Our People will ensure that we deliver the right skills at the right time and at the right place.



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

FORCE READINESS

In the sensor-rich net-centric construct of 21st-Century operations, the numbers of platforms are no longer the only 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.

The current low rate of ship construction will constrain the future size of the fleet. Therefore, we must invest in the right capabilities for the ships we are procuring, and we must properly posture our forces to provide the speed and agility for seizing and sustaining the advantage in any fight. The application of transformational technologies, coupled with new manning and innovative distance-support concepts will enable us to attain the desired future combat capability with a force posture of approximately 313 ships. In today's and tomorrow's rapidly changing global environment, 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 force predictability. These variations are being facilitated by use of longer-term deployments with crew rotations and forward home-porting of additional ships, as well as the FRP.

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 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 emerging technologies, forward Basing, and innovative manning concepts such as Sea Swap. For the first time in decades, we are building entirely new types of ships, with modular and open-architecture systems that will provide unprecedented flexibility and adaptability to fight in diverse environments against a variety of possible enemies. It also allows us to dramatically expand their growth potential with less technical and fiscal risk.

The FRP was created to field a more agile and responsive force structure to provide combat power to respond to combatant commanders' demands. Because FRP is executable with an 11-aircraft carrier force, we have decided to decommission the aging USS *John F. Kennedy* (CVN-67), which joined the fleet in 1968. With 11 carriers, the Navy can employ vital resources at top readiness priorities, without sacrificing fundamental capabilities.

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 the “Long War” articulated in the 2006 Quadrennial Defense Review drive the need for effective electronic warfare and suppression of enemy air defenses. The retirement the Air Force EF-111A Raven EW aircraft and assignment all DoD radar-jamming missions to the Prowler underscore its significance in joint warfare.





The Long-Range Shipbuilding Plan outlines an attack submarine force-level of 48 attack submarines, including the *Virginia*-class nuclear fast attack submarines, USS *Hawaii* (SSN 776) and *Texas* (SSN 775) new to the Fleet in 2006. We commissioned the first *Virginia* (SSN 774)-class submarine in 2004 as a replacement for the *Los Angeles* (SSN 688)-class submarine. The *Virginia* class incorporates new capabilities, including unmanned vehicles, the ability to support special operations forces, and specialized mine-avoidance systems. The Navy is also focused on guided-missile submarine conversion program, with the first SSGN becoming operational in 2007. Our SSGN capability provides covert strike platforms capable of carrying 154 Tomahawk missiles and the capacity/capability to support special operations forces for an extended period—enabling clandestine “SpecWar” force insertion and retrieval. These ships also operate a variety of unmanned vehicles to enhance the joint force commander’s knowledge of the battle space. The large internal capacity of these submarines will enable us to leverage future payloads and sensors for years to come.

The Navy’s future surface warships are being designed and engineered from their keels up to operate as critical elements of a forward-stationed, distributed, networked, joint force. We have decided upon three entirely new ship classes: the tailored-mission Freedom-class Littoral Combat Ships (LCS), designed as “sea frames” (analogous to “air frames”) with mission modules for MCM, SUW, and ASW missions, initially; the DDG 1000 *Zumwalt*-class advanced, multi-mission guided missile and strike destroyer, to reach the operating forces in 2011; and the CG(X) theater air and ballistic missile defense cruiser, scheduled for fleet introduction later in the next decade.



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 LCS, DDG 1000, and CG(X) 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 DDG 1000 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. Through 2006, 12 other DDG 51s have received this upgrade, two of which have both a Long-Range Surveillance and Tracking and a Short-Range Ballistic Missile Defense Engagement Capability.

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 environment until the new-design warships join the fleet. Because of their high operational costs and limited room for combat system growth or modernization, the Navy has decommissioned all *Spruance* (DD 963)-class destroyers.

We will continue to focus on the transformation of our amphibious warfare fleet of 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 continued 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.

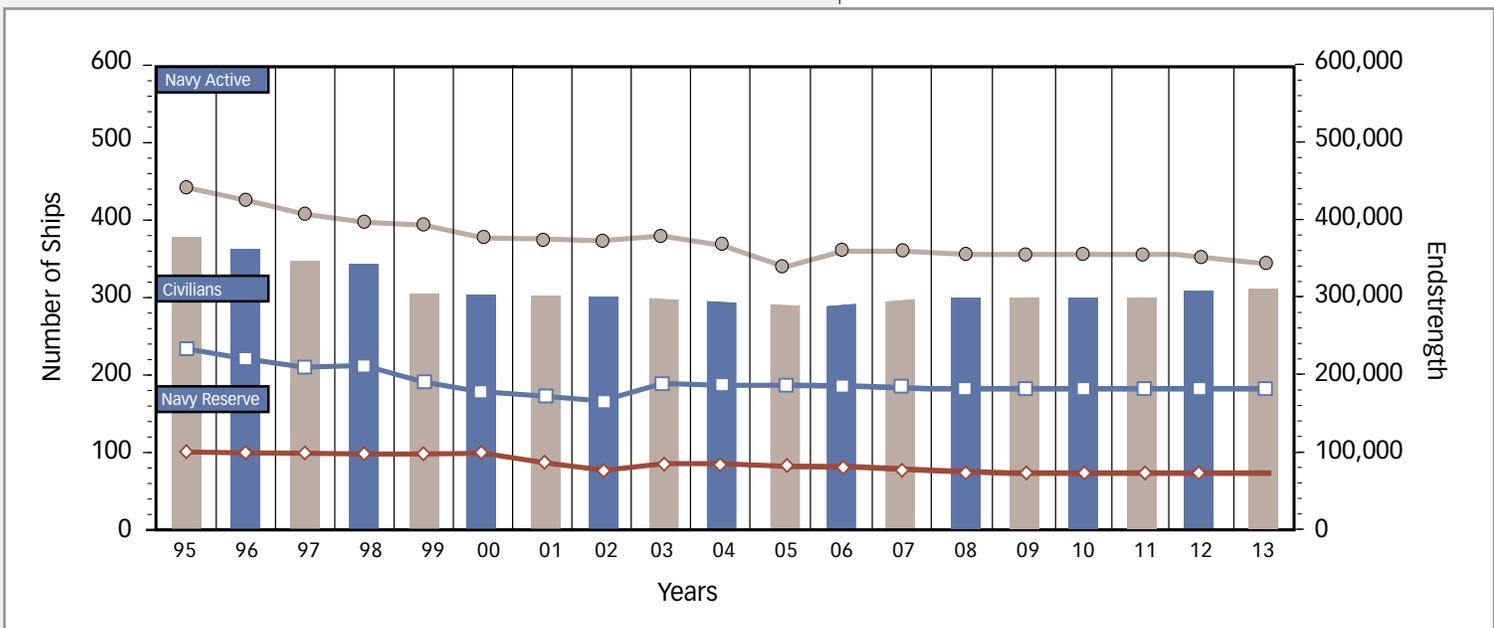
The requirement for our amphibious warfare forces includes the capability to support a single 2.0 Marine Expeditionary Brigade (MEB) forcible entry operation. This 2.0 MEB equivalent is the troops, aircraft, vehicles, equipment and cargo of a Marine Expeditionary Force (MEF), which is the primary Marine Air-Ground Task Force (MAGTF) element organized to fight and win in conflicts ranging from small 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 last of the four Navy-manned Supply (AOE 6) fast combat support ships have been transitioned to the Military Sealift Command. 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 the lead ship delivered in June 2006.

Mission accomplishment is our top priority; therefore, our focus on readiness must not waver. The FRP will support national security needs with persistent naval capabilities that are both rotational and surge capable. The FRP accelerates the Navy's advantage in responding whenever and wherever the Commander in Chief needs our naval forces, and harnesses the Navy's enhanced speed and agility to ensure we can respond to a crisis with overpowering force.



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





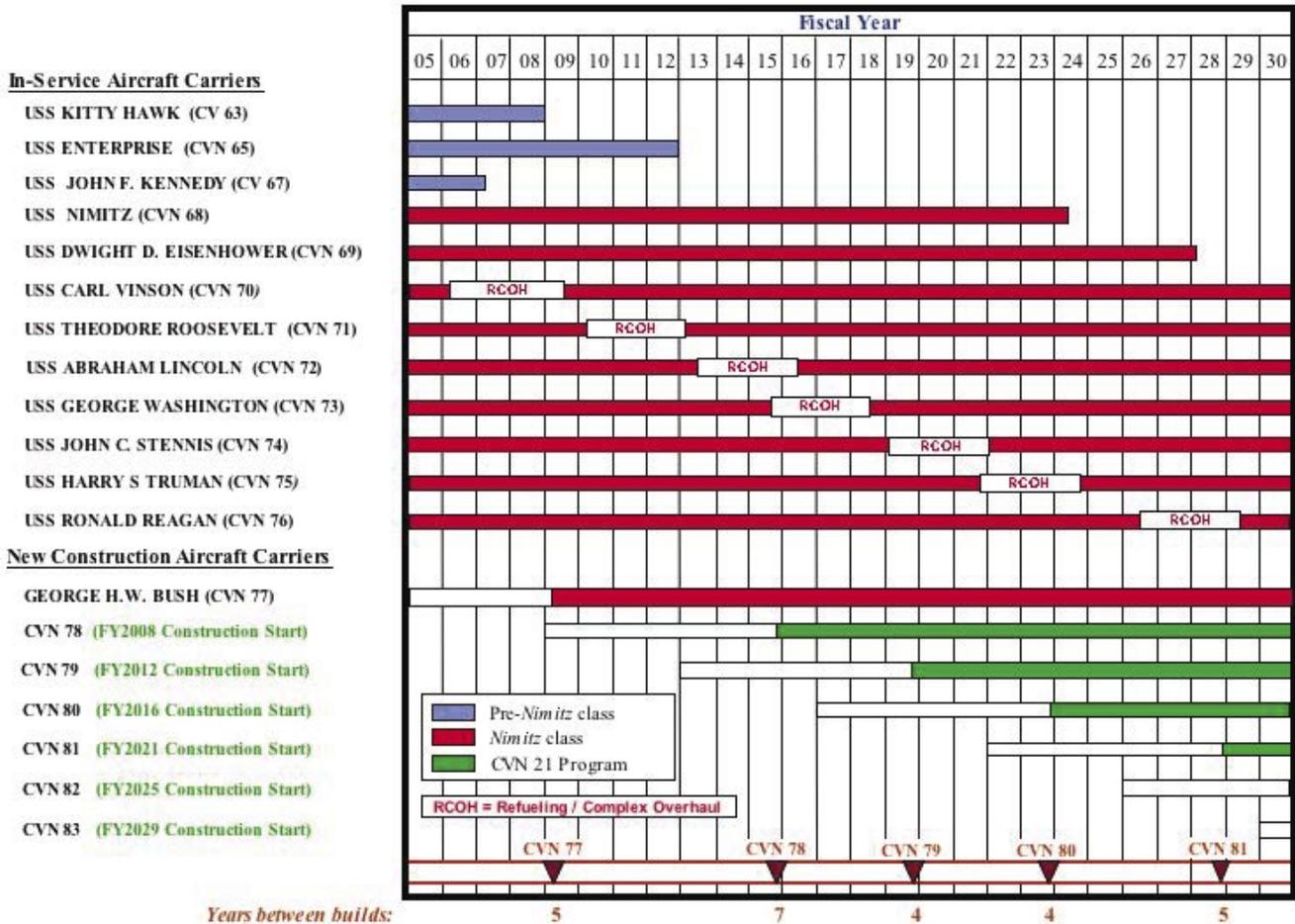
CURRENT READINESS

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 during the last few years in reducing major ship maintenance backlogs and aircraft depot-level repair back orders; improving aircraft engine spares; restoring 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 goal of 100 percent deployed-airframe availability.

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 our only

Figure 2: Aircraft Carrier Build Schedule (Calendar Years)

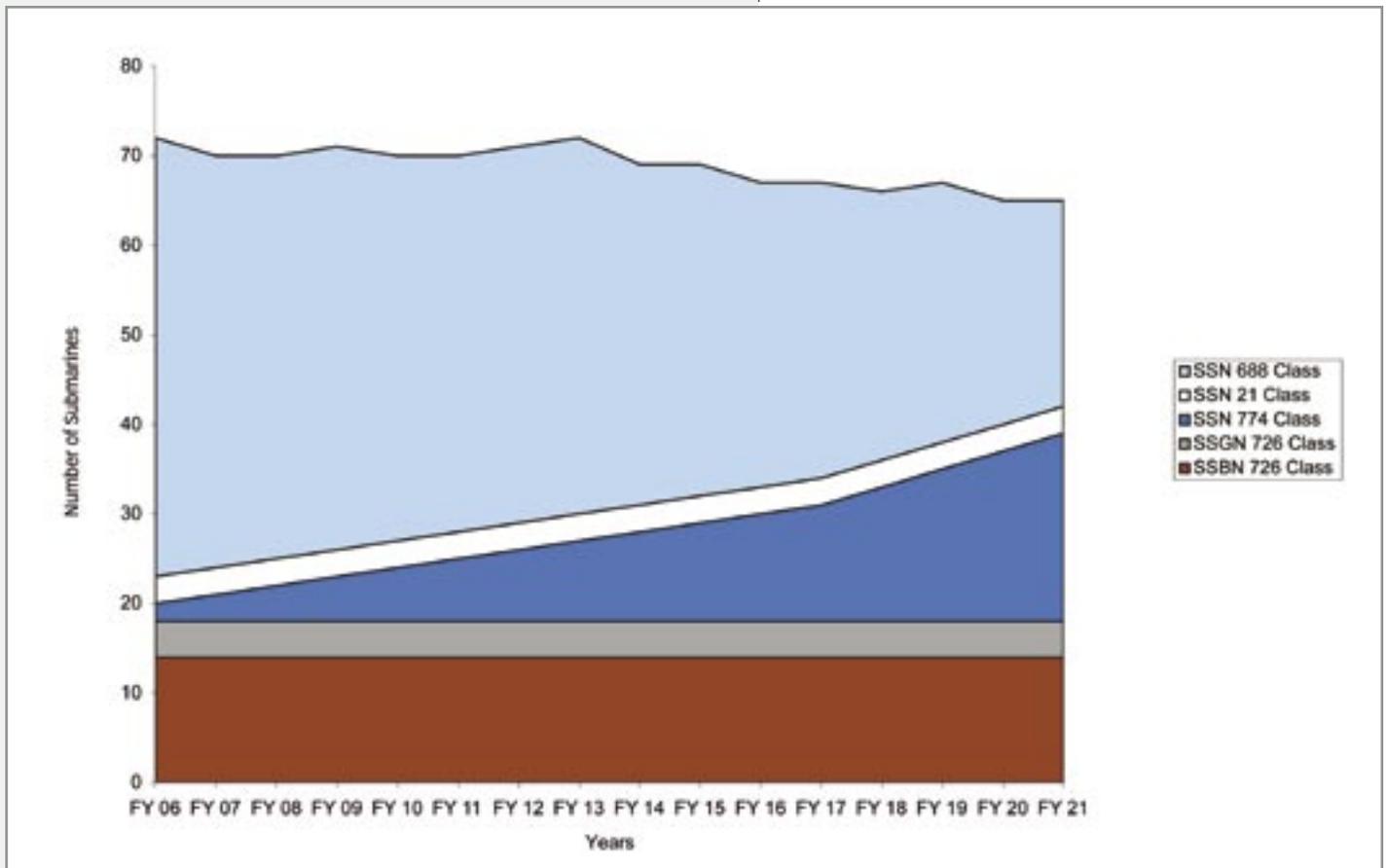
Aircraft Carrier Build Schedule



readiness metrics. The focus supported near-term solutions, i.e., buying supplies and parts as opposed to integrating all support elements in a longer-term framework. To deal with these problems, in August 2001 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: the Naval Aviation Readiness Integration Improvement Program (NAVRIIP). 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. Since then, 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 in-theater warfighters supporting Operation Enduring Freedom and Operation Iraqi Freedom.



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





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 requires a comprehensive approach to sustain access to training ranges. Inadequately 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. We continue to develop processes and procedures to allow our troops to train as they fight.

Through the processes and procedures, the 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

Figure 4: Surface Warship Projections

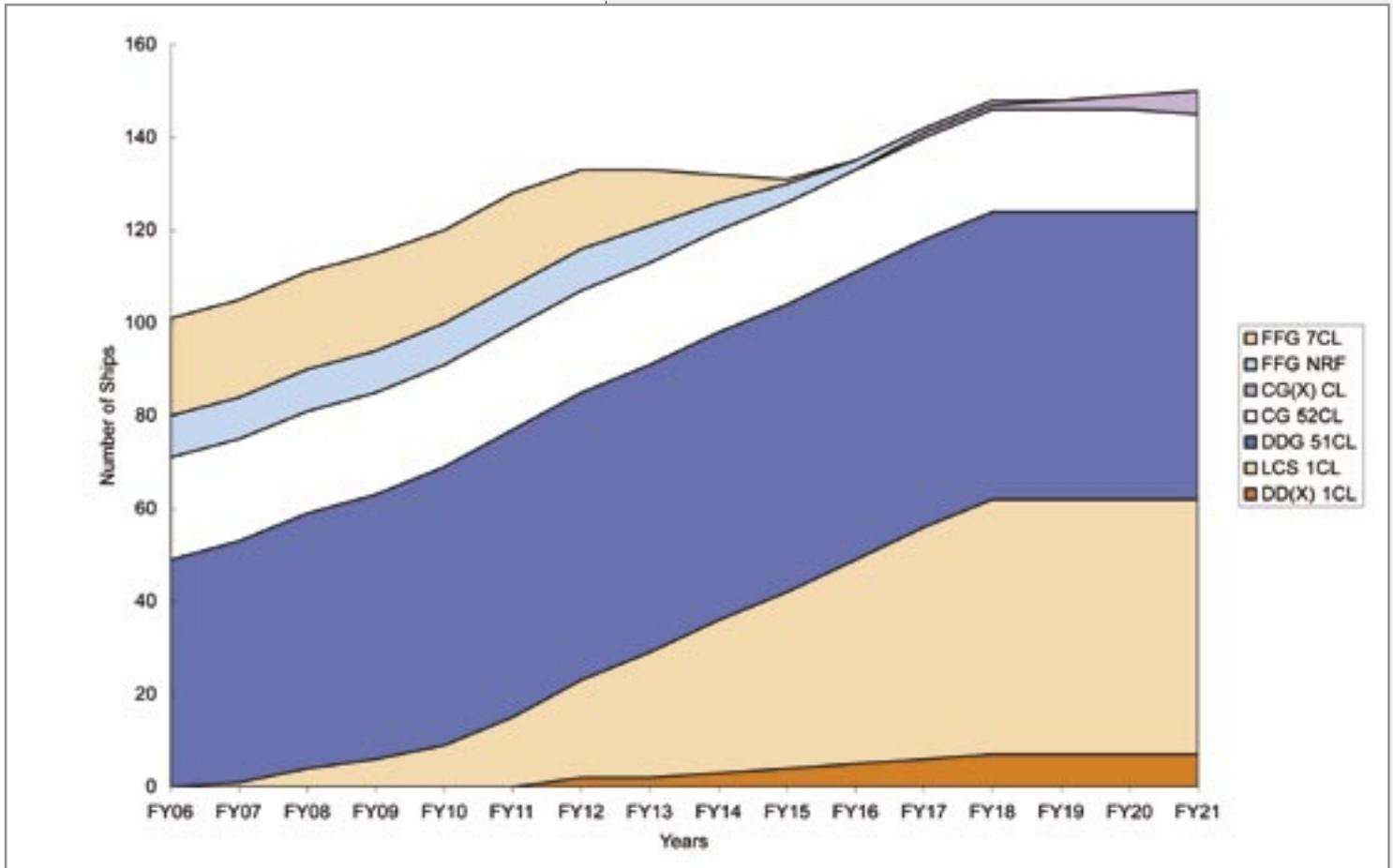
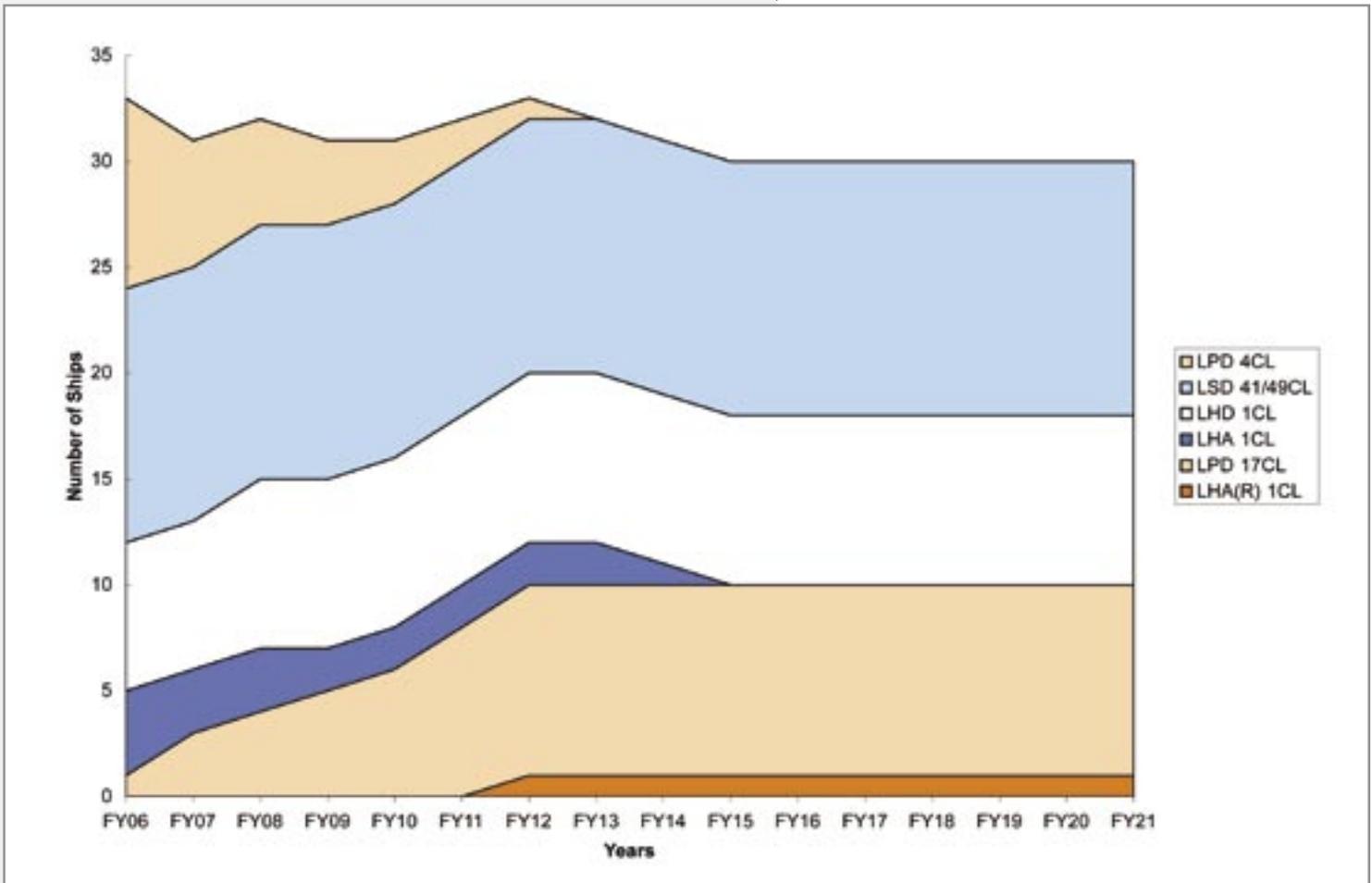


Figure 5: Amphibious Ship Projections



meet training and operational challenges. The Navy and Marine Corps will continue demonstrating leadership in both their military readiness role and as environmental stewards of the oceans and the lands on which we train and operate. 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.

Although sustaining current operational readiness and maintaining aging equipment and infrastructure are top priorities, modernizing our forces is a growing concern. The need to pay for current readiness must first be balanced with the initiatives to improve and ultimately replace the equipment we have in the fleet today. Adequate readiness can be sustained in the future only 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 and supporting future modernization and recapitalization.

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, particularly in information technologies that are the “backbone” of our advanced systems, 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.

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 for 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 with a focused and expanded program to maintain naval superiority throughout the first half of the 21st Century. The Navy has reinvigorated an aggressive effort to realign its shore establishment to 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.

Figure 6: FY2007 - 2013 Aircraft Procurement Plan

	FY07	FY08	FY09	FY10	FY11	FY12	FY13
F-35 Joint Strike Fighter	0	6	8	18	19	40	42
F/A-18E/F Super Hornet	34	24	20	24	19	21	0
EA-18G	8	18	22	18	8	2	0
E-2C/D Hawkeye	2	0	3	3	4	4	4
MH-60R Seahawk	25	27	31	28	28	25	27
MH-60S Seahawk	18	18	18	18	18	18	18
P-8A Maritime Multi-Mission Aircraft	0	0	0	6	8	10	13
KC-130J Hercules	3	4	2	2	2	2	2
MV-22 Osprey	14	21	30	30	30	30	30
VXX Executive Transport Helicopter	0	0	4	3	4	4	4
UH-1Y/AH-1Z Super Cobra/Huey	11	20	25	28	28	24	24
T-45 Goshawk	12	0	0	0	0	0	
T-6A Texan II JPATS	20	44	44	44	43	43	22
C-40 Clipper	0	0	1	0	1	1	1
C-37B	0	0	0	0	0	0	
Broad Area Maritime Surveillance UAV	0	0	0	0	0	4	4
VTUAV Fire Scout	4	3	5	6	6	9	10
F-5 TacAir Aggressor	5	0	0	0	0	0	0
Total	156	185	213	228	218	237	203

MEETING TODAY'S AND TOMORROW'S NEEDS

Future operations require two primary attributes for 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. And, 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 have still more to do to generate the resources to implement the *Sea Power 21* vision. Innovation, elimination of unnecessary costs, and increasing efficiency and effectiveness have and will help us find those resources.

Our mobility, adaptability, variable visibility, 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, and supporting freedom and stability throughout the world. 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.

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* be realized.



Figure 7: FY 2007-2013 Shipbuilding Plan

	FY07	FY08	FY09	FY10	FY11	FY12	FY13
CVN 21 Next-Generation Aircraft Carrier	0	1	0	0	0	1	1
CG(X) Next Generation Cruiser	0	0	0	0	1	0	0
DDG 51 Arleigh Burke Class	0	0	0	0	0	0	0
DD(1000) Next-Generation Destroyer	2	0	1	1	1	1	1
LCS Littoral Combat Ship	2	3	6	6	6	6	6
SSN 774 Virginia Class	1	1	1	1	1	2	2
LPD 17 San Antonio Class	0	1	0	0	0	0	0
LHD/LHA(R) Amphibious Assault Ship	1	0	0	0	0	0	0
T-AKE Lewis and Clark Cargo/ammunition Ship	1	1	0	0	0	0	0
Maritime Prepositioning Force Future (MPF(F))	0	0	2	3	3	1	1
T-ATF Fleet Ocean Tug	0	0	0	0	0	0	0
JCC (X) Joint Command Control	0	0	0	0	0	1	1
JHSV Joint Highspeed Vessel	0	0	1	1	1	0	0
Total	7	7	11	12	13	12	12

