

Highlights of the Department of the Navy FY 2010 Budget Table of Contents

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The Highlights of the Department of the Navy FY 2010 Budget

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SECTION I – SETTING A COURSE FOR BALANCE

OVERVIEW

The Department of the Navy (DON) Fiscal Year 2010 budget supports the diverse challenges of a dynamic global environment. A worldwide presence, credible deterrence, the ability to project power from naval platforms anywhere on the globe, and the ability to prevail at sea are the basic tenets of the strategic maritime posture.



The FY 2010 budget reflects lessons learned in Iraq and Afghanistan, while also addressing the range of other potential threats around the world, now and in the future. The recommendations are the product of a holistic assessment of capabilities, requirements, risks and needs, and represent those things that are truly necessary for current and future missions. We have made difficult decisions to ensure we have included only those items that are truly necessary in light of the threats America faces and the missions we are likely to undertake in the years ahead. We have delayed certain programs, such as the CG-X next generation cruiser, the Mobile Landing Platform (MLP) ship, and the eleventh Landing Platform Dock (LPD) ship, in order to revisit our costs, requirements and acquisition strategy. We have terminated the VH-71 Presidential helicopter, for which requirements and the technologies are not reasonably affordable and available. For the same reasons, we intend to end the DDG-1000 program and restart the DDG-51 line. Conversely, we have increased funding for military personnel and their families, ensuring that military end strength, medical research, health programs, and family support are fully funded in the base budget.

Our nation's maritime forces operate closely with other joint forces, allies, and coalition partners, delivering the main tenets of our *Cooperative Strategy for 21st Century Seapower*: protecting the homeland, preventing conflicts, and when necessary, winning our Nation's conflicts. Today's Navy and Marine Corps team maintains its active contribution to



continuing overseas contingency operations, and remains committed to supporting non-traditional joint requirements in Iraq, Afghanistan, the Horn of Africa, and other locations worldwide. The stability of the global environment as well as the security and prosperity of our own nation are directly linked. The bulk of the world's products continue to move by sea in an environment where security challenges are increasingly transnational.



Piracy is an international problem and requires an international solution. The U. S. Navy will continue to function as part of a larger international endeavor combining efforts of governments, militaries and maritime industry to stop piracy on the high seas. The Navy remains engaged in counter-piracy operations as part of longstanding efforts to combat crime on the high seas.

Disruptions to this global system of trade, finance, law, information, and immigration can produce cascading and harmful effects far from their sources. Forward presence makes the Navy and Marine Corps our nation's ready force, globally postured to dissuade, deter and, if required, defeat others' efforts to disrupt international stability.

DEPARTMENT OF THE NAVY STRATEGY

Our cooperative maritime strategy articulates the capabilities of forward presence, deterrence, power projection, sea control, maritime security, humanitarian assistance



and disaster response that our naval forces provide to ensure the security and prosperity of our nation and its people. Together, the Navy and Marine Corps constitute the nation's forward rotational force, with Navy and Marine Corps units operating globally at sea and on land. Our persistent forward presence and flexibility have made us the nation's ready response team, able to deliver capability where

needed on short notice. In today's uncertain environment, engaging foreign counterparts becomes even more important. Our ability to prevent conflict by direct interaction is essential to the nation's security. The *Cooperative Strategy for 21st*

Century Seapower outlines certain capabilities which comprise the core of U. S. maritime power and reflect an increase in emphasis on those activities that prevent war and build partnerships – forward presence, deterrence, sea control, power projection, maritime security, humanitarian assistance and disaster relief. In recent years, the sea services have begun to expand these core capabilities to achieve a balanced blend of peacetime engagement and major combat operations capabilities.

FORWARD PRESENCE

Maritime forces must be forward deployed, and our FY 2010 budget supports a forward posture and readiness to ensure an agile and timely response. An uncertain strategic environment places a premium on multi-purpose forces that possess the ability to easily integrate the efforts of diverse partners. Worldwide operational activities include drug interdiction, joint maneuvers, multi-national training exercises, and humanitarian assistance. Operations may also include contingency operations when called upon, such as in the Arabian Gulf, the Balkans, Afghanistan/Northern Arabian Sea (Operation Enduring Freedom), and Iraq (Operation Iraqi Freedom). On any given day, our naval forces are deployed to locations around the world, ready to answer the nation's call.

DETERRENCE

Preventing conflicts is preferable to fighting wars, and deterrence must be viewed globally, regionally, and trans-nationally, via conventional, unconventional, and nuclear means. Effective theater security cooperation activities are a form of extended deterrence, creating security and removing conditions for conflict. Maritime ballistic missile defense enhances deterrence by providing an umbrella of protection to forward-deployed U. S. forces and partners, while contributing to the larger architecture planned for defense of the United States. Further, our advantage in space systems – upon which much of our ability to operate in a networked, dispersed fashion depends – must be protected and refreshed.

SEA CONTROL AND POWER PROJECTION

The ability to operate freely at sea is one of the most important elements of joint and interagency operations, and sea control requires capabilities in all aspects of the maritime domain, including space and cyberspace. The growing number of nations operating submarines is among the most significant challenges to our ability to exercise sea control. We will not permit an adversary to impede the United States

and our allies from freedom to maneuver on the seas and access to vital sea-lines of communication and commerce. The Department's ability to overcome challenges to access while simultaneously projecting and sustaining power ashore is the basis of our combat credibility. Our advantages will continue to be sustained through properly sized forces, innovative technologies, understanding of adversary capabilities, adaptive joint planning processes and the proficiency and ingenuity of our Sailors and Marines. This budget supports maintaining a robust strategic sealift capability to rapidly concentrate and sustain forces, and to enable joint and/or combined campaigns. This capability relies on maintaining a strong U. S. commercial maritime transportation industry and its critical intermodal assets.

MARITIME SECURITY



The creation and maintenance of maritime security is essential to mitigating threats short of war, including piracy, terrorism, weapons proliferation, drug trafficking, and other illicit activities. While our FY 2010 budget supports meeting this challenge, the future of maritime security depends more than ever on international cooperation and

understanding. The U. S. Navy continues to function as part of a larger international endeavor combining efforts of governments, militaries, and maritime industry to maintain security on the high seas. For example, in response to the increase in piracy off the Somali coast, the Navy is leading a multinational effort to patrol the waters near the Horn of Africa. A combined task force has been established to deter, disrupt and suppress piracy in support of United Nations Security Council Resolution 1851, protect the global maritime environment, enhance maritime security and secure freedom of navigation for all nations.

There is no one nation that can provide a solution to maritime security problems alone. A global maritime partnership is required that unites maritime forces, port operators, commercial shippers, and international, governmental and non-governmental agencies to address our mutual concerns. This partnership increases all of our maritime capabilities, such as response time, agility and adaptability, and is purely voluntary, with no legal or encumbering ties. It is a free-form, self-organizing network of maritime partners – good neighbors interested in using the power of the sea to unite, rather than to divide.

HUMANITARIAN ASSISTANCE AND DISASTER RESPONSE (HADR)

Building on relationships forged in times of relative tranquility, we continue to offer humanitarian assistance as the vanguard of interagency and multinational efforts, both in a deliberate, proactive fashion and in response to crises. Since 2004, the Navy has conducted 10 HADR missions, seeing over 300,000 patients and performing more than 3,000 operations. In



In 2008, the U. S. Naval hospital ship *USNS Mercy* led a four-month Pacific Partnership mission during which medical and construction teams assisted the government of the Federated States of Micronesia in providing local communities with various medical, dental and engineering civic action programs providing focused humanitarian assistance. During the deployment, 90,000 patients were treated by medical teams from the *Mercy*, more than 1,300 surgeries were conducted and 14,000 people got dental help. Navy SeaBees completed 26 construction projects, ranging from the construction of a waste water treatment facility in the Philippines to the construction of a community center in Papua, New Guinea.

Another four-month humanitarian mission was undertaken by the *USS Kearsarge* to Trinidad and Tobago, Nicaragua, Panama, Colombia, Dominican Republic, and Guyana. As part of Operation Continuing Promise, the *Kearsarge* brought some 300 Navy and Marine Corps personnel to provide much needed medical care, surgeries, educational and economic assistance to these Latin American countries. The *Kearsarge* was positioned to respond rapidly after Hurricane Hanna devastated the island of Haiti, delivering more than 1.9 million pounds of supplies, including 24,800 gallons of water, to hard-hit regions of the country.



Already at sea when Hurricane Ike struck the coast of Texas, the *USS Nassau* and her MH-60S helicopters proceeded to Galveston Island to assist the Federal Emergency Management Agency (FEMA) in providing disaster relief. In addition to her helicopters, the *Nassau* embarked landing craft utilities (LCU), a beachmaster unit, disaster relief team, fleet surgical team, and helped deliver a significant amount of water, food and other emergency relief supplies. This ship and her more than 1,000 highly-skilled Sailors and Marines, who train continually to deploy on short notice

are fully capable of supporting a variety of missions, including humanitarian assistance, debris removal, emergency medical support, and transportation of supplies.

Also during 2008, Navy and Coast Guard ships brought humanitarian aid to a strategic Georgian port that was devastated in the conflict between Russia and Georgia. The series of aid shipments not only provided much needed food and supplies to the Georgian people; it also demonstrated U.S. support for Georgia in the conflict. Despite Russian criticism of the United States for using military ships in this role, the mission remained humanitarian in nature.



The Marine Corps has also contributed greatly to the naval HADR effort. During Operation Sea Angel II, detachments of three Marine Expeditionary Units (MEUs) quickly rendered humanitarian assistance after Bangladesh was devastated by Cyclone Sidr. Additionally, as a result of Cyclone Nargis striking Myanmar, elements of the 31st MEU were poised to render assistance via transport of aerial-delivered supplies. Finally, here at home, the Marines of 3rd Marine Air Wing supported fire fighting efforts during the wildfires in Southern California.

Implementation of this cooperative strategy requires that the Navy and Marine Corps demonstrate flexibility, adaptability and unity of effort in evolving to meet the enduring and emerging challenges and opportunities ahead. Specific initiatives in support of this strategy must be vetted and tested through experimentation, wargaming, and continued operational experience.

OBJECTIVES AND PRIORITIES

The Department's transformational objectives will provide real benefit to the Nation in the fulfillment of our responsibilities to maintain a capable Navy and Marine Corps as we build towards a new national and transnational seapower strategy. Major objectives and transformation initiatives are summarized below.

PREVAILING IN CONTINUING OVERSEAS CONTINGENCY OPERATIONS

- ***Maintaining Preparedness for a Wide Range of Contingencies.*** An uncertain strategic environment places a premium on multi-purpose forces that possess the ability to easily integrate the efforts of diverse partners. Tactically flexible, strategically agile, and scalable to the situation, the Marine Air-Ground Task Force (MAGTF) — the fundamental Marine fighting organization — has proven to be of exceptional value across a wide range of military operations. While today’s fight takes place in particular places and under certain conditions, tomorrow’s fight will almost certainly require a different mix of capabilities in a different operational environment. By ensuring it remains organized, trained and equipped to serve anywhere, at any time, the Marine Corps can meet its goal to “be the most ready when the Nation is least ready.”
- ***Maritime Domain Awareness.*** The FY 2010 DON budget continues efforts to develop an enhanced capability to identify threats within the maritime domain as early and as distant from our shores as possible by integrating intelligence, observation, and navigation systems into a common operating picture accessible throughout the United States government. The Maritime Domain Awareness initiative combines the efforts of federal, state, and local governmental agencies, international governments, non-governmental organizations, and commercial and private enterprises to create an understanding of anything associated within the global maritime domain that could impact the security, safety, economy, or environment of the United States.
- ***Force Structure Changes.*** The Department continues to rebalance efforts from capabilities optimized primarily to overwhelm traditional challenges, toward the force capabilities needed to defeat irregular threats. In the contemporary strategic environment, the challenge is one of deterring or dissuading a range of potential adversaries from taking a variety of actions against the United States and our allies and interests. The LCS will influence behavior and deter adversaries by its ability to operate in environments previously impractical for larger multi-mission ships. The LCS program delivered its first ship USS Freedom in September 2008 and the Department has budgeted for procurement of three more LCSs and two mission module packages in FY 2010. The increased procurement of Intelligence, Surveillance and Reconnaissance Unmanned Aerial Vehicles and other programs also reflect a

shift to meet today's challenges. We must continue to tailor deterrence to fit particular actors, situations, and forms of warfare. When called upon we must position ourselves to defeat enemies employing a combination of capabilities, conventional and irregular, kinetic and non-kinetic, across the spectrum of conflict. Rogue states will remain a threat to U. S. regional interests, and we must maintain the capabilities required to defeat such adversaries, including those armed with weapons of mass destruction.

TAKING CARE OF OUR SAILORS, MARINES, FAMILIES, AND WOUNDED

- ***A naval force fully prepared for employment.*** The Navy and Marine Corps team helps ensure the joint force has the ability to gain access to denied areas from great distances, even in the face of determined adversaries and despite increasing diplomatic, political, and cultural challenges. By emphasizing our naval forces' command of the sea, we remain ready to perform both immediate and extended operations "without a permission slip," even in austere environments, and with forces designed to efficiently scale up or down in size whenever necessary. By continuing to invest in the inherent flexibility of our Naval forces, we will continue to provide joint force commanders with multiple options to project, protect, and influence.
- 
- ***Safeguarding the people and resources of the Navy-Marine Corps team.*** The Department of the Navy continues to focus on sizing, shaping and stabilizing the total naval force to apply the right skill sets to projected requirements in the most cost efficient manner. Development and retention of quality people are vital to our continued success. America's naval forces are combat-ready largely due to the dedication and motivation of our individual Sailors, Marines, and civilians.
 - ***Growing the Force.*** To support the Marine Corps' demanding deployment tempo, the Marine Corps has accelerated growth to 202,100 end strength by FY 2009, two years ahead of the FY 2009 President's Budget plan. This additional end strength builds capacity to respond to a full range of military operations, balances the Corps' operational forces and will improve deploy-

to-dwell ratios. Achieving this growth ensures that Marines have the time to train for the full range of contingency operations. The Marine Corps continues to emphasize priorities that ensure success of the Grow the Force initiative by increases in force structure and facilities, and transformational shifts in training support.

- ***Supporting overseas contingency efforts with Individual Augmentees (IAs).*** IAs are making a significant impact in more than 16 countries around the world. They are assigned individually, rather than as part of a traditional unit, to fill shortages or provide specialized knowledge or skill sets. IAs have been assigned in Afghanistan, Iraq, Kuwait, Djibouti, Germany, Cuba, Bahrain, Qatar, Colombia, Philippines, Japan, United Arab Emirates, Sudan, Bosnia, Oman and Pakistan. Approximately 47 percent of the forces the U. S. Navy has serving on the ground in Iraq and Afghanistan are IAs. They provide commanders with mission-tailored, globally distributed forces. The Navy identifies both active and reserve service members with specific skill sets to fill IA roles, and the Marine Corps relies principally on activated reserve members to fill IA positions vacated by forward-deployed active component Marines.
- ***Strengthening cultural awareness and language capabilities.*** The Navy and Marine Corps team continues to focus significant effort on transforming and enhancing its expertise in foreign language, regional expertise and cultural awareness. A language, regional expertise and culture strategy that galvanizes and aligns related efforts across the total naval force has been implemented. The strategy includes surveying the workforce for existing language proficiency, increasing bonuses for language competencies, focusing efforts on heritage recruiting, establishing a new Foreign Area Officer community, and implementing training and education programs relating to regional issues. Additionally, the Department of the Navy has implemented mandatory foreign language screening at military accession points, and expanded eligibility requirements for the Foreign Language Proficiency Bonus.

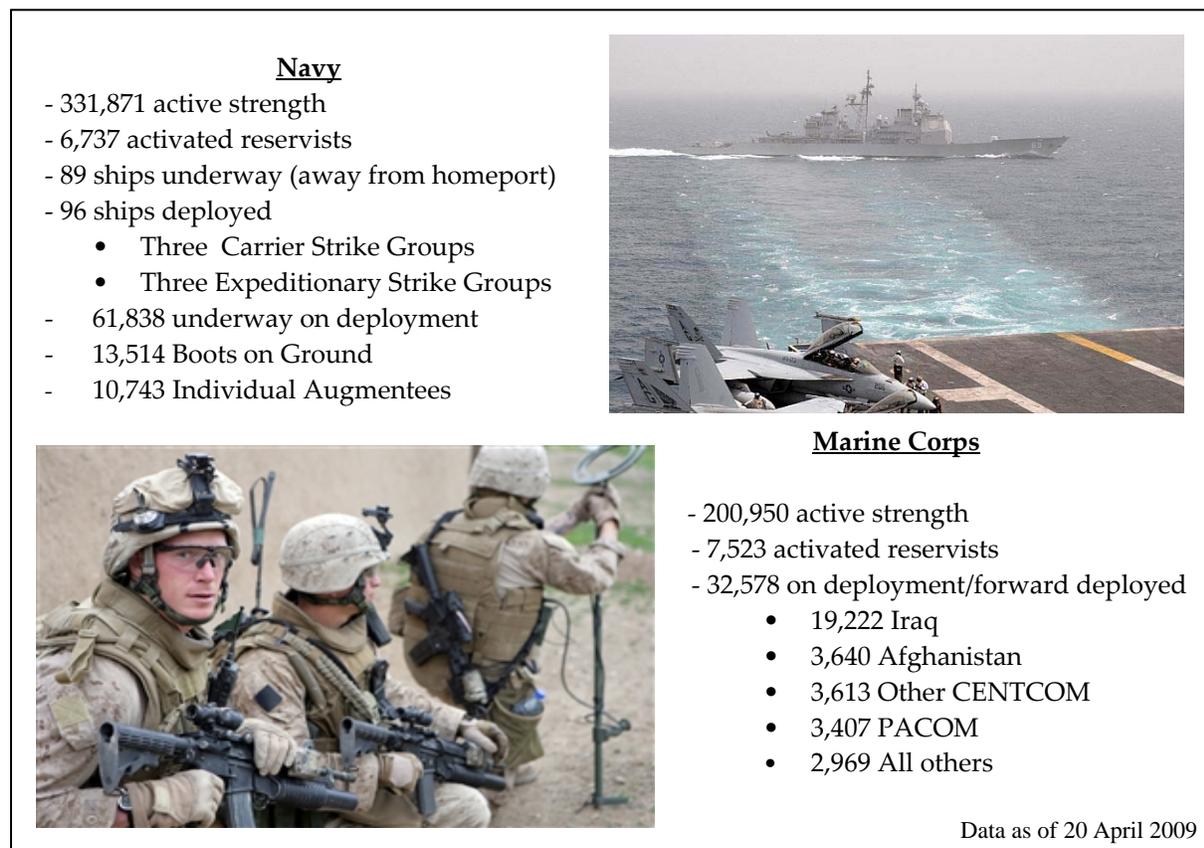


PREPARING FOR FUTURE CHALLENGES

While transformational objectives have not waived, our efforts have often been limited by resources. It is imperative that we continue to prioritize and focus these activities. Fully resourcing forward deployed naval forces to optimize engagement potential is the most cost effective method of increasing presence and partnership building efforts. The FY 2010 budget addresses these concerns by funding baseline requirements, investing resources in acquisition programs, and providing readiness levels consistent with the need to maintain forward deployed forces. Marine Corps Grow the Force (GTF) support increases in FY 2010, with funding for BEQ construction, additional utilities, training and administrative space and operating force support.

Figure 1 Reflects Navy/Marine Corps operations as of 20 April 2009.

Figure 1- Status of Navy and Marine Corps Forces



Data as of 20 April 2009

Support of the Department of the Navy FY 2010 budget is critical to achieving its mission and to supporting the 21st century seapower strategy. Our FY 2010 budget supports a forward posture and readiness for agile response. It positions us to play an integral role in global maritime security and humanitarian efforts, alongside other federal and international agencies. Readiness is properly priced and funded to meet the demand of our Combatant Commanders. Manpower adjustments align the Department's ongoing total force manpower to mission objectives. Warfighting capability investments focus on increasing support to combat operations. The DON is funded to procure 8 ships and 203 airplanes in FY 2010. It supports the right size force, trained and ready for tasking in any part of the world to meet both traditional and irregular threats in the global maritime domain.

RESOURCE SUMMARY

The FY 2010 budget reflects a balance between keeping today's force ready while modernizing and transforming for the future. Total Obligational Authority for the FY 2010 Department of the Navy budget is \$156.4 billion, as displayed in Figure 2 by appropriation title.

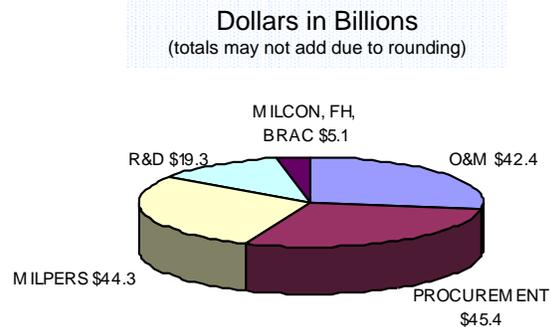


Figure 2 - FY 2010 Budget by Appropriation Title

The procurement accounts represent the largest single portion of the Navy's FY 2010 budget and address the Department's equipment needs. This budget begins the process of ensuring that our contemporary wartime requirements receive steady long-term investment funding similar to our conventional modernization programs. Programs are funded which support irregular warfare and capacity building. For example, LCS and ISR reflect a shift of resources toward supporting current conflicts and other potential irregular campaigns. Funding for Operation and Maintenance programs such as Ship Operations, Flying Hours, Air and Ship Depot Maintenance, and Service-wide Support make up the largest portions of the O&M budget. Military Personnel and Military Construction reflect the USMC Grow the Force initiative, infrastructure sustainment, and Family Readiness/Wounded Warrior programs.

Figure 3 displays individual Department of the Navy appropriation estimates for FY 2008 through FY 2010. As funding for overseas contingency operations has decreased from FY 2008 to FY 2010, the DON baseline has increased.

Figure 3**APPROPRIATION SUMMARY FY 2008 - FY 2010**

<i>(In Millions of Dollars)</i>	FY 2008	FY 2009	FY 2010
Military Personnel, Navy	23,422	24,038	25,504
Military Personnel, Marine Corps	10,290	11,793	12,916
Reserve Personnel, Navy	1,800	1,856	1,938
Reserve Personnel, Marine Corps	580	585	618
Health Accrual, Navy	1,935	1,771	1,826
Health Accrual, Marine Corps	1,116	1,053	1,136
Health Accrual, Navy Reserve	266	240	234
Health Accrual, Marine Corps Reserve	142	134	129
Operation & Maintenance, Navy	33,502	33,476	35,070
Operation & Maintenance, Marine Corps	4,733	5,453	5,536
Operation & Maintenance, Navy Reserve	1,147	1,242	1,279
Operation & Maintenance, Marine Corps Reserve	229	211	229
Environmental Restoration, Navy	0	290	286
Aircraft Procurement, Navy	12,380	14,100	18,378
Weapons Procurement, Navy	3,082	3,283	3,453
Shipbuilding & Conversion, Navy	13,177	13,016	13,777
Other Procurement, Navy	5,269	5,235	5,661
Procurement, Marine Corps	2,237	1,373	1,601
Procurement of Ammunition, Navy & Marine Corps	1,054	1,082	841
Research, Development, Test & Evaluation, Navy	17,906	19,672	19,271
National Defense Sealift Fund	1,340	1,666	1,643
Military Construction, Navy & Marine Corps	2,221	3,333	3,763
Military Construction, Naval Reserve	64	57	64
Family Housing Construction, Navy & Marine Corps	295	380	146
Family Housing Operations, Navy & Marine Corps	380	376	368
Base Realignment and Closure	648	1,031	760
Navy Working Capital Fund	14	2	0
SUBTOTAL	\$139,236	\$146,748	\$156,428
Overseas Contingency Operations	25,541	17,038	15,283
TOTAL	\$164,777	\$163,786	\$171,711

Note: Does not include American Recovery and Reinvestment Act funding. See Figure 4 and Section VIII, Figure 48 for Recovery Act details. FY 2009 column includes \$1,030M fuel rescission.

Figure 4

AMERICAN RECOVERY AND REINVESTMENT ACT APPROPRIATION SUMMARY

	FY 2009
<i>(In Millions of Dollars)</i>	
Military Construction	280
Facility Sustainment	
Navy	657
Marine Corps	114
Navy Reserve	55
Marine Corps Reserve	40
RDTEN	75
TOTAL	\$1,221

Economic strength is an essential ingredient to sustaining military capabilities. The Department is committed to carrying out the projects funded by the Recovery Act. The Department's selection of projects to be funded took into consideration the condition of facilities needed to house members returning from Iraq and Afghanistan, as well as the stated goals for starting and completing the projects expeditiously.

Military Construction - \$280M. Multiple projects will construct and modernize child development centers and barracks across the United States. Also, to increase energy efficiency, steam lines will be replaced and/or repaired throughout the mid-Atlantic region. Another project will include the installation of photovoltaic systems in Hampton Roads which will convert solar energy directly into useable electricity.

Facility Sustainment, Restoration and Modernization - \$866M. There are a broad range of projects throughout the United States that will be funded through this effort. A few examples of such projects are repairs to various wharfs, piers and dry-docks as well as improvements to runways, taxiways and aircraft hangers. There will also be upgrades and adjustments to HVAC systems and airfield lighting.

Research and Development - \$75M. There are four R&D project categories: Fuel Optimization for Mobility Platforms, Facility Energy Initiatives, Domestic Energy

Supply/Distribution, and Tactical Power. Finding ways to be more fuel efficient is of the utmost importance to the Department. Projects include the development and testing of alternative fuels for naval tactical vehicles, including ships, aircraft and USMC combat vehicles. Isolating and testing other renewable energy resources is another project area of interest to the Navy. An example of this type of project is one that will attempt to capture thermal energy from ocean waves and translate them into useable energy for shore installations.

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SECTION II – INSTITUTIONALIZING SUPPORT FOR THE WARFIGHTER

The service and sacrifice of Sailors and Marines is a daily reminder that we are a nation at war. We continue to impose local sea control, sustain power ashore and represent a major strategic role in Iraq and Afghanistan by providing critical force protection requirements; training, equipment, and assistance to our coalition partners. To deal with these challenges we must always be ready to assume new missions—today and tomorrow. To ensure our continuing success, we must be adequately resourced to fully achieve mission goals and objectives of the Commander-in-Chief. To institutionalize requirements for today's warfighters and reduce reliance on supplemental appropriations, funding for overseas contingency operations is now part of the FY 2010 budget.



NAVY AND MARINE CORPS SUPPORT

Our overseas force posture is shaped principally by ongoing and projected operational commitments. This participation currently involves approximately 30,000 Marines conducting counterinsurgency, security cooperation, and civil-military operations in Iraq and Afghanistan. On any given day there are approximately 14,500 Sailors ashore and another 9,200 afloat throughout the U. S. Central Command region conducting riverine operations, maritime infrastructure protection, explosive ordnance disposal, combat construction engineering, cargo handling, combat logistics, maritime security, and other forward presence activities. In collaboration with the U.S. Coast Guard, the Navy also conducts critical port operations, port and oil platform security, and maritime



interception operations. Included in our globally sourced forces are over 14,000 individual augmentees serving in a variety of joint or coalition billets, either in the training pipeline or on station. As these operations unfold, the size and type of naval forces committed to them will likely evolve, thereby producing changes to the overall force posture of naval forces. Long after the significant land component presence is reduced, naval forces will remain forward.



While forward, acting as the lead element of our defense-in-depth, naval forces will be positioned for increased roles in combating terrorism. They will also be prepared to act in cooperation with an expanding set of international partners to provide humanitarian assistance and disaster response, as well as contribute to global maritime security. Expanded Maritime Interdiction Operations (EMIO) are authorized by the President and directed by the Secretary of Defense to intercept vessels identified to be transporting terrorists and/or terrorist-related materiel that poses an imminent threat to the United States and its allies

Strike operations are conducted to damage or destroy objectives or selected enemy capabilities. Recent examples include simultaneous close air support missions that are integrated and synchronized with coalition ground forces to protect key infrastructure, deter and disrupt extremist operations or hostile activities, and provide overwatch for reconstruction efforts in support of Operations Enduring Freedom and Iraqi Freedom. They have also included small, precise attacks against terrorist cells, such as the 2007 missile attacks against terrorist sanctuaries in Somalia and the April 2009 rescue of an American ship captain. Among the various strike options, our sea-based platforms are unique and preeminent capabilities that will be maintained.



This versatility and lethality can be applied across the spectrum of operations, from destroying terrorist base camps, to protecting friendly forces involved in sustained counterinsurgency or stability operations, or to defeating enemy anti-access defenses in support of amphibious operations.

We are refocusing this strategic capability more intensely in Afghanistan in an effort to counter the increasing threat of a well-armed anti-Coalition militia, Taliban, al Qaeda, criminal gangs, narcoterrorists, and any

other anti-government elements that threaten the peace and stability of Afghanistan. Our increased efforts to deter or defeat aggression and improve overall security and counter violent extremism and terrorist networks advances the interests of the U.S. and the security of the region. The FY 2009/FY 2010 contingency operations request supports the expansion of capabilities sufficient to secure Afghanistan and prevent it from again becoming a haven for international terrorism and associated militant extremist movements.

OVERSEAS CONTINGENCY OPERATIONS RESOURCING

The current request includes incremental costs to sustain operations, manpower, equipment and infrastructure repair, as well as equipment replacement. These costs include aviation and ship operations, combat support, base support, USMC operations and field logistics, as well as activated reservists and other special pays. Finally, both the FY 2009 remaining request and the FY 2010 full year request reflect the initial shift in forces from Iraq to Afghanistan. The Department of the Navy requests \$9.7 billion for the remainder of FY 2009 and \$15.3 billion for FY 2010 to support increased OPTEMPO for contingency operations. Since 2008, total funding trends reflect the Department's efforts to reduce reliance on supplemental appropriations and resonate the objectives of the Administration to exercise fiscal discipline and cast transparency upon the budget process. Figure 5 reflects the current status of FY 2008, FY 2009, and FY 2010 funding for overseas contingency operations.

Figure 5 - Department of the Navy Overseas Contingency Operations Funding Profile

Dollars in millions		FY 2008 Appropriated	FY 2009 Estimate	FY 2009 Bridge Received	FY 2009 Remaining Request	FY 2010 Request
Military Personnel, Navy (MPN)		1,307	1,430	75	1,355	1,176
Reserve Personnel, Navy (RPN)		73	39	0	39	39
Operation and Maintenance, Navy (O&MN)		6,421	5,890	3,500	2,390	6,219
Operation and Maintenance, Navy Reserve (O&MNR)		152	68	43	25	68
Aircraft Procurement, Navy (APN)		3,362	601	0	601	916
Procurement Ammunition, Navy and Marine Corps (PANMC)		86	74	0	74	217
Other Procurement, Navy (OPN)		1,616	293	28	265	318
Weapons Procurement, Navy (WPN)		293	99	0	99	74
Research, Development, Test and Evaluation, Navy (RDT&EN)		385	244	113	131	107
National Defense Sealift Fund (NDSF)		5	0	0	0	0
Navy Working Capital Fund (NWCF)		251	0	0	0	0
Family Housing Operations (FHOPS)		12	0	0	0	0
Military Construction, Navy (MCN)		125	105	0	105	0
USN Subtotal		14,088	8,843	3,759	5,084	9,134
Military Personnel, Marine Corps (MPMC)		1,796	1,475	55	1,420	671
Reserve Personnel, Marine Corps (RPMC)		17	29	0	29	31
Operation and Maintenance, Marine Corps (O&MMC)		4,523	3,991	2,900	1,091	3,702
Operation and Maintenance, Marine Corps Reserve (O&MMCR)		116	78	47	31	87
Procurement, Marine Corps (PMC)		4,076	2,204	565	1,639	1,164
Research, Development, Test and Evaluation, Navy (RDT&EN)		194	9	0	9	0
Procurement Ammunition, Navy and Marine Corps (PANMC)		500	275	0	275	494
Military Construction, Navy (MCN)		231	134	0	134	0
USMC Subtotal		11,453	8,195	3,567	4,628	6,149
DON Grand Total		25,541	17,038	7,326	9,712	15,283

Ongoing contingency operations have had a significant impact on Navy and Marine Corps equipment. Expeditionary forces, including Seabees and Explosive Ordnance Disposal, and tactical and support aircraft are experiencing much higher than expected wear-out rate of equipment. The Marine Corps experienced equipment usage rates as much as seven times greater than peacetime rates, tremendously decreasing the projected lifespan of its gear. Resetting the force will refurbish or replace equipment which has been used more extensively than originally anticipated, and replenish equipment from strategic stocks drawn to support combat forces, so as to remain responsive to emerging threats.

Past supplemental funding has mitigated most of the Marine Corps and Navy costs, but many items remain in need of repair or replacement. Funds are required to reconstitute Navy/Marine Corps forces to capability levels existing before hostile overseas operations and to provide critical capability enhancements essential to the conduct of theater missions. Included is funding which is necessary to restore units to a desired level of combat capability commensurate with the unit's future mission.

These maintenance and supply activities involve depot (sustainment) repairs/overhauls centrally managed to specified standards. Without requested funding, efforts to continue the ongoing fight and simultaneously address the postwar need to maintain future warfighting readiness will not be achieved.

Major elements of the request include:

- Personnel. The FY 2010 overseas contingencies request includes 4,400 over strength requirements for temporary overseas IA missions such as civil affairs, provincial reconstruction, training teams, detainee operations and customs inspections. The FY 2010 baseline submission supports the transition to a strength of 202,100 Marines, and no contingency funding is requested in FY 2010 for the 32,000 Marines forward deployed in support of overseas operations.
- Naval Aircraft. Funds are requested for two Marine Corps attack helicopters lost in support of OIF/OEF Theater of Operations. Additionally, funds are requested for modifications/upgrades to ensure capability is preserved, that vital force protection upgrades are installed and for new capabilities to meet operational commanders' emerging requirements.
- Marine Corps Ground Equipment. Marine Corps Ground Equipment. The Marine Corps requires funds to restore Marine Corps unit capability to pre-war levels or upgrade to a future capability required for continued operations in Afghanistan and Iraq. Funds are also requested to provide force protection upgrades and enhancements. Requested items include Expandable Capacity HMMWV (ECV), Add on Armor Protection Kits, Construction and Material Handling Equipment, Explosive Ordnance Detection (EOD) systems, and Light Armored Vehicles (LAV) and survivability enhancements.
- Navy Ground Equipment. To support the transition of Marine Corps forces to Afghanistan, funds are requested for aircraft shelters and expeditionary airfield equipment. Funds are also requested to replace equipment lost in conflict or beyond economic repair, provide for enhanced force protection gear, and deliver enhanced counter-IED equipment to EOD units.
- Weapons/Ammunition. Funds are requested to replace weapons and ammunition expended during OIF/OEF. Additionally, funds are

requested to support the arming for deployment of the KC-130J Harvest Hawk.

- Research. Funds are request to complete the Saber Focus demonstration project, integrate the Scan Eagle platform into submarine operations, and for classified activities.

SECTION III - SHAPING A FULL-SPECTRUM NAVAL FORCE

OVERVIEW

The Department is committed to taking care of our total force, which includes our sailors, Marines, and civilians by sustaining quality of service/quality of life programs, including training, compensation, and promotion opportunities, health care, housing, and reasonable operational and personnel tempo. Quality of life and quality of service are key factors in attracting and retaining highly-motivated and qualified personnel. The Department continues to focus on three fronts: recruiting the right people, retaining the right people, and achieving targeted attrition. We continue to dedicate resources to those programs best suited to ensuring the proper combination of grade, skill, and experience in the force – the *right* person for the *right* job at the *right* time and positioned with the *right* education and the *right* skills. Although some adjustments to and within both Navy and Marine Corps strength continue, the Department will reach a point of relative stability in FY 2010 compared to recent periods.

Military personnel FY 2010 budget estimates include a basic pay raise of 2.9 percent. We have funded various bonus programs to ensure success in meeting budgeted strength levels, but at reduced levels based on the current recruiting and retention environment. As a result of increased efficiencies ashore and a reduction in force structure, the Navy continues to budget for reduced strength levels in FY 2010 as we shape the force. All core DON missions can be accomplished at this level as a result of force structure changes, efficiencies gained through technology, altering the workforce mix, and new manning practices. Additionally, work continues on providing core naval competencies throughout the total force. The Marine Corps baseline strength will complete its growth. The training of sailors, Marines, and the civilian workforce is critical to the implementation of transformational initiatives, delivering qualified personnel to the right place at the right time. The Department is transforming the naval personnel force by creating modern human resource systems to achieve the objectives of *Sea Power 21* and *the Commandant's Planning Guidance*. Using advanced technologies, the Department is shifting from the traditional schoolhouse/classroom approach to the use of simulators, trainers, computer-based interactive curriculums, and other media-based approaches. This initiative provides the total force with appropriate training, accommodates the demand in a more efficient manner, and identifies and delivers personnel capable of performing critical tasks to a leaner, more

complex Navy. Recruiting and retention is projected to meet Navy and Marine Corps requirements, with particular focus on active and reserve components “low density/high demand” skill sets such as Naval Special Warfare, Seabees, reconnaissance Marines, explosive ordnance disposal, and medical specialties.

The total naval workforce is shaped and optimized to support the National Defense Strategy. America’s naval forces are combat-ready because of the dedication and motivation of our sailors, Marines, and DON civilian workforce. The Navy and Marine Corps team engage in overseas contingency operations by providing the Combatant Commanders with skilled forces capable of operating within a full spectrum of scenarios. The Navy/Marine Corps team, in partnership with the United States Coast Guard (USCG), has expanded homeland defense initiatives through the development of a Maritime Domain Awareness (MDA) concept of operations and the establishment of Sector Command Center-Joint (SCC-J). SCC-J is an organization that incorporates Navy personnel into the USCG Sector Command Centers in Navy fleet concentration areas to coordinate operations and planning for MDA. This maritime strategy emphasizes the traditional capabilities of forward presence, deterrence, sea control and power projection as well as maritime security and the provision of Humanitarian Assistance and Disaster Response (HADR). The development and retention of quality personnel are vital to maintaining an agile and flexible force that can not only contribute to winning our nation’s wars but also can assist in preventing future conflict to the extent possible – whether by dissuasion, deterrence, humanitarian action or disaster relief.

MILITARY PERSONNEL

Active Navy Personnel



We have invested in recruiting, retaining, and training Naval personnel to create an environment that offers opportunity, promotes personal and professional growth, and provides the kind of workforce needed for the 21st century. Our vision is a Naval manpower, personnel, training and education system that targets and attracts the right talent, then trains, develops, equips and motivates these men and women throughout a career of naval service. Navy total force readiness will be enhanced by focusing on sailor readiness. The force

will be sized, shaped and stabilized by focusing on Navy as a sea-centric force. While active Navy personnel support a capabilities-based force in each of the joint capability areas, the vast majority of our active Navy personnel is essential to either force application or force support. Forty-two percent of Navy personnel are employed in Force Application, the ability to integrate the use of maneuver and engagement in all environments to create the effects necessary to achieve mission objectives. Thirty-six percent of Navy personnel are engaged in force support, the ability to establish, develop, maintain and manage a mission-ready total force and provide, operate and maintain capable installation assets across the total force to ensure needed capabilities are available to support National security. Our strategy for the future will be guaranteed by focusing on developing policies that bring forth the promise of our people, thereby ensuring full development of their personal and professional capabilities.

The Department's mission is to organize, train, maintain, and equip combat-ready naval forces capable of: engaging in overseas contingency operations and any other conflict; deterring aggression by would-be foes; preserving freedom of the seas; and promoting peace and security. The most important element in carrying out our mission is people. It is because of their efforts that we are making progress fostering maritime security, defeating terrorist networks, progressing toward a stable Iraq, supporting the Afghan government, countering piracy and the proliferation of deadly technology, giving humanitarian assistance to people in need and strengthening partnerships around the world.

The Navy provides approximately 12,756 sailors in the form of Individual Augmentees (IAs) to fulfill the OCO mission requirements of the Combatant Commanders (COCOMS). They provide commanders with mission-tailored, globally distributed forces. As IAs, they fulfill vital roles, serving in non-traditional missions such as provincial reconstruction teams, detainee operations, civil affairs, training teams, customs inspections, counter IED, and combat support. The Navy's FY 2010 baseline budget request includes 2,700 permanent end strength in support of adaptive core IA missions. The FY 2010 overseas contingencies request includes 4,400 over strength requirements for temporary overseas IA missions such as civil affairs, provincial reconstruction, training teams, detainee operations and customs inspections. The remaining 5,656 Navy IAs are mobilized reserve requirements which are addressed in the FY 2010 overseas contingencies request. These missions include IED and combat support, base operations, medical support and intelligence.

Our service members bring dedication, patriotism, strength, talent, unity of effort, and cultural diversity to our Navy. People are the catalysts for our success. Figure 6 displays active Navy end strength for FY 2008 through FY 2010.

Figure 6 - Active Navy Personnel Strength

	FY 2008	FY 2009	FY 2010
Officers	51,383	51,444	52,023
Enlisted	276,397	274,629	272,427
Midshipmen	4,448	4,410	4,350
Total: Strength	332,228	330,483	*328,800

*Includes 4,400 strength requested for overseas contingency operations

The *Strategy for Our People* ensures we have the best and brightest on our team. Our strategy outlines six goals for achieving a total Navy force of Sailors that is the right size and possesses the right skills to best meet the needs of the Navy. These six goals are: capability-driven manpower, a competency-based workforce, effective total force, diversity, being competitive in the marketplace and being agile, effective and cost-efficient.

Recruiting continues to meet the manpower needs of the Navy. Active Navy recruiters continue to meet their monthly shipping and new contract mission and quality goals. Recruit quality in FY 2008 was 95% High School Graduates, 70% Test Score Category I-III A and 13% with some college experience.

Figure 7 – Active Navy Recruiting Productivity

	FY 2008	FY 2009	FY 2010
# of Recruiters	4,563	4,300	4,300
# of Recruits (New Contracts)	45,654	33,423	36,125
# of Recruits per Recruiter	10	7.8	8.4
Size of Delayed Entry Program (DEP) (Beginning of FY)	18,979	19,952	17,875
Accession mission	39,000	35,000	36,000
Size of DEP as percent of accessions	48.7%	57%	50%
Enlisted Accessions	37,739	35,000	36,000
Percent High School Graduates	95%	95%	95%
Percent above average Armed Forces Qual Test	70%	70%	70%

The Navy increased enlisted accession goals slightly to prepare for the leveling off of Navy’s manpower reductions. Beginning to increase the accession mission will prevent dipping below the desired end strength levels and recreating the workforce imbalances of the 1990s. The active enlisted accession mission is 36,000 in FY 2010. Navy has reacted to increased accession requirements in specialized skills such as Naval Special Warfare/Naval Special Operations (NSW/NSO), Nuclear and Engineering with increased enlistment bonuses to attract more recruits to these programs. The Navy also uses NSW/NSO coordinators and mentors at each recruiting district to ensure that recruits are well prepared for the rigorous physical requirements before they ship to boot camp. These elite programs provide some of the most demanding training in the world and require exceptionally bright and physically fit individuals. Since the first hurdle for these recruits is passing the physical screening test, the Navy requires NSW/NSO recruits to successfully complete the test with a passing score prior to accession. These measures have dramatically increased pass-rates for recruits at boot camp, increasing from the historic norm of 28 percent to 78 percent in FY 2007.

The Navy will increase the number of E-4 to E-9 (Top 6) to 73.25% in FY 2010 to retain more of our experienced leaders and maintain advancement opportunities. The figures below provide summary data on active Navy personnel recruiting/accessions and attrition.

Figure 8 – Navy Enlisted Reenlistment Rates

	FY 2008	FY 2009	FY 2010
Zone A (<6 years)	51%	56%	57%
Zone B (6 to 10 years)	61%	64%	63%
Zone C (10 to 14 years)	82%	83%	74%

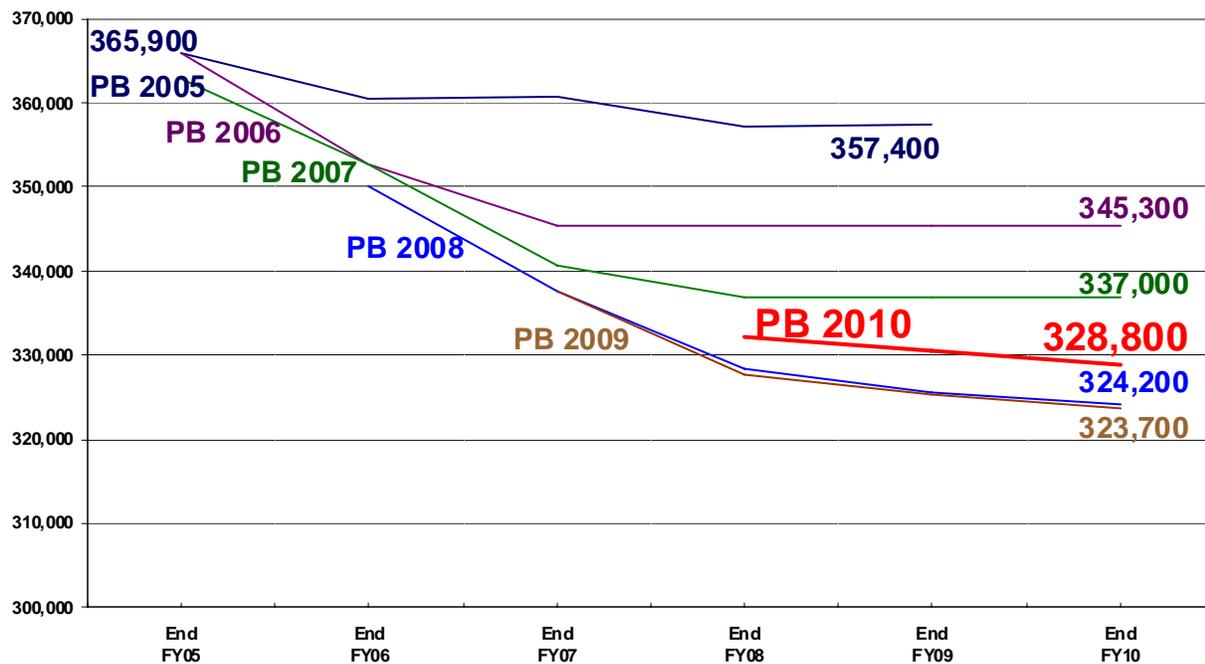
Note: Strength Plans categorize reenlistments as First Term (Zone A) and Career. Zones B and C rates are extrapolated Center for Career Development historical data.

Figure 9 - Navy Enlisted Attrition

	FY 2008	FY 2009	FY 2010
Zone A (<6 years)	8.4%	8.4%	9.1%
Zone B (6 to 10 years)	2.5%	2.5%	2.8%
Zone C (10 to 14 years)	1.5%	1.5%	2.1%

The Navy made significant manpower reductions between FY 2005 and FY 2009. In contrast, the FY 2010 budget shows only minor deviation from last year. The change includes reducing the end-strength based on the Fleet’s force structure in FY 2010 through FY 2015, coupled with an end-strength increase due to the reversal of a prior congressional decision to substitute civilian medical professionals in place of military medical professionals and an end-strength increase that reflects the Navy’s changing mission in support of the current and future conflicts.

Figure 10 – Active Navy Manpower Trend



Navy Support of Contingency Operations

The Navy has over 38,000 active and reserve sailors continually deployed in support of the contingency operations overseas serving as members of carrier strike groups, expeditionary strike groups, Special Operating Forces, Seabee units, Marine forces, medical units, and as individual augmentees (IAs). IAs fulfill the mission requirements of the COCOMs providing commanders with mission-tailored, globally distributed forces. As IAs they are fulfilling vital roles by serving in traditional Navy roles such as USMC support, maritime and port security, cargo handling, airlift support, seabee units, and as member of joint task force/Combatant Commanders staffs. Navy IAs are also filling non-traditional Navy missions such as provincial

reconstruction teams, detainee operations, civil affairs, training teams, customs inspections, counter IED, and combat support.

Reserve Navy Personnel

The Navy Reserve continues to provide strategic depth and operational capabilities to our Navy and Marine Corps team and joint forces, from peace to war. Central to this effort are our Reserve personnel that are ready and able to surge forward across a wide spectrum of operations and enhance the Navy's total force. To achieve this end, the Navy continues to invest in Navy Reserve recruiting, retention, and training while achieving total force integration with its Reserve Component (RC). The FY 2010 budget supports Navy Reserve strength levels of 65,506, providing pay and allowances for drilling Navy Reservists and Full Time Support (FTS) personnel. The Navy has leveraged National Defense Authorization Act incentives to best recruit sailors within the total force.



The Navy's goal is to become a better aligned total force in keeping with Department of Defense and Department of the Navy strategic guidance, while providing fully integrated operational support to the Fleet. The Navy continually validates new mission requirements and associated billet structure for its Reserve force to meet the joint capability requirements of the future within an integrated, capabilities-based force. The Reserves are continuing to maximize the effectiveness of Navy's total force through the following initiatives: converting 152 active component (AC) production recruiter billets to FTS; streamlining logistics aviation units; right-sizing the twelve RC Naval Mobile Construction Battalions (NMCBs) to mirror the manning of the nine AC units; converting 187 reserve cyber workforce billets to active; realigning FTS and SELRES Helicopter Sea Combat Squadron-84 billets to active to form a composite active/reserve squadron; and consolidating civil affairs and expeditionary training group billets into one centralized command for increased efficiency.

Continuum of Service - A 'Sailor for Life'

Continuum of Service, which is an essential element of providing a dynamic and capable work force for the Navy, is the paradigm by which a Sailor may serve and reenlist during the course of a lifetime. This 'Sailor for Life' philosophy would allow Sailors the flexibility to move between Active and Reserve status, manage a civilian career, pursue advanced education, and account for unique life circumstances. In

other words, it enables Sailors to serve continuously with seamless transitions. This framework provides the taxpayer with a better return on investment by expanding the opportunities for our Sailors to serve, thereby taking advantage of both military and civilian training and experience. Simply stated, a well developed Continuum of Service will create a sailor for life, always ready to serve in support of our national interests and defense. This concept is critical in developing and maintaining RC Sailors who are “Ready Now, Anytime, Anywhere.”

Figure 11 - Reserve Navy Personnel Strength

	FY 2008	FY 2009	FY 2010
Drilling Reserve	56,456	55,601	54,688
Full Time Support	11,680	11,099	10,818
Total: Strength	68,136	66,700	65,506

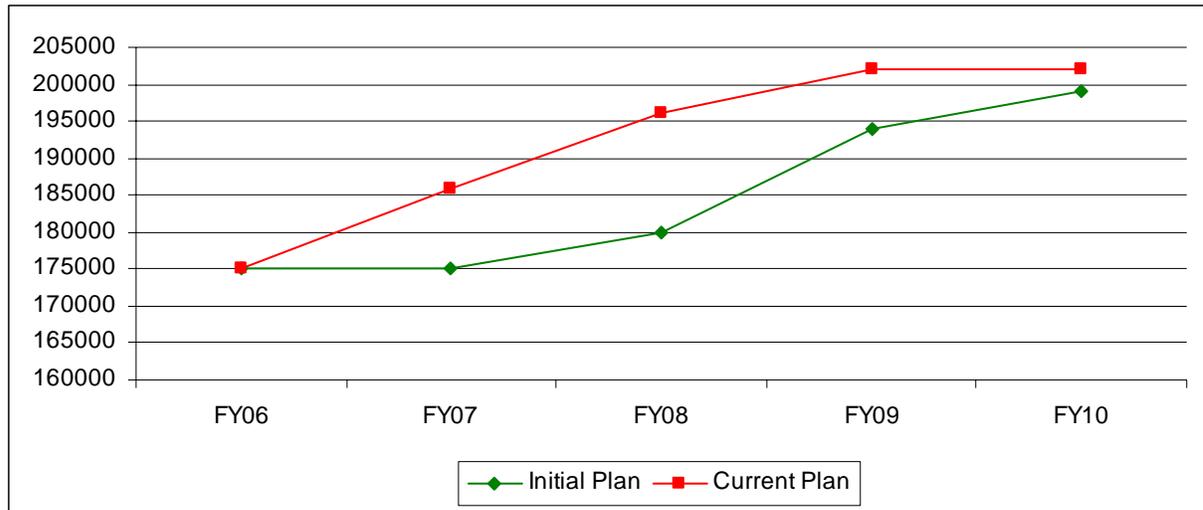
Active Marine Corps Personnel



The FY 2010 submission supports the transition to a strength of 202,100 Marines by the end of FY 2009. The Marine Corps continues efforts to rebalance its baseline program, shifting resources from conventional to irregular capabilities and capacities. Today’s Marine Corps shoulders a critical portion of prosecuting Operations Iraqi Freedom and Enduring Freedom (OIF/OEF) with over 32,000 Marines forward deployed. Fighting

across the spectrum of conflicts, our ability to sustain deployed forces for extended periods enables us to support COCOMs throughout the world. To meet these challenges, the Marine Corps must satisfy requirements across the entire spectrum of warfare, including continued focused efforts on recruiting and maintaining high quality Marine Corps personnel. Figure 12 demonstrates the Marine Corps growth in active forces in accordance with the Grow the Force initiative towards 202,100.

Figure 12 - Active Marine Corps Growth



The proposed increase of Marine Corps Active Component end strength to 202,100 Marines will go a long way toward reducing the strain on the individual Marines and the institution. This plan decreases the deployment-to-dwell ratio of some of our habitually high-operational tempo units such as light armored reconnaissance companies, amphibious assault companies, reconnaissance companies, combat engineers, military police, signals intelligence units, unmanned aerial vehicle units, helicopter squadrons, air command and control units, combat service support units, and explosive ordnance disposal units. The figure below provides summary personnel strength for active Marine Corps personnel.

Figure 13 - Active Marine Corps Personnel Strength

	FY 2008	FY 2009	FY 2010
Officers	20,188	21,230	21,230
Enlisted	178,317	180,870	180,870
Total: Strength	198,505	202,100	202,100
Enlisted Accessions	37,565	35,592	34,592
Percent High School Graduates	95%	95%	95%
Percent above average Armed Forces Qual Test	63%	63%	63%
Reenlistments	19,526	19,402	19,600

The Marine Corps anticipates continued success in meeting recruiting and retention goals to maintain the planned force level, grow a more senior and experienced baseline force, and meet the requirements of engaging in overseas operations and

standing up the MARSOC. This budget also supports requirements for initial skill training and follow-on training courses, and supports continued success in meeting recruit accession goals. The figure below provides summary personnel accessions and retention data for active Marine Corps personnel.

Figure 14 - Marine Corps Reenlistments (Active)

	FY 2008	FY 2009	FY 2010
First Term Alignment Plan (<6 years)	9,507	10,600	9,950
Subsequent Term Alignment Plan (Career)	10,019	8,802	9,650

Reserve Marine Corps Personnel

The FY 2010 budget request supports a Marine Corps Reserve strength of 39,600. Marine Reserve Units and Individual Mobilization Augmentees continue to provide critical Force Application capabilities in support of national defense requirements and have deployed worldwide to countries in Southwest Asia as well as Northern Africa. At home, the Marine Reserve force provides corporate management and support to reserve Marines and logistics support for assets pre-positioned throughout the country, ready to assist with, not only national defense missions, but also civil-military missions such as disaster relief. The budget provides pay and allowances for drilling reservists attached to specific units, individual mobilization augmentees, personnel in the training pipeline, and full-time active reserve personnel.

The Selected Marine Corps Reserve (SMCR), with its force application structure complementing the active operating force in its “augment and reinforce” mission, continues to serve the nation well. In addition to SMCR unit deployments, the Marine Reserve contributes to OIF/OEF in several ways including individual augmentees and civil affairs units that are vital in security and stability operations, logistics, force support, election support, infrastructure revitalization and the building of partnerships.

Despite the currently high operational tempo, the Marine Reserve force continues to recruit and retain top-notch Marines. Additionally, the Marine Reserve funds bonus and incentive programs at levels required to meet recruiting and retention goals. Furthermore, an important source of seasoned leadership for the Marine Reserve force consists of Marines who transition from the Active to the Reserve Component. Consistent with the Active Component’s incremental increase to 202,100 Marines, the

Marine Reserve force realizes it is important to keep this valuable pipeline open. SMCR unit affiliation bonuses provide an incentive for Marines leaving active duty to continue their service as leaders in the Marine Reserve force.

The Marine Corps Reserve is a full partner of the Marine Corps total force concept. Marine reservists continue to prove their dedication to our nation and its citizens. Their continuing honor, courage, and commitment to warfighting excellence while maintaining close ties to their community truly set them apart as “citizen soldiers.”

The figure below shows personnel strength for reserve Marine Corps personnel.

Figure 15 - Reserve Marine Corps Personnel Strength

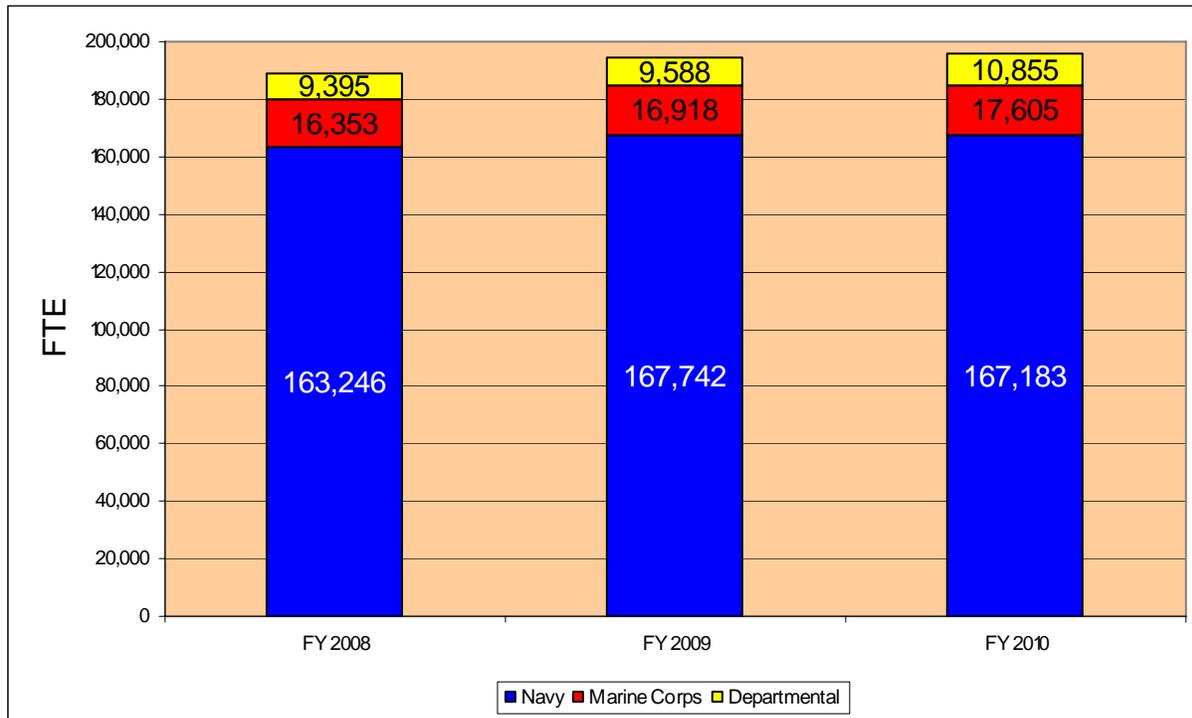
	FY 2008	FY 2009	FY 2010
Drilling Reserve	35,383	37,339	37,339
Full Time Support	2,140	2,261	2,261
Total: Strength	37,523	39,600	39,600

CIVILIAN PERSONNEL

DON civilians are an integral part of the total workforce who support the mission and daily functions of the Navy and Marine Corps. The Department’s civilian personnel constitute the cadre of corporate knowledge necessary to sustain and support operations. From wage grade workers to renowned scientists, a versatile and agile workforce is required to meet this challenge. Today’s civilian personnel are employed in a variety of fields including installation management; research and development; engineering and acquisition; medical, Fleet activities, logistics, depot maintenance, and administrative support. The majority of these functions are financed by the Operation and Maintenance appropriations and the Navy Working Capital Fund. The Department of the Navy includes the following civilian personnel Full-Time Equivalent (FTE) estimates:



Figure 16 - Civilian Personnel FTEs



Acquisition Workforce

The Department recognizes the need for a renewed investment in the acquisition workforce. Responding to the need for greater organic oversight of major acquisition programs particularly in the development and production phases, the requirement for trained and certified acquisition personnel in several specialties has increased. This corresponds with an expansion of the Acquisition Intern program and the active recruitment and retention of qualified personnel at the middle and senior career levels. Resources from the Department of Defense Acquisition Workforce Development Fund (DAWDF) support the expansion of recruitment at all levels including interns, journeyman, and highly qualified experts. These personnel may transition to permanent positions in their assigned command at the end of the respective one to three-year term appointment. DAWDF funds are also being used for the retention and credentialing of personnel through educational and developmental activities. The number of Defense Acquisition Workforce Improvement Act certified personnel at Levels II and III will increase each year commensurate with overall programmatic requirements. The Department is committed to preventing capability gaps in the acquisition workforce, with a view of ensuring the Navy and Marine Corps maintain a healthy technical authority within the Department.

In-sourcing

In-sourcing is a practice in which work that has been contracted out is performed in-house. Since the 1990's the Department of the Navy experienced a 40 percent decline in civilian employees along with a loss of some expertise. This has resulted in oversight deficiencies in several major acquisition programs; and, a renewed interest in the appropriate management of acquisition programs including implementation of 10 USC 2463, "Guidelines and Procedures for use of Civilian Employees to Perform Department of Defense Functions". Accordingly, major portions of the Defense budget support acquisitions and the Department's success is based on the ability of personnel to develop, produce, field, and maintain weapon systems and related programs. Although 10 USC 129a authorizes the Department to consider the advantages of different forms of personnel (military, civilian, or private contract), essential government capabilities and corporate knowledge must remain resident within each acquisition entity. Therefore, Department of the Navy commands and activities must ensure sufficient acquisition workforce employees (civilian and military) are hired, trained, certified, and retained to carry on programs in the functional areas prescribed in acquisition workforce regulations.

In support of the FY 2010 budget, the Department of Defense is initiating a plan to improve the oversight of contractor services, acquire those services more effectively, and in-source contractor services where it is more appropriate to do so. In FY 2010 this results in an overall increase in government civilian personnel of 1,204 full-time equivalents for the Department of the Navy and cost savings of \$172 million. The Department is identifying functions for in-sourcing and aggressively recruiting personnel to fill critical needs including non-acquisition and inherently governmental functions at all levels within the Department. Included in the 1,204 civilian personnel increase will be human resource specialists to assist with recruitment actions and acquisition oversight personnel to improve the management of the continuing contracts. Using government employees will also alleviate the perception of undue influence by contractor staff and preserve inherently governmental functions and decision making.

National Security Personnel System (NSPS)

Authorized in the FY 2004 National Defense Authorization Act, the NSPS provides flexibility in hiring and managing civilian workers and links pay and performance to the mission and accomplishment of organizational goals. Since conversions began in April 2006, approximately 63,447 Department of the Navy personnel have converted

to NSPS. NSPS conversions ceased March 16, 2009, pending a full review of the NSPS implementation. Figure 17 contains actual costs by fiscal year and the cumulative number of personnel converted.

Figure 17 - NSPS Actual Costs to Date

<i>Dollars in Thousands</i>	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Design and Implementation	698	1,456	1,277	4,635	812
Training, Development, Support, and Execution	3,613	5,712	6,492	11,466	3,471
HR Automated Systems	60	48	132	535	183
Program Evaluation	229	52	396	375	184
Program Office Operations	4,089	5,991	5,839	9,254	2,049
Totals	8,689	13,259	14,136	26,265	6,699
Number of Personnel Converted	0	4,354	16,066	30,315	63,447

To ensure equity, each Department of Defense Component must annually certify pay pools are fully funded and paid at the aggregate level.

Military to Civilian Conversions

Military to civilian conversions remain a viable and effective tool for the Services to find the most efficient and effective way to perform services and meet their missions. The use of these conversions is one method in which the Department complies with 10 USC 129a, which requires the Secretary of Defense to “use the least costly form of personnel consistent with military requirements and other needs of the Department...and consider particularly the advantages of converting from one form of personnel (military, civilian, or private contract) to another for the performance of a specified job.” The largest change is the reversal of the Medical military to civilian conversions consistent with Section 721 of the FY 2008 National Defense Authorization Act. There are minimal conversions of non-military essential training, and support staff positions from military to civilian within the Navy, as well as the conversion of installation functions from military to civilian in the Marine Corps. Some conversions may be filled by contractor personnel.

Figure 18 displays total civilian personnel resources by component, appropriation, and special interest area. The increases in civilian personnel levels are largely attributable to the in-sourcing initiative.

Figure 18- DON Civilian Manpower Full-Time Equivalent

	FY 2008	FY 2009	FY 2010
Total – Department of the Navy	188,994	194,248	195,643
<u>By Component**</u>			
Departmental	9,395	9,588	10,855
Navy	163,246	167,742	167,183
Marine Corps	16,353	16,918	17,605
<u>By Type Of Hire</u>			
Direct	177,717	182,994	184,154
Indirect Hire, Foreign National	11,277	11,254	11,499
<u>By Appropriation/Fund</u>			
Operation and Maintenance, Navy	93,591	97,830	100,305
Operation and Maintenance, Navy Reserve	952	1,118	1,117
Operation and Maintenance, Marine Corps	16,743	16,890	17,863
Operation and Maintenance, Marine Corps Reserve	218	218	254
Total - Operation and Maintenance	111,504	116,056	119,539
Military Construction, Navy	2,097	2,062	2,062
Research, Development, Test & Evaluation, Navy	1,268	1,284	1,398
Military Assistance	69	69	69
Family Housing (N/MC)	738	721	770
Total - Other	4,172	4,136	4,299
Total - Working Capital Funds	73,318	74,056	71,805
<u>Select Special Interest Areas</u>			
Installation Mgmt/Base Support	38,438	38,710	39,079
Warfare Centers	28,299	28,440	28,399
Shipyards	27,962	28,826	28,940
Engineering/Acquisition Commands	20,443	20,193	20,382
Medical (DHP)	12,091	13,227	13,280
Fleet Activities	8,415	8,936	9,444
Aviation/MC Depots	11,251	11,417	11,114
Departmental (includes PEO acquisition)	9,395	9,588	10,855
Military Support	9,672	11,222	11,431
Supply/Distribution/Logistics Centers	9,688	9,943	8,731
Transportation	8,095	8,117	8,084
Intelligence	3,022	3,406	3,834
Marine Corps Support/Other	2,223	2,223	2,070



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SECTION IV – PROTECTING READINESS TO MEET TODAY'S CHALLENGES

As the United States continues to operate in a variety of roles around the world, the Navy and Marine Corps team must implement a strategy that balances the enduring requirements for traditional naval capabilities with those needed to squarely confront and influence the highly dynamic security environment of the 21st Century. From the establishment of stability and security in Afghanistan, Iraq, and elsewhere throughout the world, to humanitarian relief efforts, the Navy and Marine Corps team has demonstrated its readiness to mobilize for any task and answer any challenge.

Overview

Operational readiness is the catalyst that brings naval power to bear whenever it is needed. Our budget supports requirements for our carrier strike groups (CSGs), expeditionary strike groups (ESGs), and Marine Expeditionary Forces to execute the National Military Strategy and respond to persistent as well as emerging threats.

The security environment today has created new demands for naval forces. This demand includes support for security, stabilization, transition and reconstruction operations, support for homeland security, and continued preparedness for contingency operations. Acknowledging that the evolving dynamics of the 21st-century security environment require our forces to be ready to deploy globally will continue to fund the necessary requirements to ensure our ability to protect vital U.S. interests, assure and assist our friends in crisis situations, and prevent, deter, or resolve conflict. This budget provides for the necessary costs to generate trained and ready forces and supports our forward deployed engagement and presence requirements. It includes support for baseline deployed and non-deployed steaming days, the associated flight hours, and related ship and aircraft maintenance.

Seabee skill sets are in great demand both now and into the foreseeable future. The recently realigned Naval Construction Force, in conjunction with a new active construction regiment, a naval mobile construction battalion, and our reserve component, will provide the total force solution to meet the increased demand

signals for Seabee Forces in support of operations overseas, COCOM Theater Engagement Plans, and Humanitarian Assistance and Disaster Relief (HADR).

The United States Marine Corps continues to right-size through the Grow the Force initiative. Originally planned to reach an end strength of 202,000 by FY 2011, the Marine Corps anticipates reaching this goal by the end of FY 2009. Funded in concert with the accelerated increases in end strength are increases in infrastructure and equipment procurement. These increases will enhance the capability of the Marine Corps to operate across a full spectrum of operations from warfare to military operations other than war by ensuring enough forces are trained, rested and ready. The Marine Corps will continue to provide COCOMs with flexible, agile, and scalable Marine Expeditionary Units. Additionally, a task organized unit specifically designed to address requirements to build partner nations will be available to the COCOMs. The Security Cooperation Marine Air Ground Task Force (SC MAGTF) will have capabilities, mobility, and sustainability commensurate with its requirements to provide training to less developed military forces. These units will be tailored to specific geographic areas and possess a regional orientation with specialized manpower and training to include foreign area officers, linguists, and other personnel with regional expertise.

Our focus continues to be providing ready naval forces, from individual units to strike groups, that are forward deployed and capable of providing a substantial surge force. The readiness for this capability is enabled by the Fleet Response Plan (FRP) which supports the National Military Strategy. The FRP provides adaptable, flexible and sustainable naval forces necessary not only to fight current ongoing contingencies, but also to support the needs of the combatant commanders to maintain a global forward presence as well as providing for any other evolving national defense requirements.

The role of the Navy and Marine Corps on the world stage is evident throughout the budget. From contributions to multilateral operations under United Nations/NATO auspices to cooperative agreements with allied Navies, international engagement efforts cross the entire spectrum of the Department's missions and activities. Our naval capabilities are often demonstrated through participation with allies and other foreign countries, through joint and combined exercises, port visits, and exchange programs.

Our top readiness priority is ensuring that forces are fully trained, ready to deploy, and fully supported while deployed. The budget reflects the best balance of

resources to achieve this priority. The Navy will closely manage the readiness accounts to ensure we can fulfill all existing, enduring, and emerging war-fighting requirements.

SHIP OPERATIONS

The Ship Operations program provides the Navy with critical capabilities necessary to achieve mission objectives. The Department's goal is to deliver the capability to maneuver and engage in combat operations in all environments to achieve these objectives. Sustaining this force application capability requires a robust logistics force able to effectively support operations, extend operational reach, and provide the joint force commander the freedom of action necessary to meet mission objectives. The Department's budget request represents the appropriate and necessary balance between combat and logistics forces to ensure mission accomplishment.

Battle Force Ships

The budget provides for a deployable battle force of 287 ships in FY 2009 and FY 2010, as shown in Figure 19. This level of operational funding supports 11 aircraft carriers and 31 large amphibious ships that serve as the foundation upon which our carrier and expeditionary strike groups are based. These ships, when formed into strike groups that include surface combatants, logistics support forces and attack submarines when required, provide the capability to dynamically deploy, maneuver and ultimately engage potential enemies in all environments. The robust and consistent capabilities they bring to the fight enable our Navy to meet our nation's strategic and the geographic COCOM's mission objectives. Included in our battle force is an inherent capability to sustain the Navy's forces using highly capable logistics support ships and planes that can strategically and operationally maneuver as required to meet all support requirements.

In FY 2010 five battle force ships will be commissioned: three Guided Missile Destroyers (DDG), one Nuclear Attack Submarine (SSN), and one Dry-Cargo Ammunition ship (T-AKE). **Five battle force ships will be decommissioned:** one Ammunition ship (AE), one Auxiliary Fleet Support ship (T-AFS), one Frigate (FFG) and two Nuclear Attack Submarines (SSN).

Figure 19 – DON Battle Force Ships

	FY 2008	FY 2009	FY 2010
<u>Force Application Capability</u>			
Aircraft Carriers	11	11	11
Fleet Ballistic Missile Submarines	14	14	14
Guided Missile (SSGN) Submarines	4	4	4
Surface Combatants	107	111	113
Nuclear Attack Submarines	53	54	53
Amphibious Warfare Ships	32	31	31
<u>Logistics Capability</u>			
Combat Logistics Ships	30	31	30
Mine Warfare Ships	14	14	14
Support Ships	17	17	17
Battle Force Ships	282	287	287

Active Forces

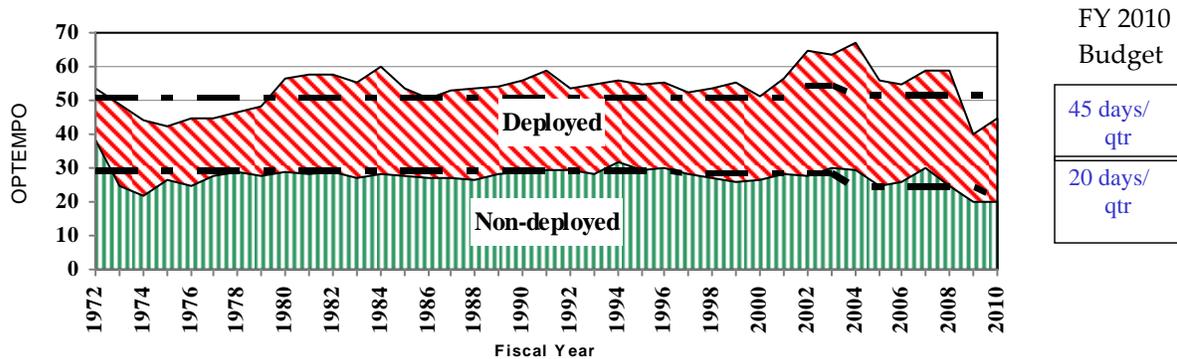
The Department is committed to providing naval forces with an inherent ability to quickly maneuver and engage our country's adversaries, whether they are conventional blue water based navies or unconventional terror based organizations. Additionally, we must be able to assure our allies of our steadfast abilities as partners while at the same time continuing to actively prosecute terrorism around the globe. To ensure the full readiness of the Carrier Strike Groups (CSGs) and Expeditionary Strike Groups (ESGs), the budget provides the requisite resources to train, equip, operate and support these forces for extended periods while in harms way. The Navy's strike groups, along with their associated logistics support forces, are the foundation of the Navy's ability to apply force as required to achieve mission objectives. For FY 2010, deployed ship operations are budgeted to maintain highly ready forces, prepared to operate jointly to perform the full-spectrum of military activities, and to meet forward deployed commitments in support of the National Military Strategy. The FY 2010 budget request supports the Fleet Response Plan (FRP), enabling ships to surge and reconstitute rapidly by maintaining the continuous flow of ships from maintenance after deployment, through basic phase training back to ready assets. This concept enables the Department to provide multiple CSGs within required time frames to meet the threat and deliver decisive military force if necessary. The Department of the Navy will support these goals and respond to global challenges by planning for 45 underway days per quarter for

the active Operational Tempo (OPTEMPO) of our deployed forces and 20 underway days per quarter for non-deployed forces. These levels are below our peacetime readiness requirements based on the continuing assumption that overseas contingency operations will reduce training and routine deployment opportunities.

Non-deployed OPTEMPO provides primarily for the training and assessment of Fleet units, including participation in individual unit training exercises, multi-unit exercises, joint exercises, sustainment training, and various other training exercises and assessment opportunities. The training period under FRP supports our ability to meet rotational force requirements and ensures a surge capable force with a robust ability to maneuver as required and to successfully engage any enemy in the pursuit of our national interests. Consistent with Congressional action on the FY 2009 budget, non-deployed steaming is sustained at a baseline level of 20 days per quarter.

Figure 20 illustrates historical and budgeted OPTEMPO. The lines are the deployed and non-deployed goals. Fluctuations from the goals reflect real world operations and revised baseline requirements. FY 2009 and FY 2010 reflect baseline funded OPTEMPO without incremental funding for contingency operations. For FY 2010, requested funding for contingency operations will support additional deployed steaming of approximately 13 days per quarter.

Figure 20 - Active Force Ship OPTEMPO



Mobilization

Providing rapid response to contingencies is an ever increasing need. The Navy's mobilization forces, displayed in Figure 21, are resourced to provide this needed logistics capability throughout the world. In support of a strong logistics capability, the preposition ship squadrons are forward deployed in key ocean areas to provide

the initial military equipment and supplies for a contingency. The prepositioned response is followed by the surge ships, which are maintained in a reduced operating status from four to thirty days. The number of days indicates the time from ship activation until the ship is available for tasking; e.g., ROS-4 indicates it will take four days to make the ship ready to sail, fully crewed and operational. Ships in reduced operating status have small cadre crews aboard to assure the readiness of propulsion and other primary systems if the need arises to activate the ship. The cadre crews vary in size based on the type of ship and the length of reduced operating status. Only ROS-4 and ROS-5 ships are considered in the surge capacity in Figure 21.

Figure 21 – Strategic Sealift

	FY 2008	FY 2009	FY 2010
<u>Prepositioning Ships:</u>			
Maritime Prepo Ships (O&M,N)	15	15	16
USPACOM Ammo Prepo (O&M,N)	1	1	1
Army Prepo Ships (O&M,A)	6	6	7
Air Force Prepo Ships (O&M,AF)	2	2	2
DLA Prepo Ships (DWCF)	1	1	1
<u>Surge Ships:</u>			
Large Medium-Speed RORO Ships (NDSF)	11	11	11
Aviation Logistics Support (NDSF)	2	2	2
Hospital Ships (NDSF)	2	2	2
Fast Sealift Ships (NDSF)*	8	0	0
Ready Reserve Force Ships (NDSF)	44	50	49
Prepositioning Capacity (millions of square feet)	4.9	4.8	5.2
Surge Capacity (millions of square feet)	9.0	9.0	9.0
Total Sealift Capacity (millions of square feet)	13.9	13.8	14.2

*Transferred to MARAD RRF in FY 2009

Each of three Maritime Prepositioning Ships (MPS) squadrons supports a Marine Expeditionary Brigade for 30 days. Operating costs of prepositioning ships and exercise costs for surge ships are reimbursed to the National Defense Sealift Fund (NDSF) by the operations account of the requiring Defense component, as noted parenthetically in the figure above. The biennial exercise costs of the hospital ships and aviation maintenance ships are reimbursed out of the DON operation and maintenance appropriations, which also fund the daily operating costs of the MPS.

Strategic Sealift ships provide the Navy the logistics capability needed to respond quickly to immediate missions with a sustained force.

The Navy will terminate the capital lease on three Maersk class (foreign-built) vessels in FY 2009. However, to maintain required logistics support, the Navy will purchase three MPS ships in FY 2009 and one in FY 2010 which are currently under long-term capital lease. These ships will comprise part of a restructure of the USMC Afloat Prepositioning program.

The Defense Logistics Agency (DLA) prepositioning ships are Offshore Petroleum Distribution System (OPDS) ships. DLA has moved from having four organic ships dedicated to the OPDS requirement and has substituted a contracted system, using one contracted vessel to meet the requirement.

The eleven Navy LMSRs are maintained in a four-day ROS and provide the initial surge sealift capacity required to transport combat forces from CONUS to an area of operations to satisfy warfighting requirements.

Two hospital ships, the *USNS Mercy* and the *USNS Comfort*, are maintained in a five-day ROS and provide the initial surge hospital capability to support warfighting and HA/DR efforts. As a part of the Pacific Partnership 2008, the Navy deployed the *USNS Mercy* hospital ship to Southeast Asia and Oceania. This deployment was a joint civil-military operation to provide valuable humanitarian assistance (direct medical services and preventive medical care) to medically underserved communities throughout the region. Recognizing the continuing goodwill generated by these humanitarian aid and disaster relief missions, beginning in FY 2010, the Navy has planned for an annual deployment for one hospital ship per year to more easily support these requirements.

The Ready Reserve Force (RRF) funding level meets required readiness and allows the ships to activate in time to deliver cargo to a given area of operations and satisfy COCOMs' critical warfighting requirements.

Ship Maintenance

The Department's organic ship maintenance program is mission funded in Operation and Maintenance. It provides funding for the Navy's public shipyards, regional maintenance centers, and intermediate maintenance facilities. Ship maintenance work is also contracted through private vendors and private shipyards.

This construct supports the Fleet Response Plan by allowing Fleet Commanders to control maintenance priorities in order to provide the right match of capabilities to requirements. Specifically, the fleets are supporting our nation's maritime strategy by quickly and efficiently allocating work to ships that are required to provide sea control, forward presence and power projection in order to influence actions and activities both at sea and ashore. The ship maintenance budget supports an integrated capabilities-based force through the maintenance and modernization of the right portfolio of ships to provide the optimum mix of force application and logistics to respond to crises and provide naval presence.

Mission funding maintains cost visibility and performance accountability by providing a consistent financial system across all ship maintenance activities, improved efficiency and cost consciousness. The Department's active ship maintenance baseline budget supports 79 percent of the notional O&M maintenance projections in FY 2010. An additional 18 percent of the total requirement is supported in the request driven by contingency operations overseas. Projected work on refueling overhauls is 100 percent funded in SCN through FY 2009. Beginning in FY 2010 the repair portion of the SSBN engineered overhauls is funded in O&MN and the equipment procurement portion is funded in OPN. The Department realigned the SSBN ERO funding to align the ERO work and budget responsibilities with those of other ship depot maintenance. Projected work on refueling overhauls remains 100 percent funded in FY 2010.

The Nation's public and private shipyards make up the Navy's repair base and in total, have the capability to execute ship maintenance as well as those deferred maintenance amounts reflected in Figure 22. Annual deferred maintenance is work that was not performed when it should have been due to fiscal constraints. This includes items that were not scheduled or not included in an original work package due to fiscal constraints, but excludes those items that arose since a ship's last maintenance period. As the execution year progresses, the workload can fluctuate, impacted by factors such as growth in scope and new work on maintenance availabilities, changes in private shipyard cost and shipyard capacity. While some amount of prior years' deferred maintenance may be executable in following years (depending on deployment schedules and shipyard capacity), the numbers in Figure 22 reflect only those individual years' deferred maintenance, not a cumulative amount.

Figure 22 - Department of the Navy Ship Maintenance

<i>(Dollars in Millions)</i>	FY2008	FY2009	FY2010
Active Forces			
Ship Maintenance	4,316	4,140	4,297
Depot Operations Support	1,103	1,158	1,171
Baseline Ship Maintenance (O&M,N)	5,419	5,298	5,468
Overseas Contingency Operations	786	440	1,001
Total Ship Maintenance (O&M,N)	6,205	5,738	6,469
Percentage of Projection Funded	100%	95%	97%
Annual Deferred Maintenance	\$0	\$262	\$186
CVN Refueling Overhauls (SCN)	295	613	1,775
SSBN Refueling Overhauls (SCN)	229	260	-
Total: Ship Maintenance (SCN)	524	873	1,775
% of SCN Estimates Funded	100%	100%	100%

AIR OPERATIONS

Active Tactical Air Forces

The budget provides for the operation, maintenance, and training of ten active Navy Carrier Air Wings (CVWs) and three Marine Corps Air Wings. Naval aviation is divided into three primary mission areas: Tactical Air/Anti-Submarine Warfare (TACAIR/ASW), Fleet Air Support (FAS), and Fleet Air Training (FAT). TACAIR squadrons conduct strike operations and support the Marine Air Ground Task Force (MAGTF) by providing flexibility in moving to a position of advantage in air and surface environments in order to provide logistics, command and control, battlespace awareness, and force application capabilities to the Fleet and COCOMs. TACAIR integration ensures that Navy and Marine Corps units are effectively incorporated in the CVWs and MAGTFs to achieve maximum force application capabilities at sea, land and air. ASW squadrons locate, destroy, and provide force support and command and control capabilities while conducting maritime

surveillance operations. FAS squadrons provide consistent and vital fleet logistics and battlespace awareness capabilities. In FAT, the Fleet Replacement Squadrons (FRS) provide force support capabilities by training pilots to become proficient in their specific type of aircraft while transitioning to fleet operations. Starting in FY 2010 Fleet air training is realigned from Budget Activity 1 (Operating Forces) to Budget Activity 3 (Training and Recruiting) to support the stand up a of single process owner for Naval aviation, providing overarching leadership and management of aircraft, aircrews, training, readiness, and maintenance.

Figure 23 – DON Aircraft Force Structure

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<u>Active Forces</u>	21	21	21
Navy Carrier Air Wings	10	10	10
Marine Air Wings	3	3	3
Patrol Wings	4	4	4
Helicopter Anti-Submarine Light Wing	2	2	2
Helicopter Combat Support Wings	2	2	2
<u>Primary Authorized Aircraft (PAA) - Active</u>	3,220	3,340	3,401
Navy	2,138	2,120	2,187
Marine Corps	1,082	1,220	1,214
<u>Total Aircraft Inventory (TAI)</u>	3,744	3,839	3,905
Active	3,439	3,538	3,599

Aircraft OPTEMPO

As discussed in previous sections, the Department has transitioned to the Fleet Response Plan (FRP). The Navy FRP allows for a tiered T-2.5 readiness level across the notional Inter-Deployment Readiness Cycle (T-1.7 while deployed, T-2.0 pre-deployment, T-2.2 post-deployment, and T-3.3 during the maintenance/training phase). The Marine Corps maintains a level of readiness of T-2.0 throughout pre- and post-deployment periods as well as while forward deployed in support of the MAGTF. By maintaining these readiness levels, the Navy and the Marine Corps stand ready to provide force application capabilities to the COCOMs at a moment's notice. The flying hour program has been priced using the most recent cost per hour experience. As in FY 2009, it is anticipated that operational requirements will

continue to exceed peacetime levels in FY 2010. These higher flight operations are included in the contingency request.

FRS operations are budgeted at 87 percent in FY 2010 for student level training requirements enabling pilots to complete the training syllabus. Student levels are established by TACAIR/ASW force level requirements, aircrew personnel rotation rates, and student output from the undergraduate pilot/naval flight officer training program. In FY 2010 FAS is funded to provide sufficient hours to meet 98 percent of the total notional hours required. Figure 24 displays active flying hour readiness indicators.

	FY 2008	FY 2009	FY 2010	GOAL
Active				
TACAIR- Navy	T-2.3	T-2.6	T-2.5	T-2.5
TACAIR- USMC	T-2.0	T-2.2	T-2.0	T-2.0
Fleet Replacement Squadrons (%)	94%	89%	87%	94%
Monthly Flying Hours per Crew (USN & USMC)	18.3	17.8	19.0	N/A
with overseas contingency operations	22.7	22.2	22.9	N/A

Aircraft Depot Maintenance

The aircraft depot maintenance program funds repairs, overhauls, and inspections, within available capacity, to ensure sufficient quantities of aircraft are available to operational units. The readiness-based model determines airframe and engine maintenance requirements based on squadron inventory authorization necessary to execute assigned missions. The aircraft depot maintenance program has the capability to perform routine inspections to determine the level of maintenance required, including restoring and recapitalizing airframes and engines to serviceable condition, and to service airframes and engines at scheduled intervals as a form of preventative maintenance. The goal of the airframe rework program is to provide enough airframes to meet 100% of Primary Authorized Aircraft (PAA) for deployed squadrons and 90% PAA for non-deployed squadrons for the Navy and Marine Corps. The engine rework program objective is to obtain zero bare firewalls and fill 90% of authorized spare requirements for each Navy and Marine Corps engine type/model/series (TMS) by returning engines/modules to a Ready-for-Issue (RFI) status. Other depot maintenance includes the repair of aeronautical components for aircraft systems and equipment under direct contractor logistics support.

The FY 2010 budget provides optimized capability within fiscal constraints. Deployed squadrons have 100% of their PAA to meet requirements prior to and during deployment, and non-deployed squadrons assume minimal risk. The zero bare firewalls goal and the engine sparing goal are impacted by external factors such as capacity constraints and engineering challenges. Figure 25 displays the funding and readiness indicators for aircraft depot maintenance.

The AIRSpeed aviation strategy continues to focus on reducing the cost of doing business, increasing productivity, and improving customer satisfaction in order to support ready-for-tasking aircraft in a cost-wise readiness manner. Furthering efficiencies and inter-service cooperation, Navy and Marine Corps aircraft and engines are sometimes repaired at Army and Air Force depot maintenance activities. For example, KC-130J airframe maintenance is performed by the Air Force, and the T-700 series helicopter engine is sent to the Corpus Christi Army Depot for repairs and overhauls. In return, Fleet Readiness Center Cherry Point conducts repairs and overhauls on the Air Force's UH-1N helicopters and the T-400 series helicopter engine for the Army and Air Force.

Figure 25 - DON Aircraft Depot Maintenance

(Dollars in Millions)	% at		% at		% at	
	FY 2008	Goal	FY 2009	Goal	FY 2010	Goal
<u>Active Forces</u>						
Airframes	576		600		569	
Engines	331		366		277	
Other Components	107		159		212	
Baseline Active Aircraft Depot Maintenance	\$1,014		\$1,125		\$1,058	
Overseas Contingency Operations	\$197		\$151		\$159	
Total	\$1,211		\$1,276		\$1,217	
<u>Airframes - Active Forces</u>						
Deployed Squadrons meeting goal of 100% PAA	105	100%	111	100%	111	100%
Non-Deployed Squadrons meeting goal of 90% PAA	186	100%	181	100%	176	97%
<u>Engines - Active Forces</u>						
Engine TMS meeting Zero Bare Firewall goal	34	98%	32	97%	32	97%
Engine TMS meeting RFI Spares goal of 90%	50	70%	55	83%	44	62%

Navy Expeditionary Forces



Navy Expeditionary Combat Command (NECC) is a global force provider of adaptive force packages of expeditionary capabilities to joint warfighting commanders, centrally managing the current and future readiness, resources, manning, training, and equipping of a scalable, self-sustaining and integrated expeditionary force of active and reserve sailors. Expeditionary sailors are deployed from around the globe in support of the new "Cooperative Strategy for 21st Century Seapower." NECC forces and capabilities are integral to executing the maritime strategy which is based on expanded core capabilities of maritime power: forward presence, deterrence, sea control, power projection, maritime security, humanitarian assistance and disaster relief. To enable these, NECC provides a full spectrum of operations, including effective waterborne and ashore anti-terrorism force protection; theater security cooperation and engagement; and humanitarian assistance and disaster relief.

NECC leads the way in providing integrated active and reserve forces, highlighted by the seamlessly integrated operational forces of naval construction (Seabees), maritime expeditionary security (formerly coastal warfare), navy expeditionary logistics (Cargo Handling Battalions), explosive ordnance disposal, and the remaining mission capabilities throughout the command.

NECC is not a standalone or combat force, but rather a protection force of rapidly deployable mission specialists that agilely fill the gaps in the joint battle space and compliment coalition capabilities.

MARINE CORPS OPERATIONS

Active Operations

In the FY 2010 budget, the United States is responding to a wide range of challenges to include prosecuting continuing contingency operations across the spectrum of conflict and across the globe. This includes kinetic operations against terrorist organizations, through our efforts to rebuild Iraq and Afghanistan into peaceful,

productive members of the world community. In this era, the nation needs forces that are highly mobile, flexible, and adaptable to a wide array of situations. These characteristics define the Marine Corps, and they must continue to do so in the future.

America's Marines are fully engaged in the fight for freedom, peace and security around the globe. Marines are forward deployed in Iraq, Afghanistan, and around the world. In order to ensure our efforts are sustainable, the Marine Corps was authorized an increase in end strength to 202,100. This increase postures the Marine Corps for expected continuing demands and will relieve deployment strain resulting from contingency operations. Personnel policies, organizational constructs, infrastructure, equipping/resetting the force and training support have all been adjusted to sustain this end strength increase. The FY 2010 budget continues support for the Marine Corps grow the force by synchronizing infrastructure increases and equipment procurement to match the growth in end strength. This growth right-sizes the Marine Corps for the next contingency, and resets the force stressed by the current conflicts. Additionally, the FY 2010 budget supports the priorities of resetting the force and modernizing for tomorrow. The equipment has passed the test of sustained operations, but has been subjected to intense usage and harsh environmental conditions, resulting in escalating maintenance and increased equipment replacement. As the conflict demands more of the force, the cost of resetting equipment to ensure unit readiness increases. In order to ensure unit readiness and prudent use of resources, difficult choices have been made between equipment replacement and modernization with next generation equipment. The FY 2010 budget supports increases in facilities restoration and modernization initiatives for the growth in Marine Corps end strength and the Barracks 2.0 initiative, which provides adequate housing for our single Marines. While we continue to take care of our Marines in theater, their families are not forgotten. The FY 2010 budget provides family support programs within morale, welfare and recreation. These programs include family member employment, personal financial management and volunteerism, exceptional family member and new parent support. This budget continues the Marine Corps efforts in irregular warfare training. Training efforts include the support for Marine Corps Tactics and Operation Group and the Marine Corps Air Ground Combat Command, which provides advanced training and certification to the operations staff and fires team at the battalion and regimental level. The instruction is focused on integrated ground combat element operations in a MAGTF context, combined arms as a defining factor in all operational design and tactical execution, and finally unit training management and readiness as the means of codifying operational excellence.

Furthermore, the Marine Corps Air Ground Combat Command and the Tactical Training Exercise Control Group supports explosive ordinance disposal, and range maintenance training. Together these training initiatives will ensure Marine forces receive proper operational instruction prior to deploying into future combat operations. These additional training efforts will provide the agility necessary to allow the training continuum to keep pace with the dynamic nature of irregular warfare.

The FY 2010 budget supports the Marine Corps in its role in overseas contingency operations, while simultaneously supporting the Corps' need to train, sustain, and modernize itself. The Marine Corps has experienced equipment usage rates as much as seven times greater than peacetime rates, tremendously decreasing projected equipment lifespan. To support Marines in combat, the Corps has routinely drawn down additional equipment from its Maritime Prepositioning Ship squadrons and these stocks need to be replenished so as to remain responsive to emerging threats. Congress has responded rapidly and generously to requests for equipment and increased protection of Marines and Sailors. Prudently managing these resources, while transitioning to modernization, remains a primary responsibility.

Figure 26 – DON Marine Corps Land Forces

	FY 2008	FY 2009	FY2010
Total USMC End Strength	197,053	202,100	202,100
Navy End Strength Support	9,300	9,535	9,376
Number of Marine Expeditionary Forces	3	3	3
Number of Active Infantry Battalions	27	27	27
Number of Reserve Infantry Battalions	9	9	9
Infantry and Supporting Unit Additions by end of FY	2 Infantry Battalions 1 Artillery Battery 2 Recon Platoons 1 Combat Eng Bn Company 2 MP Companies 2 Truck Companies 2 ANGLICO Platoons Plus up - Intel Battalion Plus up - 3d Radio Bn Intel Enablers 4 Exp Ord Displ Teams	1 Combat Eng Bn Supt Company 1 Artillery Battery 1 Combat Eng Bn HQ Company 2 MP Companies 1 Counter Battery Platoon 2 Combat Log Bn (MEU) Plus up - Radio Battalion Plus up - Intel Battalion Info Ops 5 Exp Ord Displ Teams Civil Affairs Planners Civil Affairs Dets Combat Log Bn (-)	1 Regimental HQ 1 Artillery Battery 2 Amphibious Vehicle Companies 1 Counter Battery Platoon 1 JSF Training Squadron 1 Air Traffic Control Det 1 Tactical Air Control Det 1 Marine Air Communication Det Plus up - Logisitics, Maintainers, Communications Technicians

As reflected in Figure 26, the operation and maintenance budget supports the Marine Corps operating forces, which are comprised of three active Marine Expeditionary Forces (MEFs). Each MEF consists of a command element, one infantry division, one aircraft wing, and one Marine logistics group. Each MEF provides a highly trained, versatile expeditionary force capable of rapid response to global contingencies. The inherent flexibility of the MEF organization, combined with Maritime Prepositioning Force (MPF) assets, allows for the rapid deployment of appropriately sized and equipped forces. Embedded within each MEF are three Marine Expeditionary Units which deploy regularly in the Expeditionary Strike Groups. Each MEF also has an embedded capability to source a Marine Expeditionary Brigade (MEB). These scalable forces possess the firepower and mobility needed to achieve success across the full operational spectrum in either joint or independent operations. The Marines have a saying, "Every Marine is a Rifleman," and that extends to Navy Corpsmen serving in Marine units. Other Naval personnel providing vital support to the Marine Corps include religious ministry support, other medical staff, administrative and logistical support.

Ground Equipment Depot Maintenance

Repair/rebuild is accomplished on a scheduled basis to maintain the readiness of the equipment inventory necessary to support operational needs. Items programmed for repair are screened to ensure that a valid stock requirement exists and that the repair or rebuild of the equipment is the most cost effective means of satisfying the requirement. This program is closely coordinated with the efforts funded in the Procurement, Marine Corps appropriation to ensure that the combined repair/procurement program provides a balanced attainment of inventory objectives for major equipment. Thus, the specified items to be rebuilt, both principal end items and components, are determined by a process which utilizes cost-benefit considerations as a prime factor. The rebuilding costs for each item are updated annually on the basis of current applicable cost factors at the performing activities.

Figure 27 -- Marine Corps Ground Equipment Depot Maintenance

	FY 2008		FY 2009		FY 2010	
	\$	% Rqmt	\$	% Rqmt	\$	% Rqmt
Funding Profile:						
Baseline	\$62.4		\$78.3		\$81.0	
Overseas Contingency Operations	\$391.1		\$543.0		\$554.0	
Total	\$453.5		\$621.3		\$635.0	
Active Forces						
Combat Vehicles	\$185.5	100.0%	\$360.2	100.0%	\$344.6	100.0%
Tactical Missiles	\$0.1	100.0%	\$5.2	100.0%	\$5.5	100.0%
Ordnance	\$20.2	100.0%	\$32.6	100.0%	\$4.8	100.0%
Electrical Communication	\$41.9	100.0%	\$47.9	100.0%	\$51.7	100.0%
Constructive Equipment	\$33.5	100.0%	\$37.6	100.0%	\$6.8	100.0%
Automotive Equipment	\$172.3	100.0%	\$137.8	100.0%	\$221.6	100.0%
Total Active Forces	\$453.5	100.0%	\$621.3	100.0%	\$635.0	100.0%

RESERVE OPERATIONS

The mission of the Department's reserve components is to provide strategic depth and deliver operational capabilities to our Navy and Marine Corps team and joint forces, from peace to war. In FY 2010, the reserve components will continue to contribute significantly to the effectiveness of the Navy Total Force. The Navy and Marine Corps Reserve budgets support the day-to-day costs of operating reserve

component (RC) forces and maintaining assigned equipment at a state of readiness that will permit rapid deployment in the event of full or partial mobilization and meet fleet operational support requirements. This budget ensures the RC remains "Ready Now, Anytime, Anywhere."

The Department's RC operating forces consist of aircraft, ships, combat equipment and support units, and their associated weapons. Our vision is to be a provider of choice for essential naval warfighting capabilities and expertise, strategically aligned with mission requirements and valued for our readiness, innovation, and agility to respond to any situation. The Navy and Marine Corps Reserve average operating aircraft inventory totals 273 airframes in FY 2010 and the Navy Reserve ship inventory will be 9 Battle Force ships. In addition, funding is used to operate and maintain reserve component activities and commands in all fifty states. There will be 136 Navy Reserve and 185 Marine Corps Reserve facilities at the end of FY 2010.

Navy Reserve Ships

The Navy's RC will support our Maritime Strategy by steaming 45 days underway per quarter for deployed forces and 20 days underway per quarter for non-deployed forces. The non-deployed OPTEMPO provides for the training of units when not deployed, including participation in individual unit training exercises, multi-unit exercises, joint exercises, sustainment training, and various other training requirements. Navy RC Battle Force ships provide force application as well as command and control capabilities with nine frigates assigned.

Figure 28 – Navy Reserve Battle Force Ships

	FY2008	FY2009	FY2010
Surface Combatants	9	9	9
Reserve Battle Force Ships*	9	9	9

**Also included in Figure 19*

Navy Reserve Ship Maintenance

RC ship maintenance is integrated with the active component program. The shipyards have the capability to execute the FY 2010 ship maintenance as well as those deferred maintenance amounts reflected in Figure 29.

Figure 29 - Navy Reserve Ship Maintenance

<i>Dollars in Millions</i>	FY2008	FY2009	FY2010
Reserve Forces			
Baseline Ship Maintenance	41	62	42
Overseas Contingency Operations	-	-	9
Total Ship Maintenance	41	62	51
Percentage of Projection Funded	100%	89%	79%
Annual Deferred Maintenance	-	9	14

Reserve Component Air Forces

RC flying hour funding enables ready Navy and Marine Corps Reserve aviation forces to operate, maintain, and deploy in support of the National Military Strategy. Navy and Marine Corps RC aviation forces will continue to provide vital logistics, force application, force support, battlespace awareness, command and control, and net-centric capabilities to the Fleet and COCOMs through participation in global deployment and various exercises. The Naval Air Force Reserve consists of one Logistics Support Wing (fifteen squadrons), one Tactical Support Wing (six squadrons), four Helicopter Combat Support squadrons, two Maritime Patrol Squadrons, and one Helicopter Anti-Submarine Warfare squadron. The Navy Reserve provides one hundred percent of Navy's organic medium lift through the logistics support wing. The 4th Marine Aircraft Wing (MAW) consists of nine squadrons and supporting units.

Figure 30 – Reserve Component Aircraft Force Structure

	FY 2008	FY 2009	FY 2010
Reserve Forces	3	3	3
Navy Tactical Support Air Wing	1	1	1
Logistics Air Wing	1	1	1
Marine Air Wing	1	1	1
Primary Authorized Aircraft (PAA) – Reserve	297	273	273
Navy	162	161	161
Marine Corps	135	112	112

The Navy's RC fulfills the preponderance of the Department's adversary and intratheater logistics requirements. The Navy RC helicopter footprint in Iraq has been continuous since 2003, supporting special operations ground force missions in urban and rural areas, psychological operations, and medical and casualty evacuations. Navy reservists are not only ready to support national defense missions, but also civil-military missions such as providing disaster relief, including the Navy's only fire-fighting capability to the California Department of Forestry. The Tactical Support Wing provides a strategic reserve and operates alongside the active component in carrier air wing workups and exercises around the globe, and rotationally deploys EA-6B electronic warfare aircraft in support of contingency operations. RC aircrews and maintainers also conduct mine warfare and counter-narcotics operations in multiple theaters, train naval aviators and augment global maritime patrol deployments.

The 4th MAW conducts air operations in support of the Fleet Marine Forces worldwide, in areas including anti-aircraft warfare, offensive air support, assault support, electronic warfare, aerial reconnaissance, control of aircraft and missiles, and as a collateral function, to participate as an integral component of naval aviation in the execution of such other Navy functions as directed. Over the past few years, Marine Corps RC helicopters, KC-130T refueling tankers, and F/A-18A+ strike fighter aircraft have been activated and deployed around the globe, including Iraq and Afghanistan. The 4th MAW also augments the Marine Corps active component by providing all aviation support to Mojave Viper, an OIF pre-deployment training for all infantry battalions held in Twenty-nine Palms, CA.

In FY 2010, the Department's RC aviation is budgeted at 98% of the required hours, as shown in Figure 31. This level of funding allows Navy and Marine Corps RC aircrews to meet minimum flight time requirements and maintain readiness in all mission areas.

Figure 31 – Reserve Component Flying Hour Program

	FY 2008	FY 2009	FY 2010	GOAL
TACAIR - Navy	T-2.7	T-2.6	T-2.6	T-2.6
TACAIR - USMC	T-2.0	T-2.0	T-2.0	T-2.0
Reserve Squadrons (%)	98%	98%	98%	98%
Monthly Flying Hours per Crew (USNR & USMCR)	13.2	13.7	14.1	

Reserve Component Aircraft Depot Maintenance

The reserve component aircraft depot maintenance program is integrated with the active component program to fund repairs, overhauls, and inspections, within available capacity, and to ensure sufficient quantities of aircraft are available to operational units. The goal of the airframe rework program is to provide enough airframes to meet 90% of Primary Authorized Aircraft (PAA) for non-deployed RC squadrons for the active and reserve components. The engine rework program objective is to obtain zero bare firewalls and fill 90% of authorized spare requirements for each RC engine type/model/series (TMS) by returning engines/modules to a Ready-for-Issue (RFI) status. Other depot maintenance includes the repair of aeronautical components for aircraft systems and equipment under direct contractor logistics support.

The FY 2010 budget provides optimized capability within fiscal constraints. Figure 32 displays the funding and readiness indicators for RC aircraft depot maintenance.

Figure 32 - Reserve Component Aircraft Depot Maintenance

<i>(Dollars in Millions)</i>	<i>% at</i>		<i>% at</i>		<i>% at</i>	
	FY2008	Goal	FY2009	Goal	FY2010	Goal
Reserve Forces						
Airframes	102		102		89	
Engines	33		43		36	
Baseline Reserve Aircraft Depot Maintenance	\$136		\$145		\$125	
Overseas Contingency Operations	-		\$8		\$4	
Total Reserve Aircraft Depot Maintenance	\$136		\$153		\$129	
Airframes - Reserve Forces						
Non-Deployed Squadrons meeting goal of 90% PAA	58	100%	54	100%	46	85%
Engines - Reserve Forces						
Engine TMS meeting Zero Bare Firewall goal	20	100%	20	100%	20	100%
Engine TMS meeting RFI spares goal of 90%	33	80%	34	83%	33	80%

Navy Reserve Expeditionary Forces



The Reserve Component expeditionary forces are integrated with the Active Component forces to provide a continuum of capabilities unique to the maritime environment within Navy Expeditionary Combat Command (NECC). The Navy Reserve trains and equips 47 percent of Sailors supporting NECC missions, including waterborne and ashore anti-terrorism force protection, in-theater security, humanitarian assistance, disaster relief, infrastructure maintenance and improvement, and other mission capabilities which are seamlessly integrated with operational forces around the world.

Marine Corps Reserve Operations

The Marine Corps Reserve is a full partner of the Marine Corps' total force concept. Reserve Marines continue to prove their dedication to their country and fellow citizens. Marine Corps Reserve units, Individual Ready Reserve Marines, and Individual Mobilization Augmentees continue to fill critical requirements of national defense. Infantry battalions, armor, reconnaissance, and transportation units from the 4th Marine Division have served with distinction in Iraq and elsewhere, seamlessly integrating with their active component counterparts. Additionally, reserve aviation units from the 4th Marine Aircraft Wing have deployed to support combat operations abroad. At home, Marine Forces Reserve maintains Reserve Marines and assets pre-positioned throughout the country, ready to assist with not only national defense missions, but also civil-military missions such as providing disaster relief. Marine Forces Reserve, with its well-equipped, well-led, and well-trained professional men and women, will continue to be integral to the Marine Corps of the future. This budget supports that Marine reserve force that remains ready and able to support and augment when and where needed. The Department's FY 2010 budget ensures that the readiness of the reserve force will be maintained by providing increased funding for training, base support, and the operation and maintenance of equipment.

SECTION V – REBALANCING INVESTMENT TO MEET GLOBAL REQUIREMENTS

OVERVIEW

In keeping with the priorities of the Secretary of Defense, the FY 2010 budget begins to rebalance our investment programs in order to institutionalize and enhance our capabilities to fight the wars of today and the most-likely scenarios in the future, while at the same time providing a hedge against other risks and contingencies.



The FY 2010 budget ensures that our contemporary wartime requirements receive steady long-term funding similar to our conventional modernization programs. The increased procurement of the Littoral Combat Ship (LCS) and Intelligence, Surveillance and Reconnaissance (ISR) Unmanned Aerial Vehicles (UAVs) and other programs that support irregular warfare and capacity building reflect that shift. However, even as the Department begins to shift resources and institutional weight towards supporting the current conflicts and other potential irregular campaigns, we still must contend with the security challenges posed by the military forces of other countries - from those actively hostile to those at strategic crossroads.

In the end, the Department of the Navy is dedicated to procuring a naval force that is both affordable and meets 21st century national security requirements. Our naval forces will remain sea based, with global speed and persistence provided by forward deployed forces and supplemented by rapidly deployable forces through the Fleet Response Plan (FRP). This capabilities-based, threat-oriented fleet can be disaggregated and distributed world-wide to support current COCOM demands. The resulting distributed and netted force, working in conjunction with our joint and maritime partners, will provide both actionable intelligence and the ability to take action where and when the threat is identified in today's unstable environment. That same force can be rapidly aggregated to provide the strength needed to defeat any potential adversary in more conventional operations.

SHIP PROGRAMS



The Department's FY 2010 budget will provide platforms that are multi-capable, agile, and able to respond to the dynamic nature of current and future threats. The FY 2010 shipbuilding budget funds eight ships, including the twelfth *Virginia* class submarine, the second Joint High Speed Vessel (JHSV) for the Navy, two T-AKE Dry Cargo and Ammunition ships, and three Littoral Combat Ships. The eighth

ship, an Arleigh Burke destroyer, restarts the DDG 51 program. An integral part of the joint force application capability, the carriers, surface combatants and submarines that make up tomorrow's Navy provide the ability to maneuver to engage, insert, influence and secure by kinetic and non-kinetic means. Bringing a potent logistics capability to the joint force commander; T-AKE and JHSV provide the ability to move, maintain and sustain the joint force.

Figure 33 displays shipbuilding quantities for FY 2009 and FY 2010.

Figure 33 - Shipbuilding Programs

	FY 2008	FY 2009	FY 2010
CVN 21	1	-	-
SSN 774	1	1	1
DDG 1000	-	1	-
DDG 51	-	-	1
LCS	-	2	3
LPD 17	1	1	-
T-AKE	-	2	2
JHSV	-	1	1
New Construction Total	3	10	8
LCAC SLEP	5	6	3
CVN RCOH	-	1	-

Surface Ship Programs

The next generation aircraft carrier, the *Ford* Class or CVN-78, will be the future centerpiece of the carrier strike group and a major contributor to the future expeditionary strike force as envisioned in *Sea Power 21*. CVN-78 has a major role in Sea Shield, projecting Navy combat power anywhere in the world. The ship's command centers combine the power of FORCEnet and the flexible open systems architecture to support multiple missions, including special and joint warfare missions and integrated strike planning. Taking advantage of the *Nimitz* Class hull form, the *Ford* Class will feature an array of advanced technologies designed to improve warfighting capabilities and allow significant manpower reductions. It will have a new electrical generation and distribution system, an electromagnetic aircraft launching system, a new advanced arresting gear, a new/enlarged flight deck, weapons and material handling improvements, and a smaller ship's complement. The budget provides the third increment of full funding for construction of the lead ship, the *USS Gerald R. Ford* (CVN-78), and advance procurement funding for CVN-79. The budget also provides for the second increment of funding for the *USS Theodore Roosevelt* (CVN 71) Refueling Complex Overhaul which is planned to commence in September 2009.

Surface combatants are the workhorses of our Fleet and central to our traditional Navy core capabilities. The Navy's FY 2010 budget for surface combatants is a significant departure from the 30-year shipbuilding plan submitted with the President's FY 2009 budget. In lieu of continuing procurement of DDG 1000 class ships, the Navy is proposing restarting DDG 51 production in FY 2010. The Navy is concerned about evolving capability gaps in the outer air battle in the blue water, particularly against the improved ballistic missile capabilities emerging worldwide. The DDG 51 is a proven, multi-mission guided missile destroyer and one of the Navy's most capable ships against ballistic missile threats. The Navy plans to complete construction of the DDG 1000 ships currently under contract and the third DDG 1000 appropriated in FY 2009 for a total of three DDG 1000 class ships. This plan will provide stability of the industrial base and continue the development of advanced surface ship technologies such as radar systems, stealth, magnetic and acoustic quieting, and automated damage control. The budget provides the second



increment of funding for DDG 1002, funding associated with truncation of the DDG 1000 program, and full funding for DDG 113.



The Littoral Combat Ship (LCS) is a fast, agile, stealthy, relatively small and affordable surface combatant capable of operating against anti-access, asymmetric threats in the littorals. LCS will influence behavior and deter adversaries by its ability to operate in environments previously impractical for larger multi-mission ships. LCS uses architectures and interfaces that permit tailoring tactical capabilities to various LCS missions. These mission module packages are easily interchangeable as operational conditions warrant. The primary mission areas of LCS are small boat prosecution; mine counter measures; shallow water anti-submarine warfare; and intelligence, surveillance, and reconnaissance activities. Secondary missions include homeland defense, maritime interception, and special operation forces support. The LCS program delivered its first ship, USS FREEDOM, in September 2008. The second LCS, *USS Independence*, is scheduled for delivery in September 2009, and two additional LCS are funded in the FY 2009 budget. The Department is budgeting for procurement of three more LCSs and two mission module packages in FY 2010.

The Guided Missile Cruiser (CG-47) modernization program (CG Mod) supports modernization of the AEGIS cruisers, commencing with the older Baseline 2 and 3 ships. The CG Mod program delivers rapid introduction of critical new warfighting capabilities by providing enhanced air dominance and C4I capabilities, an improved gun weapon system and force protection systems, and a commercial off-the-shelf (COTS) computing architecture. Hull, Mechanical and Electrical (HM&E) upgrades will also contribute to extending the mission service life of the cruisers to 35 years. The FY 2010 budget includes funds for the fourth and fifth CG Mod availabilities and the long lead-time procurement of equipment for the modernization of three CGs.

The Guided Missile Destroyer (DDG-51) Modernization program is a significant, integrated advancement in class combat and HM&E Systems. This investment enables core modernization of DDG combat systems to keep pace with the 2020 threat environment and extend the mission service life of the ships to 35 years. Enhancements added to the program are included in the areas of air dominance, force protection, C4I, and mission life extension upgrades. The FY 2010 budget includes funds for the first and second DDG Modernization availabilities and the

long lead-time procurement of equipment for the backfit modernization of three DDGs, including hardware and software to upgrade DDG 53's ballistic missile defense capability.

Amphibious Transport Dock (LPD 17 program) ships will be used in embarking, transporting, and landing elements of a Marine force to conduct primary amphibious warfare missions. The FY 2010 budget request includes the second increment of funding for LPD 26, the tenth ship of the LPD 17 class. Advance procurement funding for LPD 27 is also requested.

Submarine Programs

The Navy continues the effort to modernize the fleet of submarines. *Virginia* Class fast attack submarines are joining the existing fleet of *Los Angeles* and *Seawolf* Class submarines to provide covert force application throughout the world's oceans. Construction of the *Virginia* Class continues to be performed under a teaming arrangement between General Dynamics Electric Boat and Northrop Grumman



Newport News Shipbuilding Company. Two *Virginia* Class submarines were delivered to the fleet in FY 2008. FY 2009 funded the first of eight *Virginia* Class submarines under a new multi-year procurement (MYP) contract awarded in December 2008. FY 2010 funds the second *Virginia* Class submarine in the MYP contract and advance procurement funding for future submarines, including economic order quantity procurements to achieve savings under the MYP contract.

Logistics Platforms

The Maritime Prepositioning Force (Future) (MPF(F)) squadron of ships will be a key enabler of seabasing. It is a component of the overall global positioning posture, contributing to our national maritime strategy. The FY 2010 NDSF budget continues funding for the development of future seabasing ships. MPF(F) new construction also continues in FY 2010 and includes two MPF(F) Auxiliary Cargo and Ammunition Ships (T-AKE), the thirteenth and fourteenth ships of the class, and advance procurement funding for the Mobile Landing Platform (MLP). The MLP is

the principal transport of the organic surface connectors for the MPF(F) squadron and the primary platform to support the Marine Expeditionary Brigade surface battalion. MPF(F) ships will be interoperable with current and planned Landing Craft Air Cushion (LCAC) craft and Joint High Speed Vessel (JHSV).

The LCAC modernization program continues with a service life extension for three craft in FY 2010. The budget request also includes funding for one JHSV which will provide COCOMs high-speed intra-theater sealift mobility.

Ship Research and Development

CVN 21

The research and development effort for the CVN 78 Class is comprised of the Carrier Systems Development Program, the Advanced Nuclear Power Systems Program, and the Ship Contract Design/Live Fire Testing and Evaluation Program. The Carrier Systems Development Program includes development of ship hull, mechanical, propulsion, electrical, aviation, and combat support systems, subsystems and components to significantly improve aircraft carrier affordability, manpower requirements, survivability, and operational capabilities. It also includes the Electro Magnetic Aircraft Launch System (EMALS) development of an advanced technology aircraft launch system. EMALS will replace the current steam catapult on CVN 78 Class ships. The Ship Contract Design/Live Fire Testing and Evaluation Program includes development and related testing of CVN 78 Class aircraft carrier specific technologies.

DDG 1000

DDG 1000 research and development continues to fund development of the DDG 1000 Total Ship Computing Environment (TSCE) software releases. Funding in FY 2010 supports the final two software releases, SR5 and SR6, containing tactical software for critical HM&E and Combat Systems integral to land based testing and, subsequently, HM&E and Combat Systems trials on the lead ship. Research and development efforts in FY 2010 also support the continued development, qualification and testing for the Long Range Land Attack Projectile (LRLAP) which will be used with the Advanced Gun System (AGS). LRLAP will deliver a high explosive unitary payload with Global Positioning System (GPS) accuracy.

LCS

FY 2010 LCS research and development funding will support a multitude of activities ranging from final contract trials and Post Shakedown Availability (PSA)

planning on LCS 1 and 2, to developmental and operational testing of LCS 1 and 2 with the Mine Countermeasures (MCM) mission package.

CG(X)

CG(X), designed to be the next generation cruiser, will focus on providing multi-mission capabilities. FY 2010 RDT&E,N will support requirements development, ship feasibility design, modeling & simulation efforts, and engineering development models (EDMs) to support risk reduction. These efforts will lead to a CG(X) system requirements review.

VA Class

Virginia class research and development efforts continue to focus on cost reduction efforts, operational evaluation testing, development of sonar, combat control, and electronic support systems, and submarine multi-mission team trainer efforts. FY 2010 efforts will focus on large area bow array efforts, integrated low pressure electrolyzer development, and system level and subsystem improvements to *Virginia* class electronic systems.

SSBN(X)

Beginning in FY 2010, the department significantly increases funding for the *Ohio* Class submarine replacement program (SSBN(X)). Research and development efforts will focus on the propulsion plant and missile compartment development.

AVIATION PROGRAMS

Aircraft Programs

Navy and Marine Corps aviation continues to provide forward deployed air presence in support of our national strategy. Positioned to support the joint warfighter in the force application, battle space awareness, logistics, and force support capability portfolios, the FY 2010 budget provides the Department with the best balance of naval aviation requirements. The Navy's aircraft procurement plan continues to decrease the average age of the aircraft inventory. From a high above 20 years in the 1990's, the average age decreases again, from 18.2 years in 2009 to 17.8 years in 2010. Multi-year procurement contracts for MH-60R/S and MV-22B continue to provide significant savings and stretch available procurement funds. Development funding continues for F-35, P-8A, CH-53K, and BAMS UAS. The FY 2010 budget includes the first Low Rate Initial Production (LRIP) of four Joint Strike Fighter carrier variant (CV) and six P-8A Multi-mission Maritime Aircraft (MMA).

Figure 34- Aircraft Programs

Joint Capability Area / Program	FY 2008	FY 2009	FY 2010
Battle Space Awareness			
EA-18G	18	22	22
E-2D AHE	3	2	2
MQ-8B (VTUAV)	3	3	5
Force Application			
F/A-18E/F	24	23	9
F-35B (STOVL JSF)	6	7	16
F-35C (CV JSF)	-	-	4
AH-1Z/UH-1Y	15	16	28
MH-60R	26	31	24
P-8A (MMA)	-	-	6
Force Support			
T-6A/B (JPATS)	44	44	38
Logistics			
MV-22B	21	30	30
MH-60S	18	18	18
C-40A	-	2	1
KC-130J (USMC)	4	2	-
TOTAL	182	200	203

Includes R&D aircraft

Force Application

Supporting the force application capability area, Navy and Marine Corps aviation provide the combatant commanders with air superiority and the persistent ability to strike the enemy with several platforms. The Lightning II Joint Strike Fighter (F-35) program is developing and fielding a family of aircraft that meets the needs of the Navy, Marine Corps, Air Force and eight of our allies. The F-35A Conventional Takeoff and Landing (CTOL) variant will be a stealthy multi-role aircraft for the Air Force to replace the A-10 and F-16 and complement the F/A-22. The F-35B Short Takeoff and Landing



(STOVL) variant will be a multi-role strike fighter to replace the AV-8B and F/A-18A/B/C/D for the Marine Corps. The F-35B will also replace the Sea Harrier and GR-7 for the United Kingdom. The F-35C carrier variant provides the Navy with a multi-role stealthy strike fighter to complement the F/A-18. With improved stealth and countermeasures, the F-35 incorporates the latest available technology for advanced avionics, data links and adverse weather precision targeting; it has increased range and includes weaponry upgrades which are superior to the weapons currently employed in the fleet. This highly supportable, state of the art aircraft, which enters its ninth year of system development and demonstration in October 2009, will enable the Navy and Marine Corps team to command and maintain global air superiority in an increasingly dynamic and dangerous world. FY 2010 is the third LRIP for STOVL variant and the first for the carrier variant with 16 and 4 aircraft respectively.

The Super Hornet (F/A-18E/F) currently leads Naval aviation in the fighter/attack role. With the end of multi-year procurement in FY 2009, the FY 2010 budget reduces the procurement of F/A-18E/F to nine aircraft as the F-35 production expands.

The UH-1Y/AH-1Z aircraft fulfills the Marine Corps attack and utility helicopter missions. The FY 2010 budget supports the AH-1Z new build strategy with construction of two AH-1Z in FY 2010. The budget also includes the remanufacture of ten AH-1Z and the new construction of sixteen UH-1Y for a total of twenty-eight aircraft. These aircraft have 84% commonality and will provide airborne command and control, armed escort, armed reconnaissance, search and rescue, medical evacuation, close air support, anti-armor operations and anti-air warfare. The UH-1Y entered Full Rate Production (FRP) in FY 2008 and the AH-1Z will enter FRP in FY 2011. As part of the Marine Corps Grow the Force (GTF) initiative, the UH-1Y and AH-1Z aircraft requirement has grown to 349 aircraft with the addition of three active component squadrons.



The Department supports the multi-year procurement (FY 2007-2011) of both the Seahawk MH-60R and Knighthawk MH-60S helicopters, which are part of a joint contract with the Army's UH-60M Blackhawk. The MH-60R/S are also part of multi-year procurement contracts for their common cockpits. The MH-60R replaces the aging SH-60B and SH-60F

helicopters, whose primary force application mission areas are undersea warfare and surface warfare. This platform will have numerous capability improvements including airborne low frequency sonar, multi-mode radar, electronic support measures, and forward looking infra-red sensor. The MH-60S, which is primarily employed as a logistics platform, will sustain the forward deployed fleet in missions ranging from rapid airborne delivery of materials and personnel to support of amphibious operations through search and rescue coverage. Armed helo and organic airborne mine countermeasures are new force application mission areas and will be added as block upgrades.

Sustainment of the missions performed by the fatigued P-3 Orion fleet remains a priority for the Department. The P-8A Multi-mission Maritime Aircraft (MMA), based on the Boeing 737 platform, begins replacing the P-3, with an Initial Operating Capability (IOC) in FY 2013. The P-8A's ability to perform under sea warfare, surface warfare and Intelligence, Surveillance and Reconnaissance (ISR) missions make it a critical force multiplier capability for the joint task force commander. Additionally, the P-8A, which has the first LRIP award of six aircraft in FY 2010, will have increased capabilities over the P-3 as it addresses emerging technologies and the ever evolving irregular threats.

Battlespace Awareness

The battlespace awareness capability portfolio improves the Department's ability to gain access, monitor potential threat environments around the world, and provide timely data for assessments of ever changing tactical situations. Several aviation platforms within the portfolio contribute to the situational awareness required to meet the challenges of today's complex threat environment.



The EA-18G Growler, which replaces the EA-6B, assumes the airborne electronic attack role, supporting all operational requirements and fully integrating into strike packages. With the end of multi-year procurement in FY 2009, the FY 2010 budget maintains EA-18G production at twenty-two aircraft.

The E-2D Advanced Hawkeye program continues with Low Rate Initial Production with the procurement of two aircraft in FY 2010. This next generation, carrier based early warning, command and control aircraft will provide improved battle space

detection, support Theater Air Missile Defense (TAMD), and offer improved operational availability. The E-2D will ensure the “eyes” of the nation’s sea-based strike capability remain focused on emerging threat systems.

The FY 2010 budget supports the warfighter by providing a persistent ISR capability through developing, acquiring, and fielding transformational Unmanned Aerial Vehicle (UAV) technologies. The Vertical Take Off and Landing Tactical UAV (VTUAV) can accomplish missions including over-the-horizon tactical reconnaissance, classification, targeting, laser designation, and battle management. The VTUAV launches and recovers vertically and can operate from air capable ships (DDG, CG, LCS), as well as confined area land bases.



The Marine Corps Tactical Unmanned Aerial System (MCTUAS) was procured through joint efforts with the Army’s Shadow program. The resulting Shadow UAS is providing Marine Tier III UAS capability to the MAGTF commander, while replacing the legacy Pioneer UAS. The Shadow UAS is interoperable, compatible, and maintainable with Army Shadow units.

Logistics

Completing its first operational deployment in 2008, the Osprey MV-22B Tilt Rotor continues to be the Marine Corps’ number one aviation acquisition priority. In addition to filling a critical capability role with the Marine Corps, the MV-22B program in FY 2008 began a multi-year procurement with the Air Force which extends through FY 2012. The joint program will procure MV and CV variants to support each of the service’s requirements.

The C-40A Clipper is a Boeing 737 derivative equipped with an oversized cargo door that enables multiple cargo to passenger combinations. It is replacing the aging C-9 fleet that has served the Fleet exceptionally well, but with an average age of over 34 years, the maintenance costs are steadily rising. The C-40 provides the combatant commander with short notice, quick response, intra-theater logistics support with increased range, capacity, and fuel efficiency over legacy aircraft. The FY 2010 budget includes one aircraft.

Force Support

The Department continues to work with the Air Force to support and train aviators with procurement of the T-6B Texan II. The T-6B, commonly referred to as the Joint Primary Aircraft Training Systems (JPATS), replaces the Navy's T-34 primary flight trainer for entry level naval student pilots and flight officers. The JPATS' upgraded avionics, communications and navigation systems are more representative of the modern aircraft systems students will ultimately fly.

Aviation Research and Development

RDT&E,N initiatives support both traditional and irregular warfare demands in several aviation programs. The Advanced Hawkeye will have Cooperative Engagement Capability (CEC) to modernize the E-2C weapon systems and also provide effective surveillance and battle management in support of battlespace awareness. Tactical Aircraft Directed Infrared Countermeasures (TADIRCM) continues to develop to provide the warfighter protection against surface and air-to-air missiles. Assault DIRCM will support rotary wing aircraft, while Strike DIRCM will protect fixed wing aircraft.

Research and Development for EP-X, the EP-3 replacement (formerly known as the Aerial Common Sensor) is funded as the follow-on to the EP-3E Signals Intelligence (SIGINT) platform. Connecting multi-service platforms and ground stations for ISR will be the focus of these transformational platforms as they migrate into the Joint Airborne SIGINT Architecture necessary to support the intelligence needs of national and military decision makers.

The Super Stallion CH-53E, the only heavy-lift helicopter specifically configured to support Marine missions, entered the fleet in 1980. An improved CH-53K is required to support Marine Air-Ground task Force heavy-lift requirements in the 21st century joint environment. A cross functional platform with a logistics and force application role, the CH-53K will conduct expeditionary heavy-lift transport of armored vehicles, equipment and personnel to support distributed operations deep inland from a sea-based center of operations. A robust RDT&E,N program continues in FY 2010 with the fifth year of system development and demonstration.

The Small Tactical Unmanned Aerial System (STUAS) will fill ISR capability shortfalls identified in OIF/OEF and currently supported by service contracts. STUAS has a planned IOC of FY 2011 and will be used to complement other high

demand, low density (HDLD) manned and unmanned platforms. STUAS will be available to operate from ship/shore scenarios where those HDLD assets may not be available to ship or other Navy unit commanders. The budget also includes funding for a Navy Unmanned Combat Aerial System (NUCAS) program to conduct a carrier demonstration of a low observable NUCAS platform.

The Department has recommended termination of the VH-71 Presidential Helicopter program. The FY 2010 RDT&E,N budget includes \$55 million for program close-out costs and \$30 million for initiation of a follow-on program to replace the legacy VH-3 and VH-60 Presidential helicopters.

Weapons Programs

Figure 35 – Weapons Quantities

	FY 2009	FY 2010
Tactical Tomahawk	207	196
Standard Missile	70	62
Rolling Airframe Missile (RAM)	90	90
Evolved Sea Sparrow Missile (ESSM)	75	50
Trident II	24	24
Lightweight Torpedoes	120	120
Heavyweight Torpedoes	67	85
AIM-9X (Sidewinder)	144	161
Advanced Medium-Range Air-to-Air Missile (AMRAAM)	57	79
Joint Standoff Weapon (JSOW)	496	430
Hellfire	1,068	818
Advanced Anti-Radiation Guided Munition (AARGM)	4	36
Advanced Precision Kill Weapons System (APKWS)	-	325

Ship Weapons

The Tactical Tomahawk missile provides a premier attack capability against long range, medium range, and tactical targets on land and can be launched from both surface ships and submarines. The Tomahawk program continues full rate

production in FY 2010. By improving command and control systems, the Navy will maximize the flexibility and responsiveness inherent in the Tactical Tomahawk Weapons System.

The Standard Missile (SM) program replaces less effective, obsolete inventories with the more capable SM-2 Block IIIB and SM-6 Extended Range Active Missile (ERAM). The SM-6 missiles continue with Low Rate Initial Production (LRIP) in FY 2010. The SM-6 and its associated Naval Integrated Fire Control – Counter Air (NIFC-CA), which was developed to provide defense for Sea Shield and enable Sea Basing and Sea Striking, will provide the capability to employ three missiles at their maximum kinematic range. Investments in advanced technology such as the SM-6 and its associated NIFC-CA capabilities will enable the Navy to keep pace with the evolving threat and thereby continue to maintain our conventional warfare edge.



The Rolling Airframe Missile (RAM) is a high firepower, low cost, lightweight ship self-defense system designed to engage anti-ship cruise missiles and asymmetric threats. Block 1 adds the capability of infrared all-the-way guidance while maintaining the original dual-mode passive Radio Frequency/Infrared (RF/IR) guidance (Block 0). The Evolved SEA SPARROW Missile (ESSM) is an international cooperative effort to design, develop, test, and

produce a new and improved version of the SPARROW missile (RIM-7P) with the kinematical performance to defeat current and projected threats that possess low altitude, high velocity and maneuverability characteristics beyond the engagement capabilities of the RIM-7P. ESSM provides self-defense battlespace and firepower against faster, lower, smaller, more maneuverable anti-ship cruise missiles.

The TRIDENT II D5 Submarine Launched Ballistic Missile (SLBM) provides a credible and affordable sea-based strategic deterrent that is survivable, safe, reliable and compliant with all arms control agreements. In its third year of procurement, the TRIDENT II SLBM program continues at its full rate production in FY 2010. Investment in this important program ensures that all *Ohio* Class submarines will deploy fully loaded, while ensuring sufficient inventory exists for periodic required test launches.

The MK 48 Advanced Capability (ADCAP) heavyweight torpedo is used solely by submarines and is employed as the primary anti-submarine warfare and anti-

surface warfare weapon aboard attack, ballistic missile, and guided missile submarines. With sophisticated sonar, all digital guidance and control systems, and propulsion improvements, the last ADCAP heavyweight torpedo was delivered in 1996, with modifications and improvements to existing weapons occurring since 1997. FY 2010 efforts will continue to focus on Common Broadband Advanced Sonar System (CBASS) modifications to the existing torpedo, optimizing the weapon for both deep and littoral waters and adding advanced counter-countermeasure capabilities.

The MK 54 lightweight torpedo is used to attack submarines from surface and airborne platforms and is the payload for the vertical launched anti-submarine rocket. The MK 54 lightweight torpedo uses existing torpedo hardware and software from the MK 46, MK 48, and MK 50 torpedo programs and adds state-of-the-art commercial-off-the-shelf (COTS) digital signal-processing technology. FY 2010 efforts continue to procure MK 54 modification kits in order to increase fleet inventories of this important anti-submarine warfare weapon.

Naval Surface Fire Support (NSFS) is an integral part of Sea Strike, which will project dominant, long range, decisive and precise offensive power against key enemy targets using a wide array of means, including NSFS, in support of joint conventional and special operations forces. The Marine Corps identified its NSFS requirements in *Operational Maneuver From The Sea* (OMFTS) along with its implementing concept Ship-to-Objective Maneuver (STOM). These documents rely on commencing operations from over-the-horizon, expanding the battle space and leveraging landing forces use of speed and flexibility to achieve tactical and operational surprise as they project power against deep inland objectives. To support OMFTS and STOM, fire support systems must be immediate, responsive and accurate, incorporating high volume suppression and neutralization fires in support of the landing force in all weather conditions and under continuous sustained operations.



Several land attack research and development efforts critical to future littoral warfare continue in FY 2010, including, the Advanced Gun System (AGS), the Naval Fire Control System (NFCS), and the Distributed Common Ground System (DCGS). The Navy is also embarking on an analysis of alternatives to identify material solutions to joint fires capability gaps. The AGS will provide a modular, electric

motor driven gun (no hydraulics) with an automated magazine handling system and will be capable of engaging targets ashore using the Long Range Land Attack Projectile (LRLAP) at ranges greater than 62 nautical miles. The NFCS and DCGS will use existing fire control infrastructure to serve as the nerve center for surface land attack by automating shipboard land attack battle management duties, incorporating improved land attack weapons systems, and utilizing battlefield digitization.

Aircraft Weapons



Aircraft weapons in the force application capability portfolio arm the warfighter with lethal, interoperable, and cost effective weapons systems. The AIM-9X (Sidewinder) missile is a “launch-and-leave” air combat munition that uses passive infrared energy for acquisition and tracking of enemy aircraft. The continued procurement of the AIM-9X in FY 2010 enables the Department to maintain air superiority in the short-range air-to-air missile arena through the missile’s ability to counter current and emerging countermeasures. The AIM-9X complements the Advanced Medium Range Air-to-Air Missile (AMRAAM), a next-generation, all-weather, all-environment radar-guided missile that is designed to counter existing air vehicle threats having advanced electronic attack capabilities operating at high or low altitude. The AMRAAM program is transitioning to the Phase IV missile, which will include an enhanced data link and improved electronic protection, kinematics, and High Off-Boresight capability.



The Joint Standoff Weapon (JSOW) is a 1,000-pound-class, air-to-ground weapon, which carries several different lethal packages. JSOW procurement in FY 2010 and beyond focuses on the “unitary” variant, which carries the Broach Lethal Package warhead system and provides a unique autonomous capability to engage and destroy a variety of point targets vulnerable to blast and fragmentation kill mechanisms. The AGM-88E Advanced Anti-Radiation Guided Munition (AARGM) program upgrades the legacy AGM-88 High Speed Anti-

Radiation Missile (HARM) with multi-mode guidance and targeting capability. The AARGM systems development and demonstration program will integrate multi-mode guidance (passive anti-radiation homing/active millimeter wave radar/global positioning system/inertial navigation system) on the HARM AGM-88 missile. A total of 1,871 AARGMs (including captive air training missiles) are planned for production with IOC in FY 2010.

The Joint Air-to-Ground Missile (JAGM) will be the next generation air-to-ground missile for fixed wing, rotary wing, and UAV aircraft. Development of JAGM continues with the Army as the lead service. JAGM is an extended range, precision-guided weapon that provides lock-on before launch and lock-on after launch operational selections, with precision point target and fire-and-forget capabilities against both fixed and moving targets.

Capitalizing on previous Army efforts and congressional support, the first procurement of the Advanced Precision Kill Weapons System (APKWS) will occur in FY 2010. APKWS will provide a relatively inexpensive, small, lightweight, precision-guided weapon that is effective against soft and lightly armored targets and which enhances crew survivability with increased standoff range. APKWS offers precision, maximum kills per aircraft sortie, minimum potential for collateral damage, and increased effectiveness over legacy unguided rockets.

Ground Weapons

Ground-based, indirect fires are a key component of the reach and lethality of the MAGTF. The Marine Corps' fire support triad includes three systems supported by funding in the FY 2010 budget. The first element, the Light Weight 155mm Howitzer, is 40% lighter than the aging and less mobile M198 Howitzer allowing for greater tactical mobility and range, with improved weapon stability, accuracy, and durability. FY 2010 includes an update to the digital fire control system. The second element, the High Mobility Artillery Rocket System (HIMARS) vehicle and launcher, combined with the Guided Multiple Launch Rocket System (GMLRS) provides accurate and rapid precision fires in general support of maneuver forces at ranges exceeding 60 km. Rocket munition hardware is funded in FY 2010. The Expeditionary Fire Support System (EFSS) is the third and final element in the land-based fire support triad. Internally transportable via the MV-22 and CH-53E, the EFSS will be the primary indirect fire capability to the vertical assault element of the STOM force, providing unprecedented flexibility in direct support of indirect fires.

MINE WARFARE

Figure 36 – Mine Warfare

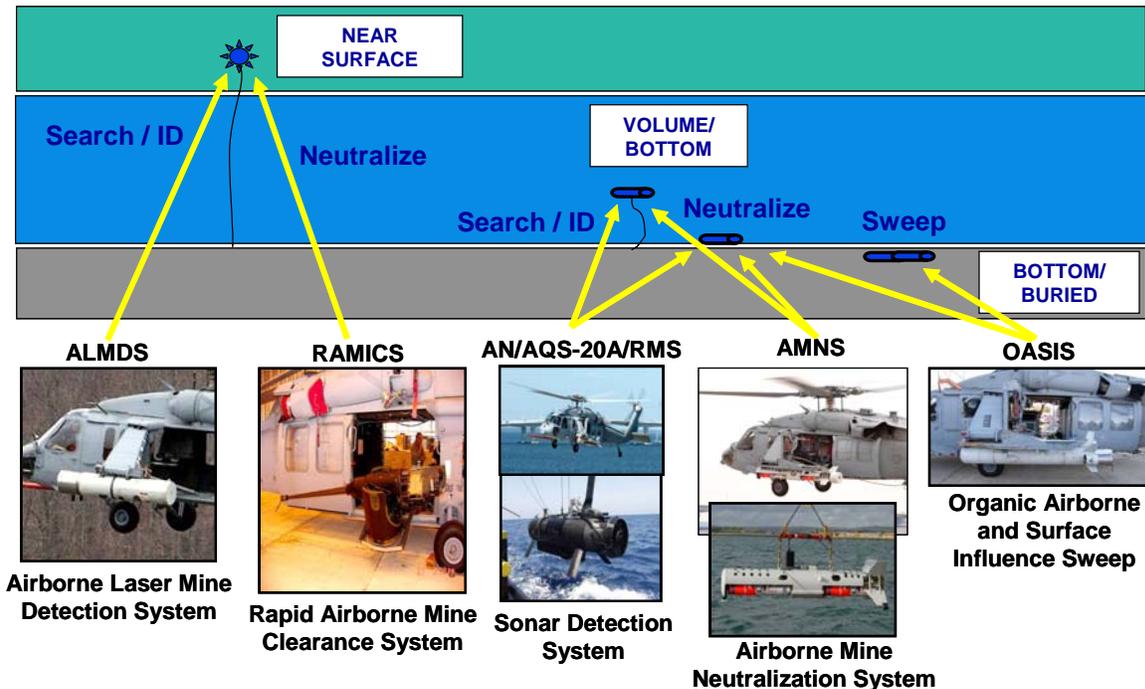


Figure 36 displays Mine Warfare efforts included in the FY 2010 budget. Mines remain a significant asymmetrical threat presenting anti-access challenges that can disrupt our ability to execute our mission. Sea mines can prevent access to naval and commercial vessels, negate our maritime capability advantages and disrupt or slow operations in the littorals. The FY 2010 Mine Countermeasure Master Plan ensures that sufficient quantities of mission packages will be procured to successfully prosecute major combat operations. Research and development efforts remain on track to deliver the mine countermeasures capability to Littoral Combat Ship (LCS), and to continue to advance the mine countermeasures roadmap through the sustained development and application of new technologies.

Major Programs

The Organic Airborne Mine Countermeasures (OAMCM) program continues development of five systems for the LCS Mine Warfare (MIW) mission package. The Organic Airborne and Surface Influence Sweep (OASIS) fielded on the MH-60S platform provides a rapid response sweeping capability against bottom and moored

acoustic and magnetic or combination acoustic/magnetic influence mines. Also fielded on the MH-60s, the Airborne Laser Mine Detection System (ALMDS) uses a laser imaging detection and ranging blue-green laser to detect, localize and classify near surface, moored and floating sea mines. The AN/AQS-20 is an underwater towed mine hunting sonar system used to detect and identify deeper moored mines and visible bottom mines. The Airborne Mine Neutralization System (AMNS) is a mine destroying wire-guided munition with homing capability. The RAMICS is a MH-60S mounted 30mm gun capable of destroying near surface and surface moored mines. The Remote Mine Hunting System (RMS), used on LCS and the Arleigh Burke class destroyer, uses a robust unmanned, semi-submersible, semi-autonomous vehicle that can be adapted to a broad spectrum of applications and missions, including towing variable-depth sensors to detect, localize, classify and identify undersea threats at a safe distance from friendly ships. The RMMV provides all-weather, low-observable operations, high endurance, interchangeable mission system electronics, and real-time data transfer capability beyond line of sight.

The FY 2010 budget continues to support the Coastal Battlefield Reconnaissance and Analysis (COBRA) system, the Intelligence, Surveillance, Reconnaissance/Targeting (ISR/T) part of the Assault Breaching System. The COBRA system will be a modular payload architecture, integrated with the MQ-8B Fire Scout VTUAV which will serve as the assault breaching detection system within the LCS MIW mission package.

Mine Warfare Research and Development

The AN/AQS-20A Sonar Mine Detecting Set was decertified from operational testing due to reliability and maintainability issues with the MH-60S Block 2A Carriage, Stream, Tow and Recovery System (CSTRS). These issues have been resolved and operational testing will resume in FY 2009 and is projected to complete in early FY 2010. OAMCM systems already delivered to the first LCS MIW Mission Package include the Airborne Laser Mine Detection System (ALMDS) and the Airborne Mine Neutralization System (AMNS). Other systems being developed for introduction in subsequent LCS Mission Modules include Organic Airborne and Surface Influence Sweep System (OASIS), and Rapid Airborne Mine Clearance System (RAMICS). Additionally, the OAMCM program provides funding for integration and testing of each MIW system on the MH-60S through a common console interface. These vital systems will provide the fleet with a flexible, organic mine warfare capability.

Networks and C4I PROGRAMS

Figure 37 – Major C4I Programs

(\$ in millions)		
Joint Capability Area / Program	FY 2009	FY 2010
Net-Centric		
NMCI <i>(Note)</i>	1,313.4	1,276.2
NGEN <i>(Note)</i>	66.2	284.2
CANES	-	46.7
MDA	69.1	26.1
JTRS	804.3	863.7
MUOS	858.2	903.7
Satellite Communications Systems	254.2	136.7
Battlespace Awareness		
DCGS	82.4	45.7
Force Application		
Submarine Communications Program	79.5	48.7
Command and Control		
Tactical Command System	81.9	65.3

Note : Programs (with the exception of NMCI and NGEN) include investment and R&D funding only.
 NMCI and NGEN funding includes investment, R&D, and operation and maintenance funding.

The Navy's Command, Control, Communication, Computers, and Intelligence (C4I) programs represent the backbone of the combat capability of naval forces. The C4I evolutionary plan revolves around four key elements: connectivity, a common tactical picture, a "Sensor-to-Shooter" emphasis, and information/command and control warfare. In support of this plan, the development of FORCEnet continues in the FY 2010 budget. FORCEnet is the cornerstone architecture that will integrate sensors, networks, decision aids, and weapons into an adaptive human control maritime system in order to achieve dominance across all warfare spectrums. C4I programs support four key capability portfolios: net-centric; battlespace awareness; force application; and command and control. Figure 37 displays C4I programs included in the FY 2010 budget by their capability area.

Net-Centric

The Navy/Marine Corp Intranet (NMCI) services contract expires at the end of FY 2010. From inception in October 2000, NMCI was a revolutionary approach in the federal government that relied heavily on private sector outsourcing to provide state of the art computing services. NMCI became the largest intranet in the world, with more than 600,000 users at more than 3,000 locations, processing about four million e-mails per day and detecting an average of 60 new viruses per month.

The Next Generation Enterprise Network (NGEN) will improve upon the successes of NMCI. A key difference is that NGEN may be government managed and controlled. NGEN management will be more centralized to support the computing demands of the Department of the Navy enterprise, fully aligned with and supported by the respective Navy and Marine Corps network operation commands. NGEN will be a key component of the DoD Global Information Grid and meets the desired net-centric element embedded in DoD capability portfolio management.

The FY 2010 budget estimate supports the NGEN program office, and a phased buyback of select computing assets and infrastructure (hardware/software). Also included are personnel to support network operations, network defense and security, and command and control.

The Consolidated Afloat Networks and Enterprise Services (CANES) program provides Navy surface ships and submarines, with reliable, high-speed Sensitive Compartmented Information (SCI), secret, and unclassified Local Area Networks (LANs). CANES provides the network infrastructure and services that enhance warfighting by enabling real-time information exchange within the ship and between afloat units, component commanders, and fleet commanders. The FY 2010 request provides RDT&E, N funding for CANES. This program reduces the need for various C4I programs to procure similar networking equipment, which reduces total lifecycle cost and physical footprint on ships.

The Tactical Switching program is the CANES shore counterpart. It incorporates existing ashore programs into a consolidated single enterprise architecture. This approach will increase bandwidth, integrate risk vulnerabilities, increase survivability and reliability of critical tactical services, reduce serial infrastructure, enable



migration to all Internet Protocol (IP), and allow open architecture ashore for CANES, Navy/Marine Corps internet next generation networks and Maritime Operations Centers. FY 2010 funding supports the Network Operations Centers (NOC) common open computing environment and services-oriented architecture complementing CANES; Defense Information System Network core migration; shore upgrades to provide the increased bandwidth for Automated Digital Networking System increment III upgrades; expanded Navy teleport IP routing architectures; and continued implementation of enterprise network management at regional and global network operations and security centers. FY 2010 funding will also complete and sustain forward deployed NOC reconstitution efforts at two sites, thereby increasing network survivability. These enterprise initiatives will allow the shore infrastructure to capitalize on increased military satellite communications technology and to conform with shipboard systems.

Maritime Domain Awareness (MDA) is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy or environment of the United States. MDA objectives include persistent monitoring, accessing and maintaining data on vessels, cargo, people, and infrastructure, as well as the ability to collect, fuse, analyze, and disseminate information through a common operating picture accessible to US and partner nations across the non-classified, unclassified and classified enclaves. FY 2010 provides funding for fusion and analysis support of prototype integration and operational support for MDA Spiral 1, tactical maritime threat warning and collaboration, expanded maritime intercept operations support and MDA data integration and dissemination.

The FY 2010 RDT&E, N budget continues to fund the **Joint Tactical Radio System (JTRS)**. The JTRS program has evolved from separate radio replacement programs to an integrated effort to network multiple weapon system platforms and forward combat units where it matters most – the last tactical mile. JTRS is developing an open architecture of cutting edge radio waveform technology that allows multiple radio types (e.g., ground, aircraft, maritime) to communicate with each other (including Allies and coalition partners) to achieve overall battlefield superiority. The goal is to produce a family of interoperable, modular software-defined radios which operate as nodes in a network to ensure secure wireless communication and networking services for mobile and fixed forces. Without JTRS, net-centric warfare stops at the command center.

The advanced **Ultra High Frequency (UHF) Mobile User Objective System (MUOS)** development and procurement funding continues in the FY 2010 budget,

supporting on-orbit capability in FY 2010 and full operational capability in FY 2014. MUOS will provide the DoD's UHF satellite communication capability for the 21st century.

Satellite Communications (SATCOM) Systems provide for shipboard terminal equipment for ship-to-ship, ship-to-shore and ship-to-aircraft tactical communications. This includes radio frequency equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. The Navy continues to conduct research in this area to increase bandwidth and survivability of off-ship connectivity.

Information Warfare/Command and Control Warfare is the integrated use of operations security, military deception, psychological operations, electronic warfare, and physical destruction to deny information to, influence, degrade, or destroy an adversary's C2 capabilities against such actions. In the Information Systems Security program, FY 2010 funds the procurement of mission critical Secure Voice (SV-21) interworking function and Secure Voice modernization (KSV-21) crypto to support the gateway transfer for SATCOM transmission. FY 2010 funding also continues to provide cryptologic equipment and secure communications equipment for Navy ships, shore sites, aircraft, Marine Corps and Coast Guard.

Other C4I programs supporting net-centric efforts include: High Frequency IP, which provides delivery of IP based collaboration services over legacy HF assets to provide an interoperable tactical edge networking capability using existing HF radio infrastructure; SubNetRelay, which provides national, allied, and coalition maritime units with a medium band IP-based, tactical ship-to-ship at-sea networking capability using legacy UHF line-of-sight systems, providing a bridge between legacy radio systems and future emerging wideband networking technologies; and High Frequency Automatic Link Establishment capability aboard amphibious class ships, which supports the embarked Marine air-ground task force commander. FY 2010 funding will also continue the development of advanced extremely high frequency terminals that support the Air Force's advanced wideband system satellite program.

Battlespace Awareness

The **Distributed Common Ground System – Navy (DCGS-N)** is the Navy's portion of the defined DoD DCGS architecture that will be interoperable across all the services' ISR systems. Data collected from satellites, aircraft, ships or submarines; or contained in intelligence databases from all intelligence producers will be shared across a joint enterprise. DCGS-N FY 2010 funds the procurement of seven block one systems (for three shore commands, one command ship, two carriers, and one amphibious ship). These DCGS-N systems will replace the currently fielded Joint Services Imagery Processing System - Navy (JSIPS-N) / Joint Fires Network (JFN) systems.

Shipboard information warfare equipment includes radio receivers, management systems, recorders, distribution systems, antennas and related equipment. The Navy uses this equipment to exploit adversarial transmissions across the entire electromagnetic spectrum to better anticipate threats to Navy assets. FY 2010 funding will support the first year of procurement of Ships Signal Exploitation Equipment (SSEE) Increment F systems. SSEE provides the afloat information warfare / cryptologist with information operations / non-kinetic capabilities and subsequent threat identification and analysis of communications intelligence as well as queuing of radio direction finding assets.

Force Application

The **Submarine Communications** program's mission is to create a common, automated, open system architecture radio room for all submarine classes. The program procures and installs systems bringing network-centric warfare to the submarine force. The program addresses the unique demands of submarine communications, obsolescence issues, and higher data rate requirements. It also procures and installs antenna field change kits for sustaining existing equipment. The common submarine radio room is a completely interoperable communications system operating within the FORCEnet architecture, which provides reliable two-way, modern, IP connectivity to joint and combined forces. This evolutionary system achieves unmatched capability, cost reduction, and future technology integration via a multimedia, circuit sharing, and Commercial Off-The-Shelf (COTS) based open architecture that serves as the shipboard automated communications control system. Procurement funding supports LOS ANGELES, SEAWOLF, VIRGINIA and OHIO class submarines. FY 2010 funding will also fund efforts to design and develop new systems such as communication at speed and depth.

Command and Control

The **Tactical Command System** upgrades the Navy's Command, Control, Computer and Intelligence (C3I) systems and processes C3I information for all warfare mission areas including planning, direction and reconstruction of missions for peacetime, wartime and times of crises. A major component of the Tactical Command System is the Global Command and Control System-Maritime (GCCS-M). GCCS-M is the Navy's fielded command and control system, a key component of the FORCEnet Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) strategy.

The Maritime Operations Center (MOC) concept of operations creates a DON headquarters network for operational level command and control, with personnel trained and certified in joint planning. MOC capabilities include: planning, executing and assessing joint and multinational operations; developing and maintaining local, regional and global maritime domain awareness; collaborative and global maritime planning, execution and assessment through globally networked MOCs; and maintaining certifications to joint standards to assume duties in joint force as the overall commander or maritime component of the joint command structure.

MARINE CORPS GROUND EQUIPMENT

To address immediate threats, the Marine Corps continues the procurement of ground equipment programs that enhance our force application and logistics capabilities with mobility and lethality. Figure 38 displays the baseline major ground equipment quantities for FY 2009 and FY 2010.

Figure 38 - Major MC Ground Equipment Procurement Quantities

	FY 2009	FY 2010
HMMWV	7	52
LVSR	488	496
ITV	25	48
Expeditionary Fire Support System (EFSS)	20	20

Major Programs



The Expanded Capacity Vehicle (ECV) is the latest and last planned Marine Corps version of the High Mobility Multi-purpose Wheeled Vehicle (HMMWV). The ECV provides a fortified chassis capable of supporting mission payloads of over 4,400 pounds and is used for the M1114 Up-Armored HMMWV, providing increased ballistic and blast protection. The

Logistics Vehicle System Replacement (LVSr) is the Marine Corps' heavy tactical distribution system. Operating throughout the Marine Air-Ground Task Force (MAGTF), the LVSr comes in the cargo, wrecker, and tractor variants. The Internally Transportable Vehicle (ITV) is a highly mobile, weapons-capable, light strike vehicle platform that is transportable in CH-53E and MV-22 aircraft. The ITV will play a key role in Ship-To-Objective-Maneuver (STOM) with its mobility and mounted heavy or medium weapons.

In preparation for future contingencies, the Marine Corps is pursuing the development of the Expeditionary Fighting Vehicle (EFV) and the Joint Light Tactical Vehicle (JLTV). The EFV is a self deploying, high water-speed, armored, amphibious vehicle capable of transporting 17 Marines from ships located beyond the horizon to inland objectives. The EFV is currently in the Development and Demonstration phase and will ultimately replace the AAV7A1 that was first fielded in 1972. The JLTV will replace the HMMWV fleet with multiple variants providing the MAGTF commander with a family of tactical vehicles tailored for unique mission tasks.

The Marine Corps' FY 2010 procurement budget continues to develop increased irregular warfare capability and capacity in support of current operations. Equipment purchases in the FY 2010 budget ensure that high demand long lead items will be available when units reach Full Operational Capability (FOC).

RESEARCH AND DEVELOPMENT SUPPORT

The Department of the Navy's Research, Development, Test and Evaluation program supports the Department's vision for future capabilities by providing the ability to enable research, development, experimentation and studies that are vital in the support of all nine joint capability areas. Over half of the entire FY 2010 RDT&E program supports the force application capability, while other funding supports battlespace awareness, logistics, net-centric, command and control, protection, and corporate management and support efforts. The Department's Research, Development, Test and Evaluation program begins with the corporate strategy that direct its science and technology program, leveraging innovative concept development and experimentation programs. These efforts, along with the efficient execution of management and support programs, provide the foundation to support delivery of major platforms and capabilities to our Sailors and Marines.



Science and Technology

The FY 2010 budget requests \$1.8 billion for the Science & Technology (S&T) program. The FY 2010 S&T budget request supports the Naval Science and Technology (S&T) Strategic Plan which was approved by the Department of the Navy's S&T Corporate Board. By design, it is a broad strategy that provides strong direction for the future, but it also retains sufficient flexibility and freedom of action to allow the Navy to meet emerging challenges or alter course as directed by senior leadership.

The basic research and applied research components of S&T fall primarily within the corporate management and support capability portfolio, along with studies and analyses. The advanced technology component of S&T supports a number of capabilities.

The FY 2010 S&T portfolio is aligned to support naval S&T focus areas which consist of: power and energy; operational environments; maritime domain awareness, asymmetric and irregular warfare, information, analysis and communication; power

projection; assure access and hold at risk; distributed operations; naval warrior performance and protection; survivability and self-defense; platform mobility; fleet/force sustainment; and affordability, maintainability, and reliability.

Discovery & Invention (D&I) This area consists of basic research and the early stages of applied research. D&I is the genesis of future naval technologies and systems. It provides technology options, maintains critical S&T capacity, and is an important component in the development of the next generation of the S&T workforce. The D&I portfolio, by design, has a broad focus, and programs are selected based on naval relevance and scientific and technological opportunity. An important aspect of D&I is the investment in essential and unique disciplines (e.g., ocean acoustics, underwater weapons, underwater medicine, naval engineering), as well as those areas that could benefit expeditionary warfare. D&I investments are planned and coordinated to leverage other military services, government agency, industry, international, and general research community investments. Most of the D&I program is performed by university researchers, but also includes the Naval Research Laboratory and Naval Warfare Centers supporting NAVAIR, NAVSEA, and SPAWAR.

Acquisition Enablers This portion of the S&T portfolio is focused on Future Naval Capabilities (FNCs) and the transition of advanced technologies to acquisition programs of record and to the Fleet. These efforts translate maturing technology into requirements-driven products in the late stages of applied research and advanced technology development. FNCs provide enabling capabilities to fill gaps identified by Navy and Marine Corps leadership through the Office of the Chief of Naval Operations and the Marine Corps Combat Development Command. The Technology Oversight Group determines the priorities for selecting FNC investments. FNC integrated product teams lead the management of individual FNCs to ensure close connectivity between requirements, technology development, and acquisition. In addition to the FNCs, Small Business Innovation Research (SBIR), Manufacturing Technology programs, and Rapid Technology Transition are used to foster other aspects critical to naval acquisition program success.

Leap Ahead Innovations Innovative Naval Prototypes and Swamp Works projects comprise the bulk of the S&T investment in the Leap Ahead Innovation portfolio. These technology investments are selected because of their potential to be “game changing” or “disruptive” in nature. Innovative Naval Prototypes (INP) programs develop and integrate technologies that can change the way naval forces operate and fight. Programs in this category may be disruptive technologies that, for reasons of high risk or radical departure from established requirements and

concepts of operation, are unlikely to survive without top leadership endorsement, and are initially too high risk for a firm transition commitment from the acquisition community. Approval for INPs is provided by the Naval S&T Corporate Board. Swamp Works programs, although potentially high risk and disruptive in nature, are smaller than INPs and are intended to produce results in one to three years. Swamp Works efforts have substantial flexibility in planning and execution, with a streamlined approval process, shortening the innovation time cycle. Although a formal transition agreement is not required, Swamp Works programs characteristically have strong advocacy, either from the acquisition community, the Fleet, or the Fleet Marine Forces. Frequently, Swamp Works products are inserted into Fleet experimentation, and if successful can provide the impetus for new acquisition requirements.

Quick Reaction and other S&T programs This includes quick-reaction projects such as Tech Solutions and Experimentation which are responsive to the immediate needs identified by the Fleet, operating forces, or Navy leadership. Tech Solutions address Fleet or force input with research to provide an S&T solution that meets or exceeds the need, with short-term programs and rapid solutions. Experimentation employs the Naval Warfare Development Command and the Marine Corps Warfighting Laboratory, in partnership with the Office of Naval Research, to explore future war fighting concepts and evaluate the capability potential of emerging technologies.

Processes for Innovation

One of the efforts supporting several capability portfolios is *Sea Trial*, the Department's process for integration of emergent concepts and technologies leading to continuous improvements in warfighting effectiveness and a sustained commitment to innovation. *Sea Trial*, led by the Navy Warfare Development Command, continuously surveys the changing frontier of technology and identifies candidates with the greatest potential to provide dramatic increases in warfighting capability. The resulting process aligns emergent technologies to support today's warfighter and deliver next-generation capability.

Following the warfighters' lead, supporting centers for concept development propose innovative operational concepts to address emergent conditions. A primary goal of *Sea Trial* is to more fully integrate the technological and conceptual centers of excellence in the Systems Commands and elsewhere, along with testing and evaluation centers, so that their combined efforts result in significant advancements in deployed combat capability. Working closely with the Fleet,

technology development centers, Systems Commands, warfare centers, and academic resources, NWDC will continue to align war gaming, experimentation, and exercise events so that they optimally support the development of transformational concepts and technologies.

The FY 2010 budget continues to support Marine Corps Warfighting Laboratory operational improvement efforts, investigating new and potentially valuable technologies, and evaluating their impact on how the Marine Corps organizes, equips, and trains to fight in the future. This includes improvements to:

- Defeat of improvised explosive devices
- Command post systems
- Command and control shared data environments
- Landing force technologies
- Assault vehicles

In addition, the FY 2010 budget continues to finance non-lethal weapons research, development and testing; a program for which the Marine Corps serves as the executive agent.

Management and Support

Research, Development, Test, and Evaluation Management Support funds:

- Research and development installations
- Efforts required for general research and development use
- Operation of the Navy's test range sites and facilities
- Operational Test and Evaluation
- Dedicated research and development aircraft and ship operations
- Target and threat simulator development efforts

Seventy-five percent of management and support funding, or about \$740 million in FY 2010, supports the Major Range and Test Facilities Base, necessary to conduct independent test and evaluation assessments for all Navy ship, submarine, aircraft, weapons, combat systems, and other development, acquisition, and operational system improvements. Appropriately, these areas of management and support activities fall within the corporate management and support capability.

The remaining research activities support platform research and development efforts and have been discussed as applicable in the previous sections. Figure 39

provides Research, Development, Test and Evaluation, Navy summary data at the budget activity level.

Figure 39 – DON RDT&E Activities

	FY 2008	FY 2009	FY 2010
<i>Dollars in Millions</i>			
<u>Significant RDT&E,N Activities</u>			
Science and Technology	2,021	2,153	1,846
Basic Research	490	546	531
Applied Research	788	774	594
Advanced Technology Development	743	833	721
Advanced Component Development	3,162	3,517	4,164
System Development and Demonstration	7,968	8,663	7,976
RDT&E Management Support	1,209	964	982
Operational Systems Development	4,126	4,375	4,303
Total RDT&E,N	18,487	19,672	19,271
NDSF R&D	66	63	73
Total R&D	18,553	19,735	19,344

Note: Totals may not add due to rounding.

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SECTION VI – REVITALIZING THE FORCE ASHORE

Providing sailors, marines, and the Department’s civilians with high quality facilities, information technology, and an environment to achieve their goals is fundamental to mission accomplishment. The ability to project power through forward deployed naval forces relies heavily on a strong and efficient shore infrastructure.

MILITARY CONSTRUCTION

Key tenets in the Department’s facilities investment strategy include:

- Growing the Marine Corps Force
- Improving Quality of Life
- Enhancing the Global Defense Posture
- Replacing Aging Facilities
- Supporting New Systems
- Upgrading Operations, Training and Security Facilities

The FY 2010 budget request achieves the Department’s key goals, financing 123 military construction projects. Of these: 36 are for the active Navy and 81 for the active Marine Corps, two for Navy Reserve Component and four for the Marine Corps Reserve Component.

Figure 40 - Summary of MILCON Funding

Military Construction Summary (Active and Reserve)

<i>Dollars in Millions</i>	FY 2008	FY 2009	FY 2010
Navy	1,349	1,229	1,003
Marine Corps	1,364	1,913	2,655
Planning and Design	143	249	169
TOTAL	2,856	3,391	3,827

Growing the Marine Corps Force

The FY 2010 request reflects \$1.9 billion for new construction that will support the Marine Corps’ increase in end-strength to 202,100 active Marines. The requested funding will provide permanent barracks, mess facilities, operations centers,

training ranges, and other supporting facilities on existing Marine Corps installations within the United States.

- Maintenance Facilities (\$61 million)
- Infrastructure Improvements (\$926 million)
- Quality of Life (\$361 million)
- Operational and Training Facilities (\$520 million)
- Planning and Design (\$41 million)

Improving Quality of Life

The Department continues to improve the quality of life for sailors and Marines. The FY 2010 program provides a total of \$635.3 million for quality of life initiatives, including the funds listed above associated with USMC force growth. Projects include:

- Bachelor Enlisted Quarters, Newport, RI (\$45.8 million)
- Student Quarters (Phase 4), Quantico, VA (\$32.1 million)
- Bachelor Enlisted Quarters, EOD School, Milton, FL (\$26.3 million)
- Bachelor Enlisted Quarters, Corry A School, Pensacola, FL (\$23.0 million)
- Student Dining Facility, Quantico, VA – (\$14.8 million)
- Bachelor Enlisted Quarters, Wallance Creek, NC (\$132.2 million)

Enhancing the Global Defense Posture - Defense Policy Review Initiative

The construction program supports improvements in the Navy's global defense posture. As part of the Defense Policy Review Initiative, an international alliance to enhance the security environment was initiated whereby the United States and the Government of Japan signed an agreement for the relocation of U. S. Marines from Okinawa to Guam. The result will be the relocation of approximately 8,000 Marines and their family members. As part of a cost-sharing arrangement, the Japanese government is providing funding and funding vehicles to support the overall relocation effort. Supporting the relocation effort in FY 2010, the Department's budget provides \$378 million for Guam projects.

- Anderson AFB North Ramp Utilities(\$21.5 million)
- Relocate Military Working Dog Facility (\$27 million)
- DAR Road Improvements (\$48.9 million)
- Anderson AFB North Ramp Parking (\$88.8 million)

- Apra Harbor Wharves Improvements (\$167 million)
- Planning And Design (\$24.8 million)

The FY 2010 budget also supports improvements in global posture supporting other missions. Projects include logistical upgrades and security and safety improvements. Some examples include:

- Reception Airfield Facilities, Rota, Spain (\$26.2 million)
- Ammo Supply Point, Camp Lemonier, Djibouti (\$21.7 million)
- Security Fencing, Camp Lemonier, Djibouti (\$8.1 million)
- Fire Station, Camp Lemonier, Djibouti (\$4.8 million)
- Interior Paved Roads, Djibouti (\$7.3 million)

Replacing Aging Facilities

As facilities reach the end of the service life they must be modernized or replaced. These projects recapitalize the waterfront, improve ship berthing, enhance operational capabilities and replace outdated facilities. Some examples include:

- Ship Repair Pier Replacement, Norfolk Naval Shipyard, VA (\$227 million)
- Aviation Transmitter/Receiver Site, Camp Pendleton, CA (\$13.6 million)
- Missile Magazines, Pearl Harbor, HI (\$22.4 million)
- Naval Construction Division Ops Facility, Little Creek, VA (\$13.1 million)
- Public Works Consolidation, Point Loma, CA (\$8.7 million)
- Airfield Elec Dist and Control, Yuma, AZ (\$1.7 million)

Supporting New Systems

As new systems are introduced into service, supporting facilities are required. These new systems include the F-35 Joint Strike Fighter, P-8 Multi-Mission Aircraft, E-2D Hawkeye and the Broad Area Maritime Surveillance (BAMS) UAV. Some associated military construction projects include:

- Various F-35 Facilities, Eglin, FL (\$24.6 million)
- P-8 Facilities, Jacksonville, FL (\$5.9 million)
- E-2D Facilities, Norfolk, VA (\$11.7 million)

Upgrading Operations, Training and Security Facilities

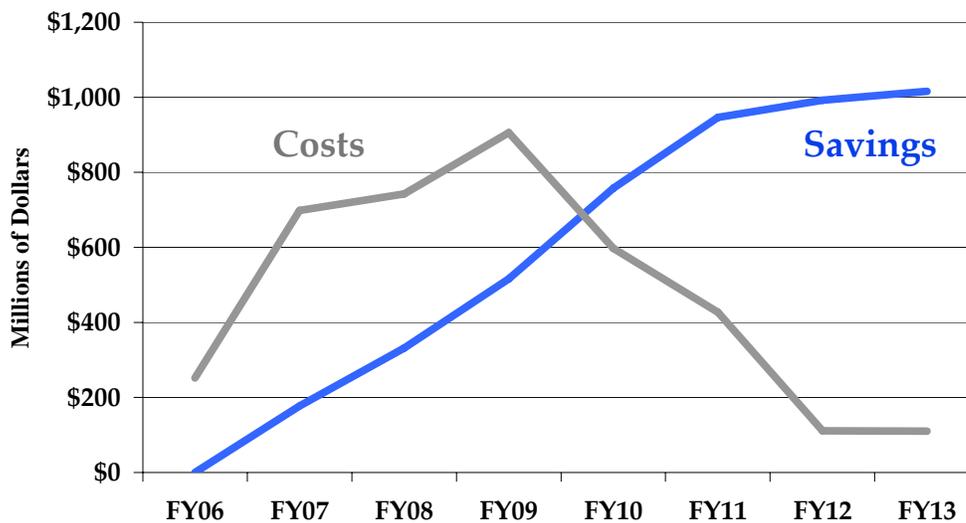
These projects range from airfield operations, training ranges, logistics support and berthing improvements. Some examples include:

- Aircraft Maintenance Hanger, Yuma, AZ (\$27 million)
- Port Operations Facility, Blount Island, FL (\$3.8 million)
- Charlie Wharf Repairs, Mayport, FL (\$29.7 million)
- Channel Dredging, Mayport, FL (\$46.3 million)

BASE REALIGNMENT AND CLOSURE (BRAC)

The Department continues to fund BRAC initiatives in the FY 2010 budget submission. The BRAC process continues to generate significant savings from reductions in the domestic base structure. The Department of the Navy employed a multi-pronged strategy for BRAC 2005 that sought to rationalize and consolidate infrastructure capabilities to eliminate excess; balance the effectiveness of the Fleet concentrations with anti-terrorism/force protection desires for dispersion of assets and redundancy of facilities; leverage opportunities for total force lay-down and joint-basing; accommodate changing operational concepts; and facilitate the evolution of force structure and infrastructure organizational alignment. BRAC 2005 is the means for reconfiguring the current infrastructure into one in which operational capacity maximizes warfighting capability and efficiency.

The program provides \$592 million in FY 2010 to continue implementation of the 2005 BRAC Commission recommendations. The Department's implementation plan, which is fully financed across the six-year implementation period, meets the statutory requirement for closure and realignment by September 15, 2011.

Figure 41 – BRAC Costs and Savings**BRAC 2005 accomplishments**

- Closed Naval Station Pascagoula and conveyed Singing River Island
- Closed or realigned 38 of 49 Naval Operational Support Centers, Navy Marine Corps Reserve Centers, Navy Recruiting Districts, Navy Regions, and Navy Reserve Regional Component Commands
- Realigned Navy Region Northeast from New London, CT to Virginia
- Converted Inpatient Services to Clinics at Marine Corps Air Station Cherry Point and Naval Station Great Lakes
- Relocated first unit/squadron from Naval Air Station Atlanta
- Finished relocating Naval Facilities Command Southeast to new HQ building at Naval Air Station Jacksonville, FL
- Executed Federal City lease with state of Louisiana
- Closed Naval Weapons Station Seal Beach Detachment Concord and transferred property to U.S. Army

The FY 2010 budget finances military construction (including planning and design), operational movements at key closure and realignment locations, and the necessary environmental compliance and impact studies at receiving locations to fulfill National Environmental Policy Act requirements. FY 2010 is the final year for BRAC construction projects.

Major efforts initiated in FY 2010 include:

- Joint Medical Command Headquarters, Potomac Annex

The continuation of closure efforts begun in FY 2006 through FY 2009 include:

- Naval Station Pascagoula, MS
- Naval Air Station Brunswick, ME
- Naval Station Ingleside, TX
- Naval Support Activity New Orleans, LA
- Naval Air Station Atlanta, GA
- Naval Supply School Athens, GA
- Naval Weapons Station Seal Beach Detachment, Concord, CA
- Marine Corps Support Activity, Kansas City, MO
- Naval Air Station Joint Reserve Base, Willow Grove, PA and Cambria Regional Airport, Johnstown, PA
- Navy Marine Corps Reserve Centers and Navy Operational Support Centers, remaining locations

The continuation of realignment efforts begun in FY 2006 through FY 2009 include:

- Fleet Readiness Centers, various locations
- Naval Station Newport, RI
- San Antonio Regional Medical Center, TX
- Marine Corps Logistics Base, Barstow, CA
- Joint Strike Fighter Initial Flight Training Sites (Various)
- Joint Center of Excellence for Religious Training and Education (Various)
- Consolidation of Civilian Personnel Offices
- Consolidation of Correctional Facilities into Joint Regional Correctional Facilities
- Co-location of Military Department Investigation Agencies
- Joint Basing of installation management functions, various locations
- Relocation of Miscellaneous Department of Navy Leased Locations
- Naval Shipyard Detachments
- Joint Center of Excellence for Chemical, Biological, and Medical Research, Development and Acquisition
- Commodity Management Privatization
- Depot Level Repairable Procurement Management Consolidation

- Centers for Fixed Wing Air Platform Research, Development & Acquisition, Test & Evaluation
- Naval Integrated Weapons & Armament Research, Development & Acquisition, Test & Evaluation Center

Mission Impact

The implementation schedule was developed to minimize the impact on Navy and Marine Corps mission capability, while placing priority on closing or realigning the bases as recommended by the 2005 Base Closure Commission and directed by the Defense Base Closure and Realignment Act, P.L. 101-510. It is the Department's objective to close and realign the recommended bases at the earliest opportunity consistent with mission requirements and availability of funds to affect the construction projects and movements.

Environmental Considerations

Remedial actions at affected bases will continue in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act. These actions include landfill closures, groundwater treatments, underground storage tank removals and free product removal as required.

FAMILY HOUSING

The Department continues its reliance on the private sector as the primary source of housing for Sailors, Marines, and their families. The family housing budget includes the operation, maintenance, and recapitalization of the family housing units remaining in the Department's inventory of government-owned housing. The budget request represents the funding level necessary to ensure government-owned housing remains adequate for Sailors, Marines, and their families.

To date, the Department has awarded 30 military family housing privatization projects totaling over 61,000 homes for Sailors, Marines, and their families. To date, over 90 percent of Navy and Marine Corps family housing has been privatized. As a result of these projects, over \$8 billion will be invested in the construction of new housing and the replacement or renovation of existing housing. The Department has contributed approximately \$800 million towards this initiative, thus leveraging its resources by ten to one. Furthermore, the Department's approach to

privatization will ensure that quality of the privatized housing is sustained over the long term.

The Navy’s FY 2010 construction budget contains \$25.1 million to fund the replacement of 30 units at Naval Base Guam, Marianas Islands and a family housing welcome center/warehouse at Chinhae, Korea. Additionally, \$25 million is budgeted in post-acquisition construction for the improvement and repair of 403 homes located overseas in Guam, Japan, and Spain. The Navy’s budget also includes \$335 million for the operation, maintenance and leasing of more than 13,300 units located worldwide.

The Marine Corps FY 2010 request for post-acquisition construction includes \$79 million to support the construction of 231 units and an addition to a DoDEA middle school at Camp Lejeune, North Carolina to help support the growing force. This will be accomplished through the use of military housing privatization authorities, in order to reduce the family housing deficit at those locations. Additionally, the request includes \$10.7 million for improvements and repairs to 44 homes located in Japan and \$4.1 million to renovate the Home of the Commandant in Washington, D.C. The Marine Corps’ budget also includes \$33.7 million for the operation, maintenance and leasing of approximately 1,700 units located worldwide.

Figure 42 - Family Housing Units

Number of Family Housing Units			
	FY 2008	FY 2009	FY 2010
New construction projects	1	3	2
New construction units	73	146	30
New privatization projects/units	3 / 1,103	6 / 2,228	1 / 231

FACILITY SUSTAINMENT, RESTORATION, AND MODERNIZATION

Appropriate investment in Facility Sustainment, Restoration and Modernization (FSRM) is necessary to maintain an inventory of installations that can provide required capabilities in support of the National Security Strategy. These installations are a major component of the force support joint capability Area. The FSRM program ensures our current inventory of facilities continues to be maintained in good working order and that any premature degradation of the facilities is precluded.



The Department of Defense (DoD) models its annual facilities sustainment requirement using an empirical model called the Facility Sustainment Model (FSM). The model takes into account facility type/use, industry metrics for similar facilities, geographic location as well as a number of other factors. Our inventory of facilities model run has been updated, and the updated list resulted in an increase in sustainment requirements. The budget provides minor program growth to sustain the DON's rate at 90% of model requirements consistent with DoD planning guidance.

The DoD uses an industry-based facility investment model to keep facility inventory at an acceptable level of quantity and quality through life-cycle maintenance, repair, and disposal. Facility recapitalization, based on industry facilities standards, occurs through restoring or modernizing aged and damaged facilities. DoD fielded a new empirical based Facility Modernization Model (FMM) for FY 2010 which changes the recapitalization rate metric from "years" to recapitalize the inventory to a "percentage" of model requirement. DoD has not yet established a goal.

The Restoration and Modernization (R&M) investments include operation & maintenance, BRAC, MILCON, NWCF and OCO Supplemental funds as applicable. R&M funding from the American Recovery and Reinvestment Act is not included. The budget reflects a significant drawdown in BRAC funding in FY 2010, as well as reductions in Navy MILCON. The Marine Corps



R&M investments return to historically normal levels in FY 2010 following an increase in FY 2009 related to bachelor quarters and other infrastructure improvement initiatives.

Figure 43 summarizes the Department's FSRM program.

Figure 43 - Facility Sustainment, Restoration, and Modernization

<i>(In Millions of Dollars)</i>	FY2008	FY 2009	FY2010
<u>Facility Sustainment Funding</u>			
Navy	1,039	1,388	1,459
Marine Corps	769	523	572
Total DON Facility Sustainment (all Appropriations)	1,808	1,911	2,031
<u>Annual Unfunded Sustainment</u>			
Navy	177	152	102
% of Model Funded	83%	90%	93%
Marine	-	52	57
% of Model Funded	100%	90%	90%
Total Unfunded Sustainment	177	204	159
<u>Restoration and Modernization (R&M) Funding</u>			
Navy	1,963	2,160	1,725
Marine Corps	732	939	540
Total DON R&M (All appropriations)	2,695	3,099	2,265
<u>Facilities Recapitalization Rate*</u>			
Navy	52	59	89%
Marine Corps	38	31	106%

* Rate measured in years for FY 2008 & FY 2009 and % of FMM Model in FY 2010

NAVY WORKING CAPITAL FUND (NWCF)

The NWCF is a revolving fund which finances Department of the Navy activities that provide products and services on a reimbursable basis, primarily for other government entities. The revolving fund structure creates a customer-provider relationship between operating units and support organizations. After customers receive annual appropriations, funded orders are sent to the NWCF providers who furnish the services or products, pay for incurred expenses, and bill the customers

who in turn authorize payment. Unlike profit-oriented commercial businesses, working capital fund activities strive to break even in prices charged to customers.

NWCF activity groups are essential enablers and support elements that are critical to the success of the DON and many DoD organizations across a number of DoD capability portfolio areas. They provide a wide range of goods and services to support the Department's ongoing operations to maintain overall military readiness and in support of overseas contingency operations. There are five NWCF activity groups: Supply Management, Depot Maintenance, Research and Development, Base Support, and Transportation. The total annual cost of goods and services to be delivered by NWCF activity groups to their customers in FY 2010 approximates \$25 billion. No major changes to the business base are expected in FY 2010 over FY 2009 levels.

Supply Management

Supply Management performs inventory management functions that result in the sale of aviation and shipboard components, ship's store stock, and consumables to a wide variety of customers. A key component of the logistics capability area, Supply Management is the central element to assuring that DON and DoD operating forces and their equipment are supported with the necessary availability of supplies, spare parts, and components to conduct GWOT engagements, various types of training, and any potential contingencies, whether of an irregular nature or of a more conventional scope. Additionally, contracting, resale, transportation, food service, and other quality of life programs are also supported. Costs related to supplying material to customers are recouped through stabilized rate recovery elements such as prior year gains and losses, inventory maintenance, repair costs including attrition, and local elements. Ensuring the right material is provided at the proper place, time, and cost is vital to equipping and sustaining our warfighting units. To this end, the Department continues to pursue initiatives to control costs and improve readiness. A portion of Navy Supply went live on the Navy Enterprise Resource Planning system in FY 2009 and the remainder is scheduled to go live in FY 2010.

Two new type/model/series aircraft were introduced to the fleet and are being supported by Navy supply management in FY 2010. They are the MH-60R "Seahawk" and the EA-18G "Growler". During this period, the largest cost drivers in the supply management inventory are aviation weapons systems for the F/A-18, H-60, and the H-53. Inventory supporting aircraft engines also continues to be a major component of the overall supply management inventory. The Marine Corps is

leading a joint program for procurement of spares for the Mine Resistant Ambush Protected (MRAP) vehicles while also supporting increased customer provisioning and replenishment spares requirements for other systems.

Depot Maintenance

Depot maintenance functions performed by the Fleet Readiness Centers (FRCs) and Marine Corps Depots ensure that the right types and quantities of weapons systems and support equipment are repaired, overhauled and updated on schedule so that deployed and soon-to-deploy units have the battle-ready items they need to fight and win both ongoing OCO engagements and any potential confrontations. Depot Maintenance personnel not only perform these functions at the major activity sites, there are also a number of forward-deployed individuals that perform time-critical repair and upgrade functions in-theater, enduring the same kinds of physical conditions as the service members they support.

The FRCs are a core industrial base essential for mobilization; repair of aircraft, engines, and components; and the manufacture of parts and assemblies. They provide engineering services in the development of hardware design changes and furnish technical and other professional services on maintenance and logistics issues. The FRCs provide important support to fleet operations by overhauling and repairing a wide range of equipment and components. Workload budgeted in FY 2010 is material intensive, requiring fewer direct labor hours to repair. Contractors are used to supplement the organic workforce during workload peaks.

Since the FY 2009 President's Budget, the MRAP vehicle workload has emerged at the Marine Corps Depots and includes upgrades to vehicles in-theater as well as some work at the depots. Current projection of other workload includes repair of combat-damaged equipment and weapons systems returning from OIF/OEF. The slightly reduced workload projection in FY 2010 is based on expected declines in both the quantity of inductions and in the expected levels of repair required (i.e. more inspect and repair only as necessary as opposed to the current experience with significant repairs due to battle damaged equipment). If operational contingencies further extend, then the civilian workforce would be accordingly adjusted.

Research and Development

Research and Development includes the Warfare Centers and the Naval Research Laboratory. R&D activities are very heavily involved in the development, engineering, acquisition and in-service support of weapons systems and equipment

for the air, land, sea, and space operating environments that are the key to DON and DoD success in the force application area now and in the future. Other capability areas where the R&D activities make major contributions are battlespace awareness, net-centric (connectivity and interoperability), and command and control. Their contributions are evidenced through their research, engineering and testing efforts in the fields of space, aerial, surface and sub-surface sensors, communications systems, multi-media data fusion, and battle management systems. R&D activities are also implementing improvements and greater standardization among their acquisition workforces, thereby contributing to the progression of overall acquisition process and execution improvement under the corporate management and support area.

Certain R&D activities support the logistics capability through the repair and maintenance of select items of operating forces weapons and equipment. This is done in those instances in which the work is limited in scope, irregular in schedule and/or very specialized (and therefore not sufficient to warrant fully dedicated depot facilities or commercial source interest). Success in the logistics area enables the achievement of force application capability area goals by the operating forces. Workload at R&D activities remains robust and relatively constant between FY 2008 and FY 2010, of approximately \$11 billion annually.

Additionally, NWCF R&D activities have been at the forefront of implementing Navy ERP. Navy ERP came on-line at Naval Air Warfare Center in FY 2008. Space and Naval Warfare Systems Centers are scheduled to go-live in FY 2010.

- Space and Naval Warfare System Centers provide fleet support for command, control, and communication systems, and ocean surveillance, and the integration of those systems that overarch platforms. The current estimate reflects the impact of the Base Realignment and Closure V recommendation to consolidate maritime command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) research, development and acquisition, test and evaluation functions.
- Naval Air Warfare Center provides fleet support for naval aircraft engines, avionics, aircraft support systems and ship/shore/air operations.
- Naval Surface Warfare Center provides fleet support for hull, mechanical, and electrical systems, surface combat systems, coastal warfare systems, and other offensive and defensive systems associated with surface warfare.
- Naval Undersea Warfare Center provides fleet support for submarines, autonomous underwater systems, and offensive and defensive systems associated with undersea warfare.

- Naval Research Laboratory operates as the DON's full spectrum corporate laboratory, conducting a broadly based multidisciplinary program of scientific research and advanced technological development directed toward maritime applications of new and improved materials, techniques, equipment, systems, and ocean, atmospheric, and space sciences and related technologies.

Base Support

The Base Support business area is comprised of the Facilities Engineering Commands (FECs) and the Naval Facilities Engineering Service Center (NFESC).

The FECs provide a broad range of services in the force support area by ensuring that DON and DoD facilities and installations have reliable access to utilities services such as electricity, water, steam and natural gas and building/facilities repair, maintenance and modernization services. NFESC is a DON-wide technical center delivering quality products and services in energy and utilities, amphibious and expeditionary systems, environment and shore, and ocean and waterfront facilities. In addition, energy efficiency improvements in both buildings and support vehicles are being implemented by Base Support activities in order to conserve DON and DoD resources. Facility-related technology development and environmental testing is also performed by this group.

The FECs' FY 2009 operating results reflect the impact of changes in the dollar/euro exchange rate that have already occurred since the FECs' budget estimates were incorporated into the FY 2009 President's Budget. Even though the FECs are impacted by higher purchased utilities, they are implementing energy conservation measures that are reducing the quantities of electricity and natural gas consumed. Initiatives to standardize and lower vehicles and equipment operating costs have been incorporated into the FY 2010 base support vehicles and equipment rates. The decrease in the FECs' FY 2010 civilian workforce reflects the decline due to commercial activity and high performing organization studies.

Transportation

The DON cannot succeed in the logistics area without the contributions of the Transportation group. While over-ocean movement of supplies and provisions to the operating forces is a primary focus of this group, it also maintains prepositioned equipment and supplies as well as other special mission services, and thereby is another example of enabling the DON to achieve force application goals whenever and wherever necessary.

Transportation is comprised of the Military Sealift Command (MSC) which supports the fleets, Naval Sea Systems Command, Space and Naval Warfare Systems Command, Strategic Systems Program Office, and the Air Force with unique vessels and programs. The three programs budgeted by MSC through the NWCF are: 1) Naval Fleet Auxiliary Force which provides support utilizing civilian mariner manned non-combatant ships for material support and ocean going tugs and salvage ships; 2) Special Mission Ships which provide unique seagoing platforms, operation of Navy command ships, and contracted harbor tugs; and 3) Afloat Prepositioning Force Navy which deploys advance material for strategic lift for the Marine Expeditionary Forces.

Activation changes include delivery of two T-AKEs in FY 2009 and two T-AKEs in FY 2010. Deactivations and contract termination changes include three T-AK Marine Corps container ships and three Maersek ships in FY 2009 and three T-AFSs combat stores ships in FY 2010.

NWCF Cash

The Department's goal is to maintain the cash balance in the seven to ten day range based on the average daily expenditure rate plus a six month projection of outlays to procure capital investments. The cash forecast of collections and disbursements considers cyclical timing (i.e. payroll disbursements based on payroll periods; timing of major disbursements including capital purchases, vendor payments within and outside government, long lead contract accruals, and transfers if known). The NWCF cash balance tends to trend toward the lower end of the cash goal due primarily to the cumulative effect of prior congressional actions, return of excess accumulated operating results due to prior year gains, and conservative cash projections due to business impacts in the budget year.

Figure 44 - Summary of NWCF Costs

COST (In Millions of Dollars)	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
Supply (Obligations)	6,082	6,779	6,727
Depot Maintenance - Aircraft	2,076	1,937	1,839
Depot Maintenance - Ships	167	0	0
Depot Maintenance - Marine Corps	580	526	460
Transportation	2,596	2,542	2,609
Research and Development	10,838	10,920	10,999
Base Support	2,816	2,688	2,764
TOTAL	\$25,155	\$25,392	\$25,398
 CAPITAL INVESTMENT			
Supply	15	10	9
Depot Maintenance - Aircraft	39	40	45
Depot Maintenance - Ships	0	0	0
Depot Maintenance - Marine Corps	5	5	5
Transportation	10	13	17
Research and Development	102	103	115
Base Support	15	21	28
TOTAL	\$185	\$192	\$219

SECTION VII – IMPROVING PERFORMANCE

The Department of the Navy is committed to building a performance based culture and has actively developed process improvements to improve and measure performance. Working in cooperation with the DoD enterprise, we will continue to improve performance measurement and budget reporting and to strengthen links between performance and budget. DON successes as well as major ongoing initiatives are addressed in this section.

CONTINUOUS PROCESS IMPROVEMENT (CPI)

CPI is a compilation of methodologies for analyzing how work is currently being done and how processes can be improved to do the job more efficiently and effectively on an ongoing basis. CPI provides DON managers and workers with proven performance improvement tools to build a strong warfighter support foundation for improving cycle time and reliability, aligning the work of subordinate organizations to enterprise-wide goals, and optimizing costs. CPI projects are generally chosen because they can improve performance measures and/or reduce funding needs associated with the particular area that is analyzed.

To achieve greater efficiency and successful business improvements and efficiencies a CPI methodology called Lean Six Sigma (LSS) has been deployed through the Department. Since 2006 the DON has been using this methodology which combines the strategies of Lean (eliminating non-value added activities and improving cycle time) and Six Sigma (reducing variation and producing highly repeatable processes).

The objective is to use LSS methods to create more readiness and assets within the DON budget. A three-year action plan was established that involved engaging senior leadership in deployment of the plan. Most of the items in this plan have been accomplished and the Department is engaged in the creation of a new CPI Strategic Roadmap. LSS initiatives are regularly monitored by DON leaders, including monthly Secretary of the Navy management reviews with principal leaders, particularly focusing on those applicable to Departmental "top issues." An aggressive LSS training program continues to build capacity for future initiatives which include activities engaged in transactional, service and support missions.

Below are some examples of Department of the Navy LSS efforts.

- CPI tools are being utilized at the Naval Supply Systems Command (NAVSUP) in direct response to the implementation of the Enterprise Resource Planning (ERP) system and specifically with Release 1.1. Teams are building Business Transition Plans to prepare for the process changes that will be effective in the upcoming release. Implementation of these plans will shorten the cycle time for users to reach full proficiency with the new release and decrease the error rate. Ultimately, Release 1.1 is estimated to result in \$304 million in inventory savings across the FYDP, starting in FY 2011. 
- The Federal Information Security Management Act (FISMA) applies to the Department's Information Assurance program, and requires certification and accreditation (C&A) of all DON systems and networks. The DON Chief Information Officer utilized LSS to address the delays experienced in the C&A process. The goal was to reduce the entire process cycle time by 30 percent. The process has been reduced from 59 days to four days by reducing the number of handoffs involved in the certification process and the dwell time at each of the remaining steps.
- The Navy Operational Logistics Support Center's (NOLSC) ordnance shipments to combat units in Iraq were behind schedule. To address the problem, a LSS project was undertaken to review the entire ordnance requisition and shipping process. As a result of the analysis, the team implemented several changes including: Eliminating non-value added steps in the requisition process; developing a forecasting tool to help predict customer demand; Shipping most popular ordnance on "Space Available" flights to get ahead of demand. By implementing these changes, NOLSC reduced the requisition cycle time by approximately 50%. 
- The Naval Sea Systems Command (NAVSEA) completed a project that focused on contracting processes that were generating long cycle times prior to award, lacked customer valued-based output measures, and created problems in execution due to multiple contract modifications. This reduced

the contract cycle time over 30% (from 545 to 360 days), improved efficiency of contract specialist resources and provided for better contract value.

- The Naval Air Systems Command (NAVAIR) completed two projects that focused on civilian base check-in and check-out processes. Both projects identified long cycle times, excessive labor costs, disjointed processes and IT network accounts remaining open post check-out during the measure and analyze phases. They streamlined both with a one stop check-in and phone check-out and identified a new process for termination or transfer of network accounts. Cycle times were reduced by 28% for check-in and 38% for check-out and iterative stops were reduced by 88% and 28%, respectively.
- The Marine Forces Pacific Command completed a CPI project which has put into place new policy and procedures to control the number of NMCI accounts within their area of responsibility and avoid charges for an excessive number of accounts. Due to accumulation of inactive accounts, the Command had exceeded contract limitations by 14,950 NMCI accounts resulting in potential costs of over \$5 million dollars in overage charges. As a result of the CPI project, the Command deleted in excess of 21,000 inactive accounts and now has a surplus of over 5000 individual NMCI accounts available for issue. Policies and procedures are now in place to consistently control and eliminate inactive accounts so limitations will not be exceeded. Additionally, the removal of the dormant accounts reduced security risk. The project is now beginning to be replicated at other USMC organizations.

To accomplish the goal of LSS integration, the Department's leaders have been educated on a broad spectrum of LSS topics including framework, efficiency methodologies and tools, and accelerated change management approaches. LSS has been deployed using a top-down approach. Benefits of process improvement continue to be realized and include improved speed of transactions, reduced cost of work, enhanced quality of work life, and improved safety.

BUSINESS TRANSFORMATION

The Department of the Navy's business transformation vision is to significantly increase the readiness, effectiveness, and availability of warfighting forces by employing business process change to create more effective operations at reduced

costs and by exploiting process improvements, technology enhancements, and an effective human capital strategy to assure continued mission superiority.

In these times of fiscal constraint, the DON is challenged to make necessary investments in future capabilities while sustaining current warfighting effectiveness. As part of a strategy to achieve these competing ends, the DON has adopted business transformation policy designed to:

- Employ business process change to create more effective operations at reduced costs.
- Exploit process improvements, technology enhancements, and an effective human capital strategy to ensure continued mission superiority.

DON business process improvement involves executing, aligning and integrating a series of enterprise-wide initiatives which will dramatically transform our ability to execute programs and support our mission. The result will be improved efficiency, better decision-making, and an organizational culture that is performance-based. Collectively, these initiatives will create a environment that produces more accurate and timely business information and will, over time, be endorsed by a favorable third party financial audit. The specific initiatives are described below.

Navy Enterprise Resource Planning: The Navy Enterprise Resource Planning (ERP) Program was designated the Navy's financial system of record in October 2008. The Navy ERP, the foundation for the Navy's transformation of business affairs, has been live at NAVAIR since October 1, 2007. Navy ERP serves approximately 16,000 users at 12 NAVAIR sites. The successful rollout at NAVAIR and a positive readiness review in August 2008 paved the way for Navy ERP to be deployed to approximately 12,000 NAVSUP users at 21 sites in October 2008. The functionality delivered to NAVSUP included Financial and Acquisition functionality implemented at NAVAIR (Release 1.0) as well as Wholesale and Retail Supply functionality (Release 1.1) planned for release in February 2010. SPAWAR is scheduled for an October 2009 implementation of ERP and will be the third Command to implement, adding another 10,000 users. NAVSEA is scheduled to follow with another 30,000 users beginning in FY 2011. At that time approximately 68,000 personnel will be using Navy ERP to perform their daily business activities and approximately 53% of Navy Total Obligating Authority (TOA) will be managed through Navy ERP. Navy has committed to extending the Navy ERP solution throughout the Navy.

All Navy ERP users will perform their business activities in a standardized manner consistent across the enterprise. Standardizing and automating key business practices across the Navy will create efficiencies, reduce the cost of business and enable easier career mobility within the workforce. These efficiencies, along with the elimination of costly and obsolete legacy information technology systems and significant inventory reductions resulting from improved supply chain management operations, will provide the Navy with a significant return on investment.

The Navy ERP system will provide an updated, transforming capability that will enable innovation, interconnectivity and collaboration among scientists, engineers, program managers, and business managers. Financial information is involved in almost every action taken by the Department of Defense (DoD) to manage defense business and report the results of its operations. The standardization of systems and processes in financial functions and acquisition programs is the backbone of Navy ERP and provides the foundation for subsequent releases. The system provides financial transparency and total asset visibility, key ingredients for improved enterprise management. Experience shows that sound financial management practices and systems can serve as the building blocks of an overall enterprise that can support both financial and non-financial modernization.

Chief Management Officer: The DON moved expeditiously to comply with the FY 2008 Defense Authorization Act, which mandated a Business Transformation governance structure within DoD and the Military Departments. The Act required the Military Departments to designate each Under Secretary as the Military Department Chief Management Officer (CMO). However, the DON quickly sought more extensive changes, mirroring congressionally directed requirements for DoD. SECNAV directed ASN (FM&C), as acting CMO, to build on the current Departmental infrastructure, which includes a DON Business Transformation Council (BTC) comprising senior officials, to recommend a future organization to manage positive change in business operations. The acting CMO employed several working groups to obtain wide reach within the Department; the working groups made recommendations for the future course of Business Transformation within DON. Concurrently, the FY 2009 Defense Authorization Act became law and expanded the changes required of the Military Departments in this area. Congress mandated establishing a Business Transformation office in each Department and also required plans for transforming business operations and systems in each service. DON actions to comply with this legislation are underway. A Deputy CMO has been assigned and is directing the formulation of the required plans pending

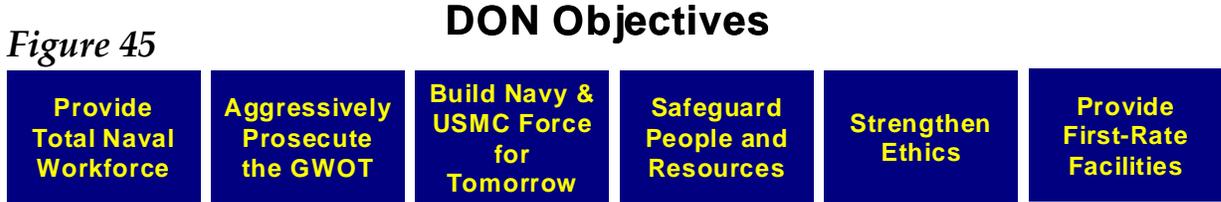
assumption of duties by an Under Secretary who will perform the duties of the DON CMO.

Financial Improvement Program: DON continues to make significant progress with its Financial Improvement Program (FIP). The goal of the FIP is to enhance the effectiveness of Navy-Marine Corps business processes and the systems supporting the processes; establish a Department-wide regime of key internal controls over the processes and systems; and to ensure that the controls are periodically tested and deemed effective. The FIP process will lead to higher-quality business data which is accurate, reliable, accessible, and complete. The result will be a stable business environment which can maintain the confidence of Congress and the taxpayer, and one which can ultimately achieve uniformly positive audit results. FIP primary achievements include: 1) Leading the Department of Defense in readying business areas for audit, in concert with the Financial Improvement and Audit Readiness (FIAR) efforts; the primary DON accomplishment is achieving audit readiness for the Marine Corps's Statement of Budgetary Resources, the first Military Service financial statement to achieve auditability; another significant area in which DON has asserted audit readiness is Environmental Liabilities, encompassing almost one-half of DON's total liabilities; 2) Refining the DON FIP methodology into an understandable and accommodating process which can be readily implemented at major commands with proper leadership; the FIP is a key enabler to positive change in the business culture Department-wide. DON's program is recognized to be the leading financial improvement program among the Military Services.

The DON FIP, in concert with the continuing roll-out of Navy ERP and other enterprise business initiatives, will transform the Department's business environment into a "best practices," auditable end-state. This transformed environment will be transparent to and accountable to DON's stakeholders – the Department of Defense, Congress, and taxpayers.

Department of the Navy Objectives and Performance Measures

The Department of the Navy FY 2010 budget is aligned with DON objectives and performance plans. The figure below illustrates our DON objectives.



Throughout this overview book, we have addressed our metrics as well as the Department of the Navy goals and objectives. Many of these metrics are also contained in budget justification materials supporting our budget request. The table which follows provides page references to the performance information contained in this document and in detailed budget justification materials supporting the current DON Objectives and FY 2010 budget submission.

DON Objective	Performance Measure	Page #
Provide a Total Naval Workforce capable and optimized to support the National Defense Strategy	Navy – Active End Strength	3-4
	Navy – Enlisted Accessions	3-4
	Navy - Number of Recruiters	3-4
	Navy - Number of Recruits	3-4
	Navy - Size of Delayed Entry Program	3-4
	Navy - Enlisted Attrition Rates	3-5
	Navy – Active Enlisted Reenlistment Rates	3-5
	Navy – Reserve End Strength	3-8
	Navy - Costs for Accession/Basic Skills/Advanced Training	B-5
	Marine Corps "Grow the Force"	1-6,4-16,4-17, 3-8,6-4
	Marine Corps – Active End Strength	3-9
	Marine Corps – Enlisted Accessions	3-9
	Marine Corps – Active Enlisted Reenlistment Rates	3-9
	Number of Marine Expeditionary Forces	4-16
	Number of Marine Battalions	4-16
	Marine Corps – Reserve End Strength	5-11
	Marine Corps - Costs for Accession/Basic Skills/Advanced Training	B-6
	National Security Personnel System	5-12,5-23,5-14
Civilian Manpower Levels	5-14,5-16	
Military to Civilian Conversions	5-15	
Use the Navy-Marine Corps	Number of Reserves Activated	1-11

Team to aggressively prosecute the Global War on Terrorism	Number of Deployed Sailors	1-11
	Number of Deployed Marines	1-11
	Ships Deployed	1-11
	Ships Underway	1-11
	Active/Reserve Navy/Marine Corps Strength	1-11
	FY08 GWOT Request	2-3
	Battle Force Ships	4-4
	Active Steaming Days Per Quarter	4-5
	Surge Sealift Ships and Capacity	4-7
	Prepositioning Ships and Capacity	4-7
	Reserve Battle Force Ships	4-18
	Reserve Steaming Days Per Quarter	4-5
	Ship Maintenance % Requirement Funded	4-10, 4-19
	Deferred Ship Maintenance	4-10
	Active Air Wings	4-11
	Active Primary Authorized Aircraft (PAA)	4-11
	Active Flying Hours T-Rating	4-12
	Airframe Availability/PAA	4-13, 4-21
	Aircraft Engine Bare Firewalls	4-13,4-21
	Aircraft Engine Spares Ready-to-Issue	4-13
	Reserve Air Wings	4-19
	Reserve Flying Hours T-Rating	4-19
Reserve Primary Authorized Aircraft (PAA)	4-19	
Ground equipment maintenance	4-17	
Build the Navy-Marine Corps Force for Tomorrow	Ship Construction Plan	3-2
	Aviation Procurement Plan	3-8
	Aviation/Ship Weapons Quantities	3-14
	Ground Equipment Quantities	3-26
	Major Platform R&D	3-6
	Funding for R&D Activities	3-32
	Maintain Balanced and Focused Science and Technology	3-28
Provide first-rate facilities to support stationing, training and operations of Naval forces.	Base Realignment and Closure	6-4,6-5,6-7
	Recapitalization Program	6-6
	67 Year FSRM Recapitalization Rate	6-10
	Family housing units	6-8
	Number of Privatization Projects	6-8

SECTION VIII - FINANCIAL SUMMARY

Total Obligational Authority (TOA) has been used throughout this book to express the amounts in the Department of the Navy budget because it is the most accurate reflection of direct program value. While TOA amounts differ only slightly from Budget Authority (BA) in some cases, they can differ substantially in others. The differences in TOA and BA, as evidenced in Figure 46 below, result from a combination of several factors.

TOA - Total Obligational Authority - The value of the direct defense program for each fiscal year regardless of the method of financing.

BA - Budget Authority - Authority provided by law to establish obligations that will result in immediate or future outlays involving Federal government funds.

Figure 46 – TOA vs BA

<i>(In Millions of Dollars)</i>	FY 2008	FY 2009	FY 2010
Total Obligational Authority (TOA)	\$139,236	\$146,748	\$156,428
Receipts and Other Funds	-93	-290	-289
Expiring Balances	411		
Rescission of Prior Year Programs	-131	-337	
NWCF Contract Authority	355		
Construction / Housing Transfers	1		
Programs Financed with Unobligated Balances	-308	-17	
Total Budget Authority	\$139,471	\$146,105	\$156,139

Note: Baseline only. Does not include Overseas Contingency Operations or American Recovery and Reinvestment Act funding. FY 2009 includes \$1,030M fuel rescission.

Receipts and Other Funds are reflected in BA, but not in TOA. Offsetting Receipts include such things as donations to the Navy and Marine Corps, recoveries from foreign military sales, deposits for survivor annuity benefits, interest on loans and investments, rents and utilities, and fees chargeable under the Freedom of Information Act. Other Funds include Trust Funds and Interfund Transaction Accounts established for the Navy General Gift Fund, Environmental Restoration of Kaho'olawe Island in Hawaii, Ships' Stores Profits, and the Naval Academy Gift and Museum Fund.

Financing adjustments account for many of the differences between TOA and BA. Generally, funding changes are scored as budget authority adjustments in the fiscal year in which the change itself is effective; for TOA purposes, changes are reflected as adjustments to a specific program year, based on the original appropriation.

Expiring balances also contribute to the difference between TOA and BA. Expiring balances are funds that were included in BA available for FY 2007 accounts, but were not obligated prior to the end of the fiscal year. These amounts are included in BA totals, but not TOA. Rescissions of prior year programs are reflected in TOA available but not as BA in the year they are rescinded.

Navy Working Capital Fund Contract Authority is offset by Contract Authority liquidated and reflects the use of authority to place orders in advance of actual sales. This amount is included in BA, but not TOA.

Construction/housing transfers are transfers authorized to shift authority from many different program years to support efforts such as the Family Housing Improvement Fund.

Adjustments to finance programs with prior balances reduce the need for BA in the budget year. These include unobligated balances from supplemental appropriations available for more than a one-year period, unobligated balances transferred from the Foreign Currency Fluctuation Fund, and transfers from supplemental accounts. Other financing adjustments include changes in fund balances and differences in reimbursable orders.

Outlays represent the net of expenditures and collections from the Treasury of the United States Government. Outlays in a given fiscal year may represent the liquidation of obligations incurred over a number of years. The TOA and BA levels for FY 2008 through FY 2010 along with DON outlay estimates are summarized in Figure 47.

Figure 47 - TOA, BA, and Outlays

Department of the Navy Summary of Direct Plan (TOA), Budget Authority, and Outlays (Dollars in Millions)

Account	TOA			BA			OUTLAYS		
	FY 2008	FY 2009	FY 2010	FY 2008	FY 2009	FY 2010	FY 2008	FY 2009	FY 2010
MPN	23,422	24,038	25,504	23,346	24,038	25,504	24,977	24,072	25,446
MPMC	10,290	11,793	12,916	10,280	11,793	12,916	12,084	11,823	12,871
RPN	1,800	1,856	1,938	1,801	1,856	1,938	1,856	1,855	1,931
RPMC	580	585	618	584	585	618	560	586	615
DHAN	1,935	1,771	1,826	1,935	1,771	1,826	1,935	1,771	1,826
DHAMC	1,116	1,053	1,136	1,116	1,053	1,136	1,116	1,053	1,136
DHANR	266	240	234	266	240	234	266	240	234
DHAMCR	142	134	129	142	134	129	142	134	129
OMN	33,502	33,476	35,070	33,397	33,459	35,070	39,038	38,901	35,798
OMMC	4,733	5,453	5,536	4,729	5,453	5,536	8,314	8,549	6,632
OMNR	1,147	1,242	1,278	1,151	1,242	1,278	1,332	1,316	1,305
OMMCR	229	211	229	229	211	229	282	264	255
ERN	-	290	286	-	290	286	-	198	259
NWCF	14	2	-	369	2	-	401	32	-
APN	12,380	14,100	18,378	12,380	14,100	18,378	10,265	12,636	14,570
WPN	3,082	3,283	3,453	3,082	3,283	3,453	2,701	2,981	3,208
SCN	13,177	13,016	13,777	13,425	12,679	13,777	11,185	12,162	12,794
OPN	5,269	5,235	5,661	5,258	5,235	5,661	5,534	5,341	5,661
PMC	2,237	1,373	1,601	2,222	1,373	1,601	6,903	4,425	3,634
PANMC	1,054	1,082	841	1,054	1,082	841	1,090	1,231	1,302
NGRE/FMS/IMET	160	-	-	160	-	-	160	-	-
RD TEN	17,906	19,672	19,271	17,858	19,673	19,271	18,563	19,108	19,378
NDSF	1,340	1,666	1,643	1,372	1,666	1,643	1,491	1,492	1,572
Total DoD Bill	135,601	141,571	151,326	135,996	141,218	151,326	150,035	150,170	150,556
MCN	2,221	3,333	3,763	2,188	3,333	3,763	1,356	2,155	3,235
MCNR	64	57	64	64	57	64	68	95	72
BRCIV	56	229	166	56	229	166	241	220	178
BRCV	592	802	592	592	802	592	307	598	779
FHCON	295	380	147	293	380	147	132	204	268
FHOPS	380	376	369	371	376	369	393	389	382
Total MILCON	3,608	5,177	5,102	3,564	5,177	5,102	2,497	3,661	4,912
Receipts and Other Funds				-93	-290	-289	-61	-290	-289
Sub Total, DON	\$139,236	\$146,748	\$156,428	\$139,471	\$146,105	\$156,139	\$152,471	\$153,535	\$155,166
OCO	25,541	17,038	15,283	26,063	17,038	15,283	*	*	*
Total, DON	\$164,777	\$163,786	\$171,711	\$165,534	\$163,143	\$171,422	\$152,471	\$153,535	\$155,166

* Outlays associated with OCO are represented in the baseline account. FY 2009 appropriation detail reflects \$1,030M fuel rescission. Totals may not add due to rounding.

Figure 48 - Derivation of FY 2009 Estimates

Figure 48 displays a track of changes to the Department of the Navy appropriations for FY 2009, beginning with the FY 2009 President's Budget request. The changes reflect the impact of congressional action associated with enactment of the FY 2008 Supplemental Appropriations Act (P.L. 110-252) and the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act 2009 (P.L. 110-329). The Operation and Maintenance, Navy appropriation reflects the transfer of \$112 million to the U.S. Coast Guard (P.L. 110-252). Prior year balances in multiyear Operation and Maintenance accounts, which remain available for obligation in FY 2009, are included.

Figure 48

Department of the Navy

Derivation of FY 2009 Estimates

(In Millions of Dollars)

	FY 2009 President's Budget	Security & Disaster Assist. Act	Available Prior Year Balances	Fuel Rescission	DON Baseline Total	Transfers	Bridge Supplemental	Remaining Supplemental	DON Baseline with Sup'l Appropriations
Military Personnel, Navy	\$24,081	-\$43			\$24,038		75	1,355	\$25,468
Military Personnel, Marine Corps	11,810	-17			\$11,793		55	1,420	\$13,268
Reserve Personnel, Navy	1,870	-14			\$1,856			39	\$1,895
Reserve Personnel, Marine Corps	595	-10			\$585			29	\$614
Health Accrual, Navy	1,771				\$1,771				\$1,771
Health Accrual, Marine Corps	1,053				\$1,053				\$1,053
Health Accrual, Navy Reserve	240				\$240				\$240
Health Accrual, Marine Corps Reserve	134				\$134				\$134
Operation & Maintenance, Navy	34,922	-582	17	-881	\$33,476	-112	3,500	2,390	\$39,254
Operation & Maintenance, Marine Corps	5,597	-89		-55	\$5,453		2,900	1,091	\$9,444
Operation & Maintenance, Navy Reserve	1,311	-6		-63	\$1,242		43	25	\$1,310
Operation & Maintenance, MC Reserve	213	-1		-1	\$211		47	31	\$289
Environmental Restoration, Navy	291	-1			\$290				\$290
Aircraft Procurement, Navy	14,717	-617			\$14,100			601	\$14,701
Weapons Procurement, Navy	3,575	-292			\$3,283			99	\$3,382
Shipbuilding & Conversion, Navy	12,733	283			\$13,016				\$13,016
Other Procurement, Navy	5,483	-248			\$5,235		28	265	\$5,528
Procurement, Marine Corps	1,513	-140			\$1,373		565	1,639	\$3,577
Procurement of Ammunition, Navy/MC	1,123	-41			\$1,082			349	\$1,431
Research, Development, Test & Eval, Navy	19,337	366		-30	\$19,673		113	140	\$19,926
National Defense Sealift Fund	1,962	-296			\$1,666				\$1,666
Military Construction, Navy	3,096	237			\$3,333			239	\$3,572
Military Construction, Naval Reserve	57				\$57				\$57
Family Housing Construction, N & MC	383	-3			\$380				\$380
Family Housing Operations, N & MC	376				\$376				\$376
Navy Working Capital Fund	2				\$2				\$2
Base Realignment and Closure	1,050	-19			\$1,031				\$1,031
TOTAL	\$149,295	-\$1,533	\$17	-\$1,030	\$146,749	-\$112	\$7,326	\$9,712	\$163,675

American Recovery and Reinvestment Act of 2009 (P.L. 111-5)

Operation & Maintenance, Navy	\$657	\$657
Operation & Maintenance, MC	\$114	\$114
Operation & Maintenance, Navy Reserve	\$55	\$55
Operation & Maintenance, MC Reserve	\$40	\$40
Research, Development, Test & Eval, Navy	\$75	\$75
Military Construction, N & MC	\$280	\$280
TOTAL	\$1,221	\$1,221



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MILITARY PERSONNEL, NAVY

Table A-1a

Department of the Navy Military Personnel, Navy

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Pay and Allowances of Officers	6,226	6,458	6,938
Pay and Allowances of Enlisted	15,414	15,747	15,506
Pay and Allowances of Midshipmen	61	63	70
Subsistence of Enlisted Personnel	882	950	1,039
Permanent Change of Station Travel	717	663	772
Other Military Personnel Costs	121	156	178
Sub Total: MPN	\$23,422	\$24,038	\$25,504
Overseas Contingency Operations	1,307	1,430	1,176
Total: MPN	\$24,729	\$25,468	\$26,680

MEDICARE-ELIGIBLE RETIREE HEALTH FUND CONTRIBUTION, NAVY

Table A-1b

Department of the Navy Medicare-Eligible Retiree Health Fund Contribution, Navy

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Health Accrual	1,935	1,771	1,826
Total: DHAN	\$1,935	\$1,771	\$1,826

MILITARY PERSONNEL, MARINE CORPS

Table A-2a

Department of the Navy

Military Personnel, Marine Corps

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Pay and Allowances of Officers	2,111	2,305	2,527
Pay and Allowances of Enlisted	7,150	8,263	9,070
Subsistence of Enlisted Personnel	587	670	786
Permanent Change of Station Travel	379	474	418
Other Military Personnel Costs	63	80	115
Sub Total: MPMC	\$10,290	\$11,793	\$12,916
Overseas Contingency Operations	1,796	1,475	671
Total: MPMC	\$12,086	\$13,268	\$13,587

MEDICARE-ELIGIBLE RETIREE HEALTH FUND CONTRIBUTION, MARINE CORPS

Table A-2b

Department of the Navy

Medicare-Eligible Retiree Health Fund Contribution, Marine Corps

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Health Accrual	1,116	1,053	1,136
Total: DHAMC	\$1,116	\$1,053	\$1,136

RESERVE PERSONNEL, NAVY

Table A-3a

Department of the Navy

Reserve Personnel, Navy

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Reserve Component Training and Support	1,800	1,858	1,938
Sub Total: RPN	\$1,800	\$1,858	\$1,938
Overseas Contingency Operations	73	39	39
Total: RPN	\$1,873	\$1,897	\$1,977

MEDICARE-ELIGIBLE RETIREE HEALTH FUND CONTRIBUTION, NAVY RESERVE

Table A-3b

Department of the Navy

Medicare-Eligible Retiree Health Fund Contribution, Navy Reserves

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Health Accrual	266	240	234
Total: DHANR	\$266	\$240	\$234

RESERVE PERSONNEL, MARINE CORPS

Table A-4a

Department of the Navy

Reserve Personnel, Marine Corps

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Reserve Component Training and Support	580	585	618
Sub Total: RPMC	\$580	\$585	\$618
Overseas Contingency Operations	17	29	31
Total: RPMC	\$597	\$614	\$649

MEDICARE-ELIGIBLE RETIREE HEALTH FUND CONTRIBUTION, MARINE CORPS RESERVE

Table A-4b

Department of the Navy

Medicare-Eligible Retiree Health Fund Contribution, Marine Corps Reserve

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Health Accrual	142	134	129
Total: DHAMCR	\$142	\$134	\$129

OPERATION AND MAINTENANCE, NAVY

Table A-5

Department of the Navy

Operation and Maintenance, Navy

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
<u>Operating Forces</u>			
Air Operations	6,210	6,308	5,684
Ship Operations	9,433	8,986	9,487
Combat Operations/Support	2,863	2,849	2,953
Weapons Support	1,967	2,009	2,117
Base Support	5,792	6,684	6,900
Total - Operating Forces	\$26,266	\$26,836	\$27,141
<u>Mobilization</u>			
Ready Reserve and Prepositioning Forces	546	390	408
Activations/Inactivations	189	117	200
Mobilization Preparedness	53	27	53
Total - Mobilization	\$788	\$534	\$661
<u>Training and Recruiting</u>			
Accession Training	256	264	284
Basic Skills and Advanced Training	1,280	1,318	2,067
Recruiting & Other Training and Education	529	574	582
Total - Training and Recruiting	\$2,066	\$2,156	\$2,933
<u>Administration and Servicewide Support</u>			
Servicewide Support	1,877	1,668	1,779
Logistics Operations and Technical Support	1,520	1,230	1,426
Investigations and Security Programs	976	1,045	1,125
Support of Other Nations	6	6	6
Cancelled Accounts	3	0	0
Total - Administration and Servicewide Support	\$4,383	\$3,949	\$4,336
Sub Total: O&MN	\$33,502	\$33,476	\$35,070
Overseas Contingency Operations	6,421	5,890	6,219
Total: O&MN	\$39,923	\$39,366	\$41,289

OPERATION AND MAINTENANCE, MARINE CORPS

Table A-6

Department of the Navy

Operation and Maintenance, Marine Corps

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
<u>Operating Forces</u>			
Expeditionary Forces	1,269	1,384	1,403
USMC Prepositioning	78	77	77
Base Support	2,180	2,713	2,917
Total - Operating Forces	\$3,528	\$4,174	\$4,397
<u>Training and Recruiting</u>			
Accession Training	20	16	17
Basic Skills and Advanced Training	354	388	427
Recruiting & Other Training and Education	295	317	324
Base Support	202	210	0
Total - Training and Recruiting	\$872	\$931	\$768
<u>Administration and Servicewide Support</u>			
Servicewide Support	313	330	372
Base Support	20	18	0
Total - Administration and Servicewide Support	\$333	\$348	\$372
Sub Total: O&MMC	\$4,733	\$5,453	\$5,536
Overseas Contingency Operations	4,523	3,991	3,702
Total: O&MMC	\$9,256	\$9,444	\$9,238

OPERATION AND MAINTENANCE, NAVY RESERVE

Table A-7

Department of the Navy

Operation and Maintenance, Navy Reserve

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
<u>Operating Forces</u>			
Air Operations	689	712	715
Ship Operations	86	114	98
Combat Operations/Support	133	133	158
Weapons Support	2	5	5
Base Support	222	264	278
Total - Operating Forces	\$1,133	\$1,228	\$1,256
<u>Administration and Servicewide Support</u>			
Servicewide Support	14	15	19
Logistics Operations and Technical Support	0	0	4
Total - Administration and Servicewide Support	\$14	\$15	\$23
Sub Total: O&MNR	\$1,147	\$1,242	\$1,279
Overseas Contingency Operations	152	68	68
Total: O&M	\$1,299	\$1,310	\$1,347

**OPERATION AND MAINTENANCE,
MARINE CORPS RESERVE**

Table A-8

Department of the Navy

Operation and Maintenance, Marine Corps Reserve

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
<u>Operating Forces</u>			
Expeditionary Forces	85	94	108
Base Support	117	84	95
Total - Operating Forces	\$202	\$178	\$203
<u>Administration and Servicewide Support</u>			
Servicewide Support	25	28	26
Base Support	2	5	0
Total - Administration and Servicewide Support	27	\$33	\$26
Sub Total: O&MMCR	\$229	\$211	\$229
Overseas Contingency Operations	116	78	87
Total: O&MMCR	\$345	\$289	\$316

ENVIRONMENTAL RESTORATION, NAVY

Table A-9

Department of the Navy

Environmental Restoration, Navy

(Dollars in Millions)

	FY 2008 Actual	FY 2009	FY 2010
Environmental Restoration Activities	-	290	286
Total: ERN	-	\$290	\$286

Note: These funds are transferred to O&M,N after appropriation and reported in executed balances there.

AIRCRAFT PROCUREMENT, NAVY

Table A-10

Department of the Navy
Aircraft Procurement, Navy
 (Dollars in Millions)

	FY 2008		FY 2009		FY 2010	
	Actual					
	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>
Combat Aircraft	149	9,687	149	9,983	159	14,119
Airlift Aircraft	0	0	2	155	1	74
Trainer Aircraft	44	325	44	287	38	267
Other Aircraft	17	851	5	203	5	134
Modification of Aircraft	0	2,548	0	1,715	0	2,022
A/C Spares & Repair Parts	0	1,411	0	1,172	0	1,264
A/C Support Equip & Facilities	0	920	0	585	0	498
Sub Total: APN	179	\$12,380	200	\$14,100	203	\$18,378
Overseas Contingency Operations	31	3,362	6	601	2	916
Total: APN	210	\$15,742	206	\$14,701	205	\$19,294

WEAPONS PROCUREMENT, NAVY

Table A-11

Department of the Navy

Weapons Procurement, Navy

(Dollars in Millions)

	FY 2008		FY 2009		FY 2010	
	Actual					
	QTY	\$	QTY	\$	QTY	\$
<u>Ballistic and Other Missiles</u>						
TRIDENT II	12	1,044	24	1,085	24	1,061
ESSM	79	83	75	85	50	51
Tomahawk	394	380	207	280	196	283
AMRAAM	52	86	57	93	79	146
Sidewinder	170	53	144	57	161	57
JSOW	370	130	496	143	430	145
STANDARD	75	158	70	225	62	249
RAM	90	75	90	71	90	75
Hellfire	659	35	1,068	92	818	59
Aerial Targets	-	67	-	79	-	47
Other	-	382	-	543	-	708
<u>Torpedoes and Related Equipment</u>						
Mk-46 Torpedo Mods	133	85	120	59	129	94
Mk-48 Torpedo ADCAP Mods	-	73	-	53	85	62
Torpedo Support Equipment	-	36	-	36	-	40
Other	-	59	-	34	-	37
<u>Other Weapons/Spares</u>						
CIWS MODS	-	181	-	163	20	159
Gun Mount Mods	-	16	-	57	-	31
All Other	-	114	-	75	-	85
<u>Spares and Repair Parts</u>						
	-	37	-	53	-	65
Sub Total: WPN		\$3,082		\$3,283		\$3,453
Overseas Contingency Operations		293		99		74
Total: WPN		\$3,375		\$3,382		\$3,527

SHIPBUILDING AND CONVERSION, NAVY

Table A-12

Department of the Navy Shipbuilding and Conversion, Navy

(Dollars in Millions)

	FY 2008		FY 2009		FY 2010	
	QTY	\$	QTY	\$	QTY	\$
<u>New Construction</u>						
CVN-21	1	3,145	0	3,916	0	1,224
SSN-774	1	3,174	1	3,573	1	3,924
DDG-51	0	48	0	199	1	2,241
DDG-1000	0	2,907	1	1,504	0	1,084
LCS	0	0	2	1,017	3	1,380
LPD-17	1	1,506	1	964	0	1,057
LHA(R)	0	1,366	0	192	0	0
JHSV	0	0	1	174	1	178
T-AKE	-	**	2	**	2	**
Total New Construction	3	\$12,146	8	\$11,539	8	\$11,088
<u>Other</u>						
CVN RCOH	0	295	1	613	0	1,775
SSBN ERO ***	1	229	1	277	0	0
LCAC SLEP	5	98	6	111	5	64
Outfitting	0	377	0	428	0	391
Service Craft	0	33	0	48	0	4
Completion of PY Shipbuilding	0	0	0	0	0	455
Total Other	6	\$1,031	8	\$1,477	5	\$2,689
Total: SCN	9	\$13,177	16	\$13,016	13	\$13,777

**Funded in NDSF.

*** Beginning in FY 2010, SSBN EROs are budgeted in O&M,N, OPN, and WPN Appropriations.

OTHER PROCUREMENT, NAVY**Table A-13***Department of the Navy**Other Procurement, Navy**(Dollars in Millions)*

	FY2008 Actual	FY2009	FY2010
Ship Support Equipment	1,675	1,513	1,757
Communications and Electronics Equipment	1,816	1,965	2,035
Aviation Support Equipment	308	378	393
Ordnance Support Equipment	621	613	695
Civil Engineering Support Equipment	199	104	90
Supply Support Equipment	106	104	101
Personnel and Command Support Equipment	336	318	341
Spares and Repair Parts	208	241	248
Sub Total: OPN	\$5,269	\$5,235	\$5,661
Overseas Contingency Operations	1,616	293	318
Total: OPN	\$6,885	\$5,528	\$5,979

PROCUREMENT, MARINE CORPS

Table A-14

Department of the Navy
Procurement, Marine Corps
(Dollars in Millions)

	FY2008 Actual	FY2009	FY2010
<u>Weapons and Combat Vehicles</u>			
LW155MM Lightweight Howitzer	175	2	7
HIMARS	30	109	71
LAV-PC	13	43	35
AAV7A1 PIP	4	5	9
Weapons and Combat Vehicles under \$5 million	51	13	26
MOD Kits	101	11	34
Other	41	62	42
<u>Guided Missiles and Equipment</u>			
Ground Based Air Defense (GBAD)	2	5	11
Other	47	5	99
<u>Communication and Electronics Equipment</u>			
Repair and Test Equipment	77	35	31
Comm Switching & Control Systems	89	49	98
Common Computer Resources	84	106	115
Radio Systems	120	66	62
Night Vision Equipment	37	25	10
Comm & Elec Infrastructure Support	24	15	16
Command Post Systems	35	16	50
Other	431	179	171
<u>Support Vehicles</u>			
5/4T Truck HMMWV (MYP)	170	3	10
Logistics Vehicle System Rep.	35	270	217
Other	199	55	76
<u>Engineer And Other Equipment</u>			
	459	284	369
<u>Spares and Repair Parts</u>			
	13	14	42
Sub Total: PMC	\$2,237	\$1,373	\$1,601
Overseas Contingency Operations	4,075	2,204	1,164
Total: PMC	\$6,312	\$3,577	\$1,765

**PROCUREMENT OF AMMUNITION, NAVY
AND MARINE CORPS**

Table A-15

Department of the Navy

Procurement of Ammunition, Navy and Marine Corps

(Dollars in Millions)

	FY2008 Actual	FY2009	FY2010
Navy Ammunition	467	489	449
Marine Corps Ammunition	587	593	392
Sub Total: PANMC	\$1,054	\$1,082	\$841
Overseas Contingency Operations	586	349	711
Total: PANMC	\$1,640	\$1,431	\$1,552

**RESEARCH, DEVELOPMENT, TEST AND
EVALUATION, NAVY**

Table A-16

Department of the Navy

Research, Development, Test and Evaluation, Navy

(Dollars in Millions)

	FY2008	FY2009	FY2010
	Actual		
Basic Research	490	546	531
Applied Research	788	774	594
Advanced Technology Development	743	833	721
Advanced Component Development	3,162	3,517	4,164
System Development and Demonstration	7,968	8,663	7,981
RDT&E Management Support	1,209	964	983
Operational Systems Development	4,126	4,375	4,297
Sub Total: RDT&E,N	\$17,907	\$19,672	\$19,271
Overseas Contingency Operations	579	253	107
Total: RDT&E,N	\$18,486	\$19,925	\$19,378

NATIONAL DEFENSE SEALIFT FUND
Table A-17

Department of the Navy
National Defense Sealift Fund
(Dollars in Millions)

	FY2008 Actual	FY2009	FY2010
Strategic Sealift Acquisition	772	999	1,090
DoD Mobilization Assets	274	269	200
Strategic Sealift Support	-	-	5
Research and Development	66	63	73
Ready Reserve Force	228	335	286
Sub Total: NDSF	\$1,340	\$1,667	\$1,643
Overseas Contingency Operations	5	-	-
Total: NDSF	\$1,345	\$1,667	\$1,643

MILITARY CONSTRUCTION, NAVY AND MARINE CORPS – ACTIVE AND RESERVE

Table A-18

Department of the Navy

Military Construction, Navy and Navy Reserve

(Dollars in Millions)

	FY2008 Actual	FY2009	FY2010
<u>Significant Programs</u>			
Operational & Training Facilities	687	646	1,006
Maintenance & Production Facilities	255	195	346
R&D Facilities	90	120	43
Supply Facilities	50	10	90
Administrative Facilities	244	84	325
Housing Facilities	458	1,574	668
Community Facilities	87	265	96
Utility Facilities & Ground Improvements	131	80	706
Pollution Abatement	74	98	308
Unspecified Minor Construction	10	14	12
Planning and Design	113	247	163
Foreign Currency	22	-	-
Sub Total: Navy	\$2,221	\$3,333	\$3,763
Overseas Contingency Operations	356	239	-
Total: Navy	\$2,577	\$3,572	\$3,763
<u>Naval Reserve</u>			
Operational & Training Facilities	51	55	32
Maintenance & Production Facilities	-	-	31
Community Facilities	5	-	-
Utility Facilities & Ground Improvements	5	-	-
Unspecified Minor Construction	-	-	-
Planning and Design	3	2	1
Total: Naval Reserve	\$64	\$57	\$64

FAMILY HOUSING, NAVY AND MARINE CORPS

Table A-19*Department of the Navy**Family Housing, Navy and Marine Corps**(Dollars in Millions)*

	FY2008 Actual	FY2009	FY2010
<u>Navy</u>			
Construction	90	120	52
O&M	350	339	335
Total: Navy	\$440	\$459	\$387
<u>Marine Corps</u>			
Construction	205	260	94
O&M	30	37	34
Total: Marine Corps	\$235	\$297	\$128
Sub Total: FH,N&MC	\$675	\$756	\$515
Overseas Contingency Operations	12	-	-
Total: FH,N&MC	\$687	\$756	\$515

BASE REALIGNMENT AND CLOSURE ACCOUNTS

Table A-20

Department of the Navy

Base Realignment and Closure Accounts

(Dollars in Millions)

Costs	FY2008 Actual	FY2009	FY2010
Base Realignment and Closure IV	56	229	168
Base Realignment and Closure V	712	802	592
Total: BRAC	\$768	\$1,031	\$760

NAVY WORKING CAPITAL FUND

Table A-21

Department of the Navy
Navy Working Capital Fund
 (Dollars in Millions)

Costs	FY2008 Actual	FY2009	FY2010
Navy Working Capital Fund	14	2	-
Sub Total: NWCF	\$14	\$2	\$0
Overseas Contingency Operations	251	-	-
Total: NWCF	\$265	\$2	\$0

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LIST OF ACRONYMS

A

AARGM - Advanced Anti-Radiation Guided Missile
AC - Active Component
ADNS - Automated Digital Networking System
AGS - Advanced Gun System
AIS - Automatic Identification System
ALMDS - Airborne Laser Mine Detection System
AMNS - Airborne Mine Neutralization System
AMRAAM - Advanced Medium Range Air-to-Air Missile
APKWS - Advanced Precision Kill Weapon System
ARI - Active Reserve Integration
ASW - Anti-Submarine Warfare

B

BA - Budget Authority
BAMS - Broad Area Maritime Surveillance
BRAC - Base Realignment and Closure

C

CANES - Consolidated Afloat Networks and Enterprises Services
CAOCL - Center for Advanced Operational Cultural Learning
CBSP - Command Broadband Satellite Program
CI/HUMINT - Counterintelligence/Human Intelligence Equipment Program
CJTF HOA - Combined Joint Task Force Horn of Africa
COBRA - Coastal Battlefield Reconnaissance and Analysis
COCOMs - Combatant Commanders
COIN - Counter Insurgency
CONPLAN - Contingency Plan
CONUS - Continental United States

COTS - Commercial Off-the-Shelf
CPI - Continuous Process Improvement
CSGs - Carrier Strike Groups
CV - Carrier Variant
CVN - Nuclear Aircraft Carrier
C2F - Commander Second Fleet
C4I - Command, Control, Communication, Computers and Intelligence
C4ISR - Command, Control, Communications, Computer, Intelligence Surveillance and Reconnaissance

D

DCGS - Distributed Common Ground System
DDG - Guided Missile Destroyer
D&I - Discovery and Invention
DIRCM - Directed Infrared Countermeasures
DLA - Defense Logistics Agency
DoD - Department of Defense
DPRI - Defense Policy Review Initiative

E

ECRC - Expeditionary Combat Readiness Center
ECV - Enhanced Capacity Vehicle
EFSS - Expeditionary Fire Support System
EFV - Expeditionary Fighting Vehicle
EOD - Explosive Ordnance Disposal
ERAM - Extended Range Active Missile
ERM - Extended Range Munitions
ERP - Enterprise Resource Planning
ESGs - Expeditionary Strike Groups
ESSM - Evolved SEA SPARROW Missile
ETC - Expeditionary Training Command
ETT - Embedded Training Teams

F

FAO - Foreign Area Officer
FAS - Fleet Air Support
FAT - Fleet Air Training
FECs - Facilities Engineering Commands
FFG - Guided Missile Frigate

FIAR - Financial Improvement and Audit Readiness

FIP - Financial Improvement Program

FNCs - Future Naval Capabilities

FOC - Full Operational Capability

FRC - Fleet Readiness Center

FRP - Fleet Response Plan

FRS - Fleet Replacement Squadrons

FSS - Fast Sealift Ships

FTE - Full-Time Equivalent

FTS - Full Time Support

FYDP - Future Years Defense Plan

G

G-BOSS - Ground-Based Operational Surveillance Systems

GCCS - Global Command and Control System

GMLRS - Guided Multiple Launch Rocket System

GNOSC - Global Network Operations and Security Center

H

HARM - High-Speed Anti Radiation Missile

HDLD - High Demand, Low Density

HF - High Frequency

HFALE - High Frequency Automatic Link Establishment

HFIP - High Frequency Internet Protocol

HIMARS - High Mobility Artillery Rocket System

HM&E - Hull, Mechanical and Electrical

HMMWV - High Mobility Multi-purpose Wheeled Vehicle

I

INP - Innovative Naval Prototypes

IOC - Initial Operational Capability

IP - Internet Protocol

IR - Infrared

ISAF - International Security Force

ISR - Intelligence, Surveillance and Reconnaissance

ISR/T - Intelligence, Surveillance and Reconnaissance/Targeting

ITV - Internally Transportable Vehicle

J

JAGM - Joint Air-to-Ground Missile

JDAM - Joint Direct Attack Munitions

JHSV - Joint High Speed Vessel

JLTV - Joint Light Tactical Vehicle

JPATS - Joint Primary Aircraft Training System

JSOW - Joint Standoff Weapon

JTRS - Joint Tactical Radio System

L

LANs - Local Area Networks

LCAC - Landing Craft Air Cushion

LCS - Littoral Combat Ship

LHA - Landing Helicopter Assault

LHD - Amphibious Assault Ship

LMSR - Large, Medium, Speed Roll-On/Roll-Off

LPD - Amphibious Dock Ship

LREC - Language Regional Expertise Culture

LRIP - Low Rate Initial Production

LRLAP - Long Range Land Attack Projectile

LSS - Lean Six Sigma

LVSR - Logistic Support Vehicle Replacement

M

MAGTF - Marine Air-Ground Task Force

MANTECH - Manufacturing Technology

MARSOC - Marine Corps Special Operations Command

MAW - Marine Air Wing

MCB - Marine Corps Base

MCM - Mine Countermeasures

MCTAUS - Marine Corps Tactical Unmanned Aircraft System

MCO - Major Combat Operation

MCAG - Maritime Civil Affairs Group

MCS - Mobility Capabilities Study

MCAS - Marine Corps Air Station

MCLB - Marine Corps Logistics Base

MCRD - Marine Corps Recruit Depot

MDA - Maritime Domain Awareness

MEB - Marine Expeditionary Brigade

MEF - Marine Expeditionary Force

MESF - Maritime Expeditionary Security Force

MEUs - Marine Expeditionary Units

MHQ - Maritime Headquarters

MILCON - Military Construction

MIW - Mine Warfare

MLP - Mobile Landing Platform

MMA - Multi-mission Maritime Aircraft

MNF-W - Multi-National Force, West

MOC - Maritime Operations Centers

MPF(F) - Maritime Prepositioning Force (Future)

MPS - Maritime Prepositioning Ships

MPT&E - Manpower, Personnel, Training and Education

MRAP - Mine Resistant Ambush Protected

MSC - Military Sealift Command

MSOAG - Marine Special Operations Advisory Group

MUOS - Mobile User Objective System

N

NADEPs - Naval Aviation Depots

NAVELSG - Navy Expeditionary Logistics Support Group

NCF - Naval Construction Force

NCW - Naval Coastal Warfare

NDSF - National Defense Sealift Fund

NECC - Navy Expeditionary Combat Command

NFCS - Naval Fire Control System

NFESC - Naval Facilities Engineering Service Center

NGEN - Next Generation Networks

NIFC-CA - Naval Integrated Fire Control - Counter Air

NMASWC - Navy Mine Anti-Submarine Warfare Command

NSFS - Naval Surface Fire Support

NSO - Naval Special Operations

NSPD - National Security Presidential Directive

NSPS - National Security Personnel System

NSW - Naval Special Warfare

NWCF - Navy Working Capital Fund

NWDC - Navy Warfare Developmental Command

O

OAMCM - Organic Airborne Mine Countermeasures

OASIS - Organic Airborne and Surface Influence Sweep System

OCO - Overseas Contingency Operations

OEF - Operation Enduring Freedom

OIF - Operation Iraqi Freedom

OMFTS - Operational Maneuver from the Sea

OPDS - Offshore Petroleum Distribution System

OPTEMPO - Operational Tempo

P

PAA - Primary Authorized Aircraft

PART - Program Assessment Rating Tool

POR - Program of Record

Q

QDR - Quadrennial Defense Review

R

RAM - Rolling Airframe Missile

RAMICS - Rapid Airborne Mine Clearance System

RC - Reserve Component

RF/IR - Radio Frequency/Infrared

R&M - Restoration and Modernization

RNOSC - Regional Network Operations and Security Center

ROS - Reduced Operating Status

RRF - Ready Reserve Force

RTT - Rapid Technology Transition

S

SBIR - Small Business Innovation Research

SCETC - Security Cooperation Education and Training Center

SCI - Sensitive Compartmented Information

SIGINT - Signals Intelligence

SLBM - Submarine Launched Ballistic Missile

SM - Standard Missile

SMCR - Selected Marine Corps Reserve
SNR - SubNetRelay
SOA - Service Oriented Architecture
SOCOM - Special Operations Command
SRM - Sustainment, Restoration and Modernization
SSN - Nuclear Attack Submarine
S&T - Science and Technology
STOM - Ship-to-Objective Maneuver
STOVL - Short Takeoff and Vertical Landing
SUW - Surface Warfare
STUAS - Small Tactical Unmanned Aircraft System

T

TACAIR/ASW - Tactical Air/Anti-Submarine Warfare
TADIRCM - Tactical Aircraft Directed Infrared Countermeasures
T-AFS - Auxiliary Fleet Support Ship

T-AKE - Dry-Cargo Ammunition Ship
TOA - Total Obligational Authority
TOG - Technology Oversight Group
TSw - Tactical Switching

U

UAS - Unmanned Aircraft System
UAV - Unmanned Aerial Vehicle
UCAS - Unmanned Combat Air System
UCAV - Unmanned Combat Aerial Vehicle
UHF - Ultra High Frequency
USTRANSCOM - United States Transportation Command

V

VHF - Very High Frequency
VTUAV - Vertical Take Off and Landing Tactical Unmanned Aerial Vehicle