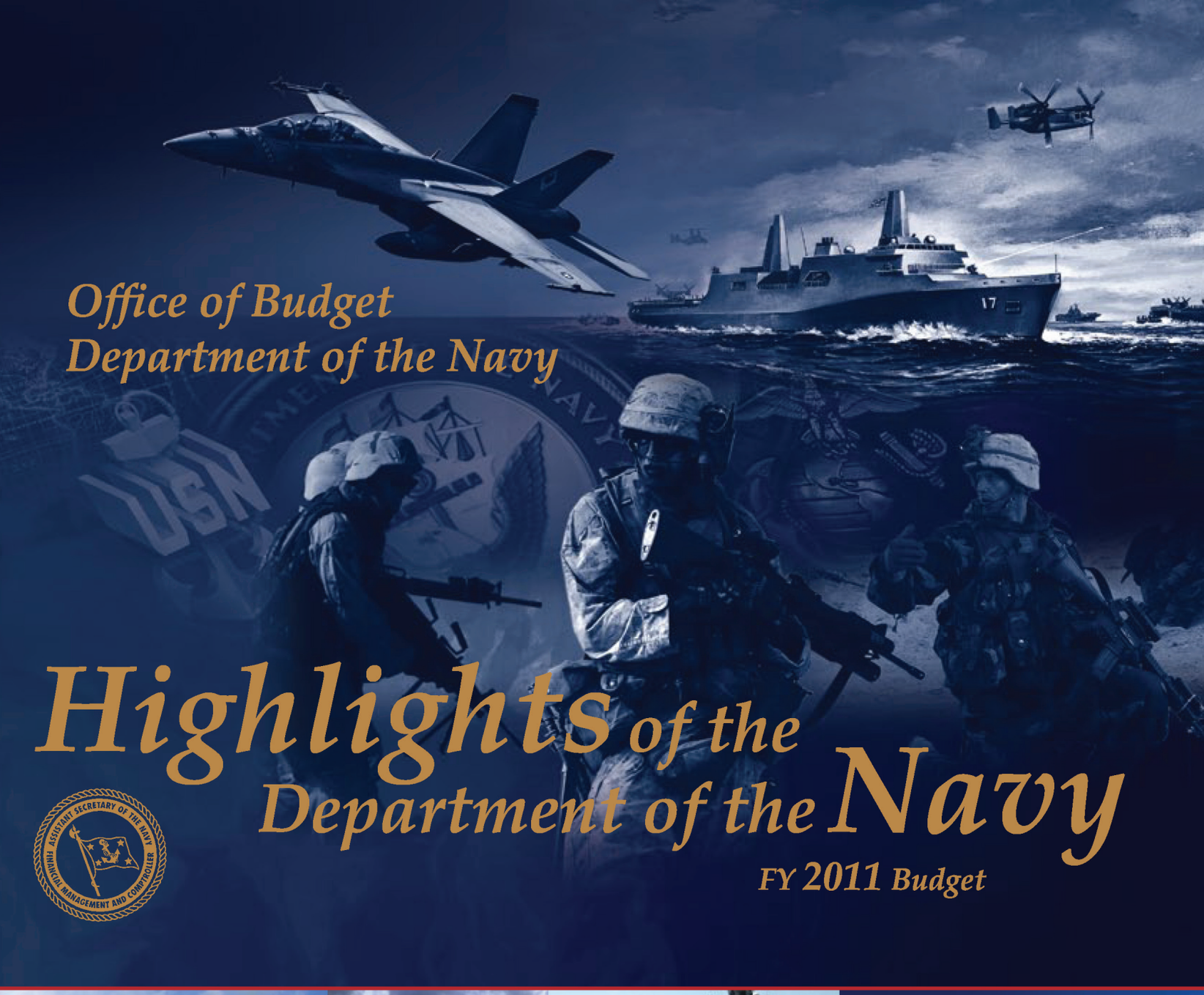

Office of Budget
Department of the Navy

Highlights of the Department of the Navy

FY 2011 Budget

February 2010

Highlights of the Department of the Navy FY 2011 Budget
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An electronic version is located at
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SECTION I – REBALANCING TO MEET PRIORITIES

OVERVIEW

The FY 2011 budget is the product of a holistic assessment of capabilities, requirements and risks and is consistent with the 2010 Quadrennial Defense Review (QDR). Enhancements in the area of Irregular Warfare (IW) are realized through increased support of Special Operations Forces and expanded capacity for littoral, brown water, and riverine missions. We continue to address both high-end and asymmetric threats through procurement of 9 ships in FY 2011 and 50 ships across the Future Years Defense Plan (FYDP), including the Littoral Combat Ship (LCS), continuation of the DDG 51 class, Mobile Landing Platforms (MLP), and *Virginia* class submarines. Additionally, aircraft procurement is funded for 206 airframes in FY 2011 and 1,006 across the FYDP. Included in FY 2011 are 12 expeditionary E/A-18G aircraft and 7 P-8A Maritime Patrol and Reconnaissance aircraft, as well as Research and Development investments in several unmanned platforms such as the Navy Unmanned Combat Air System (N-UCAS). We have also maintained our commitment to our investments in science and technology, facilities sustainment, base closure, and family housing. Pay raises for military and civilian personnel are also funded.

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 FY 2011 request of $18.5 billion for contingency operations includes incremental costs to sustain operations, manpower, equipment and infrastructure repair, as well as equipment replacement to support our focus on the increasing threats in Afghanistan and elsewhere.

In the area of cyberspace operations, we have increased investments and augmented personnel. The Quadrennial Roles and Missions Review directed the Department to develop capabilities to conduct cyberspace operations due to the fact that cyber system attacks can be as disruptive, if not more so, than kinetic weapons. Cyberspace capabilities are critical to achieving DON objectives in every warfighting domain and enterprise business model. The DON Chief Cyberspace Officer was formally established to oversee policies and responsibilities for the administration of cyberspace. To provide command and control and to enhance training and education to field a professional force, the DON stood up the Fleet Cyber Command (US 10th Fleet) and Marfor Cyber Command in late 2009. We have invested in cyberspace capabilities and the budget supports an increase of 1,025 billets, 1,014 Navy and 11 Marine Corps, for the mission, including operators and students.

Readily available energy is essential for deploying our Sailors and Marines around the globe in support of our nation's interests. Since our operational flexibility and sustainability are directly linked to our energy supplies, energy reliability is a strategic concern for our force. The potential vulnerability of energy supplies could threaten our ability to perform on the battlefield and energy costs siphon resources from warfighting requirements. Therefore, the DON is working to develop greater energy independence and conservation ashore and afloat. We will move toward alternative energy for two reasons: security and environmental stewardship. The FY 2011 DON Budget supports the Secretary of the Navy's Energy Goals of: 1) new requirements for the acquisition process; 2) sailing the "Great Green Fleet;" 3) reducing petroleum use in non-tactical vehicles; 4) increasing alternative energy ashore; and 5) increasing alternative energy use DON-wide. Current successes utilizing American Recovery and Reinvestment Act (ARRA) funding include investing $75M in 11 tactical projects and $390M in 42 shore based projects. Tactical projects include F-18 Engine Efficiency Improvements and Hybrid Electric Drive System Development for Surface Combatants. Shore projects include alternative energy (wind, solar, and geothermal) in ten states and installation of advanced metering. We are the Department of Defense lead for solar, geothermal, and ocean energy. Today, 17% of our total energy requirements are provided through alternative or renewable sources, however, the Navy and Marine Corps can, and should, do more. As we continue to increase conservation and develop alternative energy options, the DON can mitigate the impact of energy volatility, use energy as a strategic resource for operational advantage, and become a leader in environmental issues.

A worldwide presence, credible deterrence, the ability to project power from naval platforms anywhere on the globe, and the ability to prevail at sea continue to be the basic themes of the strategic maritime posture. 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. 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 six core capabilities of forward presence, deterrence, sea control, power projection, maritime security, and humanitarian assistance/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 flexible, mission-tailored forces, able to deliver capability where needed on short notice, also ensure the nation is prepared for any crisis requiring the supremacy of airpower. 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. In recent years, the sea services have begun to expand the six core capabilities to achieve a balanced blend of peacetime engagement and major combat operations capabilities.

FORWARD PRESENCE

United States naval forces significantly contribute to cooperative security operations through forward presence and sustained, routine engagement with foreign partners and allies. On any given day, our naval forces are deployed to locations around the world, ready to answer the nation's call. Our FY 2011 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).

DETERRENCE

Preventing conflicts is preferable to fighting wars, and deterrence must be viewed globally, regionally, and transnationally, 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.

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 its 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 project and sustain 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. Countering these threats far from our nation's shores protects the American homeland, enhances global stability and secures freedom of navigation for all nations. While our FY 2011 budget supports meeting this challenge, the future of maritime security depends more than ever on international cooperation and understanding. 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, utilizing surface ships as well as long range P-3 Maritime Surveillance aircraft, as part of longstanding efforts to combat crime on the high seas. Disruptions to the global system of trade, finance, law, information, and immigration can produce cascading and harmful effects far from their sources. The increase in piracy off the Somali coast is a good example. 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. Evolving from the unprecedented international disaster response for countries devastated during the 2004 Asian tsunami, Pacific Partnership has been sponsored annually by the U. S. Pacific Fleet to strengthen international relationships and interoperability for disaster relief throughout Oceania and Southeast Asia. During Pacific Partnership 2009, from June to September 2009, an international team, including members of the U.S. military, Australian Defense Force, Canadian military, U.S. government agencies, international agencies, and non-governmental organizations, treated 22,037 medical and dental patients, repaired 77 pieces of biomedical equipment, tested water sources, sprayed for mosquitoes, and completed 17 engineering projects for schools an medical clinics in Samoa, Tonga, Solomon Islands, Kiribati, and the Republic of the Marshall Islands, as well as constructing a bridge in Samoa. The *USNS Richard E. Byrd* (T-AKE 4) was the enabling platform for this effort, moving nearly 300 tons of cargo and transporting more than 500 passengers.

Operation Continuing Promise, an ongoing humanitarian effort in the Caribbean and Latin America, is building on partnerships fostered during the *USNS Comfort's* 2007 deployment and Continuing Promise 2008 deployments by the *USS Boxer* (LHD 4) and *USS Kearsarge* (LHD 3) to the region. In 2009, Commander, U. S. Naval Forces Southern Command (NAVSO) and U. S. 4th Fleet planned and coordinated a four month mission to provide humanitarian and civic assistance to Antigua and Barbuda, Colombia, the Dominican Republic, El Salvador, Haiti, Nicaragua and Panama. The *USNS Comfort*, hosted a collaborative team including personnel from the U. S. military and civil service, non-governmental organizations, academia and partner

nations. In total, 100,049 patients were treated, 1,657 surgeries were conducted, 15,003 dental patients were seen, and 13,238 animals were treated. 13 construction projects were completed, ranging from minor renovations of facilities to new school buildings. Additionally, 17 community relations projects were begun. The relationships built and sustained with our multinational partners through exercises and professional exchanges such as Continuing Promise 2009 enrich our humanitarian efforts and preserve peace and stability in the region.

Implementation of this cooperative maritime 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. We must be prepared to respond to global crises in ways ranging from peacetime presence to full-scale war. Specific initiatives in support of this strategy must be vetted and tested through experimentation, wargaming, and continued operational experience.

DEPARTMENT OF THE NAVY PRIORITIES

Our objectives and priorities are aligned with the National Defense Strategy and 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 priorities and initiatives are summarized below. Within our topline, the Department of the Navy has prioritized our resources to address the basic tenets of prevailing in today's wars, preventing and deterring conflict, preparing for a wide range of contingencies, and preserving and enhancing the force.

ALIGNMENT WITH DEFENSE STRATEGY

- **Prevailing in Today's Wars.** Today our Marines and Sailors are undertaking a myriad of missions, from combat operations in the mountains of Afghanistan to humanitarian assistance in Africa. We are a forward deployed force. To put this request in today's context, 37% of our ships are deployed on any single day, the Marine Corps has 26,000 personnel deployed world wide and the Navy has 53,000 sailors deployed. Those Sailors and

Marines are serving as members of Carrier Strike Groups, Expeditionary Strike Groups, Special Operating Forces, Seabee units, Marine battalions, riverine squadrons and medical units. Today, significant TACAIR support for Afghanistan comes from carriers and as the ground infrastructure in Afghanistan increases, the requirement for carrier based air will likely increase.

- ***Preventing and Deterring Conflict.*** To help secure and ensure the United States' access to the global commons (sea lines of communication) the Department of the Navy is working to expand our engagements with other nations. Fostering trust and cooperative relationships with foreign partners is critical to national security, but trust cannot be simply summoned in moments of crisis. It must be developed over time. To revitalize existing relationships and create new ones, we need to show long-term commitment. Our naval forces contribute significantly to cooperative security operations through forward presence and sustained, routine engagement with foreign partners and allies. We are committed to sustaining this core capability of the Maritime Strategy. Through such initiatives as the Africa Partnership Station (a multinational initiative), and Pacific Partnership (sponsored by the U.S. Pacific Fleet) we strengthen our international relationships. Additionally, the Department will increase its emphasis in support of cyberspace operations as reflected in the stand up of 10th Fleet (Cyber Command) and Marfor Cyber Command in 2009 and the budgeted increase of billets for this mission.

- ***Preparing for a Wide Range of Contingencies.*** The Department of the Navy supports the Defense strategy to prepare for a wide range of contingencies. Asymmetric use of technology will pose a range of threats to the U.S. and its partners. We have addressed both high-end and asymmetric threats through selected procurements to prepare for a wide range of future contingencies. For example, in our aircraft procurement plan, 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. The P-8A, which has the second LRIP award of seven aircraft in FY 2011, will have increased capabilities over the P-3 as it addresses emerging technologies and ever evolving irregular threats. While naval forces are conducting combat and combat-support missions in Iraq and Afghanistan, the Navy and the Marine Corps also stand ready to answer our nation's call across the full spectrum of military operations. We will work to continue their proud

tradition of readiness and to ensure that they are fully trained and equipped for their assigned missions.

- ***Preserving and Enhancing the Force.*** The Department continues to preserve and shape today's force in order to ensure we meet the requirements of the fight we are in today, while ensuring the long-term viability of the all-volunteer force to adapt to future events.

  To preserve the force, funds are required to reset and reconstitute Navy/Marine Corps forces to levels achieved before the commencement of hostile overseas operations in order to ensure critical capability enhancements essential to the conduct of theater missions. Included is funding necessary to restore units to a level of combat capability commensurate with the unit's future mission. 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, to remain responsive to emerging threats and other contingencies.

  In the area of military construction, funding for increased capacity in Blount Island is vital to meeting our ability to reset the returning equipment. Without requested funding, efforts to continue the ongoing fight and simultaneously address the postwar need to maintain future warfighting readiness will not be achieved. Additionally, equipment replacement is requested for three Marine Corps attack helicopters lost in combat as well as ground equipment, weapons and ammunition. Funding is also required for force protection upgrades and survivability enhancements for various systems.

MANAGING OUR PEOPLE

- ***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.

- ***Supporting overseas contingency efforts with Individual Augmentees (IAs).*** The Navy provides approximately 15,600 sailors in the form of IA's, including 3,800 personnel in the training pipeline, to fulfill the OCO mission requirements of the Combatant Commanders (COCOM). Approximately 8,500 of these IA's are funded in the baseline budget filling core missions such as maritime and port security, airlift support, and JTF/COCOM staff support. An additional 2,700 IA's are funded in the baseline budget in support of adaptive core missions including Counter IED, Combat Support, Military Police, Base Operations, Intel and Medical. The overseas contingency request includes 4,400 over strength requirements for temporary Navy overseas IA missions such as civil affairs, provincial reconstruction, training teams, detainee operations and customs inspections. IAs are making a significant impact in more than 20 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, Liberia, Chad, Cuba, Bahrain, Qatar, Colombia, Philippines, United Arab Emirates, Sudan, Oman, Pakistan, Germany, Spain, Italy, Honduras, Panama, Peru, Trinidad and Tobago, and Haiti. These IA's 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.

- ***The Navy-Marine Corps team.*** The Department of the Navy continues to shape the force to balance today's missions and to provide flexibility for the future. The Marine Corps has accomplished its goal of growing the force to 202,100 Marines. This initiative will help to provide our Marines greater dwell time and will provide the opportunity to address other training and missions that have not been accomplished in our recent history. Both the Navy and Marine Corps are meeting their recruiting goals both in quantity and quality. Our reserves continue to play a key role as part of the Total Force and our civilians are a bedrock providing support around the globe to our warfighters. 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.

- ***Wounded Warrior Medical Care.*** We have a solemn duty to ensure that when our forces go into harm's way, there is an excellent, comprehensive and sustainable plan for the care of our wounded, ill, or injured. The Navy Safe Harbor Program and the Marine Corps Wounded Warrior Regiment provide exceptional, individually tailored assistance to our wounded warriors, with a comprehensive approach designed to optimize their recovery, rehabilitation, and reintegration. The DON is also collaborating with the Departments of Defense and Veterans Affairs to foster continuity of care across all systems and facilitate efficient and effective transitions. Additionally, the National Naval Medical Center has a new state-of-the-art unit to treat Traumatic Brain Injury (TBI). TBI is the defining wound of Operation Iraqi Freedom, and this clinic provides unsurpassed inpatient care for polytrauma patients with TBI, serving all blast-exposed or head-injured casualties medically evacuated from theater. Further, to address Post Traumatic Stress Disorder (PTSD) and other psychological conditions that affect more and more of our force, the Navy and the Marine Corps continue to improve their Operations Stress Control (OSC) programs. This comprehensive approach seeks to not only promote psychological resilience, but also a culture of psychological health among our Sailors and Marines and their families.

- ***Housing and Child Care.*** The world's finest naval force deserves the world's finest family support programs, including community and health care services and access to quality, affordable child care. This budget request demonstrates a commitment to our Navy and Marine Corps families by investing in family programs, housing, and infrastructure. The Department continues to invest in family housing, with a project for 71 new construction units and two privatization projects which will add 324 units included in the FY 2011 budget. Over 90 percent of family housing has been privatized.

Figure 1 below reflects Navy/Marine Corps operations as of 22 January 2010.

Figure 1- Status of Navy and Marine Corps Forces

Navy

- 329,845 active strength
- 11,099 active reserves
- 6,931 activated reservists
- 51,763 Sailors deployed afloat
- 12,163 Sailors deployed ashore (*CENTCOM*)
- 141 ships underway – 49% *(away from homeport)*
    - Five Aircraft Carriers
    - Four Large Deck Amphibious Assault
- 111 ships deployed – 39%

Marine Corps

- 204,183 active strength
- 2,253 active reserves
- 6,747 activated reservists
- 29,835 on deployment/forward deployed
    - 3,077 Iraq
    - 14,704 Afghanistan
    - 2,454 Other CENTCOM
    - 2,515 PACOM
    - 7,085 All others

Data as of 22 January 2010

Support of the Department of the Navy FY 2011 budget is critical to achieving its mission and to supporting the 21st century seapower strategy. Our FY 2011 budget 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, while manpower adjustments align the Department's ongoing total force manpower to mission objectives. Warfighting capability investments focus on increasing support to combat operations.

RESOURCE SUMMARY

Total Obligation Authority (TOA) for the FY 2011 Department of the Navy baseline budget is $160.6 billion. Figure 2 displays the DON request in both current year and constant year dollars to provide perspective on real buying power which is relatively flat.

Figure 2 - Department of the Navy Topline FY 2009 - FY 2015
Current and Constant Dollar Comparison
($ Billion)

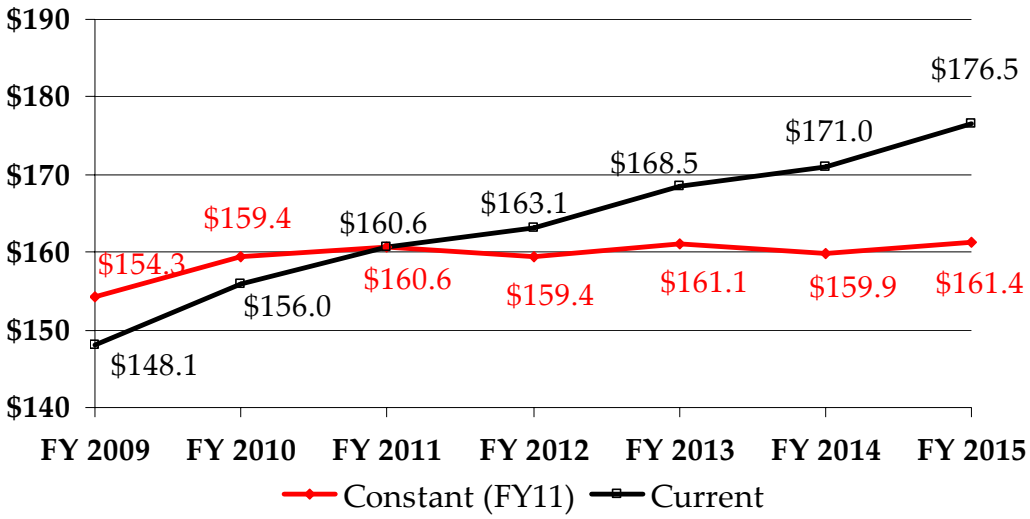


Figure 3 displays the FY 2011 President's Budget by Appropriation Title.

Figure 3 – FY 2011 DON Budget by Appropriation Title ($ Billion)

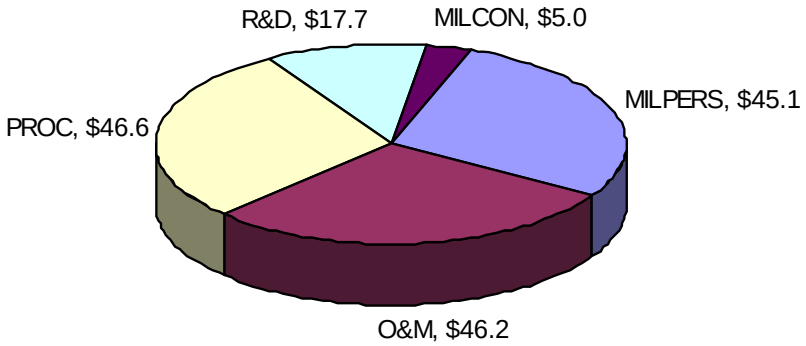


Figure 4 displays individual Department of the Navy appropriation estimates.

Figure 4

APPROPRIATION SUMMARY FY 2009 - FY 2011

(In Millions of Dollars)	FY 2009	FY 2010	FY 2011
Military Personnel, Navy	24,146	25,289	25,951
Military Personnel, Marine Corps	11,775	12,800	13,250
Reserve Personnel, Navy	1,868	1,909	1,944
Reserve Personnel, Marine Corps	619	614	617
Health Accrual, Navy	1,771	1,826	1,817
Health Accrual, Marine Corps	1,053	1,136	1,142
Health Accrual, Navy Reserve	240	234	242
Health Accrual, Marine Corps Reserve	134	129	132
Operation & Maintenance, Navy	33,963	34,671	38,134
Operation & Maintenance, Marine Corps	5,477	5,532	5,590
Operation & Maintenance, Navy Reserve	1,248	1,272	1,368
Operation & Maintenance, Marine Corps Reserve	211	223	285
Environmental Restoration, Navy	0	286	305
Aircraft Procurement, Navy	14,128	18,586	18,509
Weapons Procurement, Navy	3,200	3,347	3,360
Shipbuilding & Conversion, Navy	13,022	13,839	15,725
Other Procurement, Navy	5,170	5,424	6,450
Procurement, Marine Corps	1,259	1,517	1,344
Procurement of Ammunition, Navy & Marine Corps	1,073	798	818
Research, Development, Test & Evaluation, Navy	19,441	19,908	17,694
National Defense Sealift Fund	2,003	1,668	935
Military Construction, Navy & Marine Corps	3,293	3,534	3,879
Military Construction, Naval Reserve	57	126	62
Family Housing Construction, Navy & Marine Corps	385	147	186
Family Housing Operations, Navy & Marine Corps	384	369	366
Base Realignment and Closure	977	820	504
Navy Working Capital Fund	2	0	0
American Recovery and Reinvestment Act (ARRA)	1,221	0	0
SUBTOTAL	**$148,119**	**$156,002**	**$160,609**
Overseas Contingency Operations*	17,152	17,944	18,534
TOTAL	**$165,271**	**$173,946**	**$179,143**

Note: See Figure 5 and Section VIII, Figure 48 for Recovery Act details. FY 2009 column includes $1,030 million fuel rescission.
* FY 2010 Overseas Contingency Operations includes a $3.9 billion supplemental request.

AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) APPROPRIATION SUMMARY

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. Figure 5 below provides detail of the Department's distribution of ARRA funding.

Figure 5 – ARRA funds distribution

(Dollars Million)	**FY 2009**
Military Construction	280
Facility Sustainment	
Navy	657
Marine Corps	114
Navy Reserve	55
Marine Corps Reserve	40
RDTEN	75
Total	**1,221**

During the first 200 days since receipt of Recovery Act funds, the Department has awarded contracts for a number of essential projects. As of 19 January 2010, $935 million has been obligated for operation and maintenance, military construction, and research and development requirements. Examples include:

Wharf S1 Repair, Naval Station Pearl Harbor ($10.6 million). This project provides repairs to the concrete support piles, concrete superstructure, mooring hardware, and timber/concrete/plastic fender system to restore structural capacity. The requirement was identified in the Underwater Facilities Inspection and Assessments report of August 2000.

Repair of HVAC/Mechanical/Electrical/Roofs and Windows, Marine Corps Base Camp Lejeune ($20.7 million). This project provides funding for major repairs to the interior and exterior of six old administrative buildings. Repairs include replacing deteriorated windows and doors with energy efficient units, removing hazardous materials such as lead paint and asbestos, repairing heads, repairing electrical systems and other repairs that will return these buildings to an acceptable condition. This project makes the buildings more energy efficient, as well as providing a better working environment for Marines and civilian employees. It is noteworthy that all four prime contractors for this project are certified small business companies.

Advance Meter Installation, Naval Base Kitsap, Naval Station Everett, and Naval Air Station Whidbey Island ($31 million). This project includes the design, procurement, installation and testing of advanced electric, gas, steam, and water metering to provide utility and energy monitoring in support of the Energy Policy Act of 2005 at the Navy Region Northwest. Once the project is completed, these facilities will be able to cost-effectively allocate and manage electricity, natural gas, and water commodities.

SECTION II – INTEGRATING SUSTAINED 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 the mission goals and objectives of the Commander-in-Chief. To integrate requirements for today's warfighters and sustain Combatant Commander requirements, funding for Overseas Contingency Operations is part of the FY 2011 budget request.

NAVY AND MARINE CORPS SUPPORT

Our overseas force posture is shaped principally by ongoing and projected operational commitments. FY 2011 continues the transition process, begun in mid-2009, of shifting Marine Corps operations in theater from Iraq to Afghanistan. By March 2010, there will be more than 18,500 Marines in Afghanistan, and by mid-April, that number will grow to a robust Marine Expeditionary Force (Forward) of 19,400 Marines. By February of 2010, Iraq-based Marine presence will be reduced to minimal forces amounting to approximately 400 Individual Augmentees (IAs), engaged in security cooperation and civil-military advisory operations. This Iraq presence will remain in-place pending the completion of operational commitments in Iraq. The shift in the emphasis of operational theater focus also will require that naval forces provide greater support to the Afghanistan theater, both in the conduct of direct operational missions, as well as increased combat support for U. S. and coalition forces on the ground, generating higher optempo demand related to the

more remote geographic location of the combat region and greater personnel requirements in country.

Participation will consist of approximately 20,000 Marines conducting counterinsurgency, security cooperation, and civil-military operations in Iraq and Afghanistan. On any given day there are approximately 12,300 Sailors ashore and another 9,800 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 15,600 IAs 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 oversight for reconstruction efforts in support of Operations Enduring Freedom and Iraqi Freedom. They have also included small, precise attacks against terrorist cells, missile attacks against extremist sanctuaries, and the April 2009 rescue

of an American ship captain. Among the various strike options, our sea-based platforms are unique and provide preeminent capabilities that will be maintained.

This versatility and lethality can be applied across the spectrum of operations, from destroying terrorist base camps and protecting friendly forces involved in sustained counterinsurgency or stability operations, 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 including 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 advance the interests of the U.S. and the security of the region. The FY 2010/FY 2011 contingency operations requests support the expansion of capabilities sufficient to secure Afghanistan and prevent it from again becoming a haven for international terrorism and associated militant extremist movements.

The Navy has 53,000 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 IAs. Our Sailors are fully engaged on the ground, in the air, and at sea in support of operations in Iraq and Afghanistan. On the ground, our Navy has 12,300 active and reserve Sailors in Central Command supporting Navy, Joint Force and Combatant Commander requirements. Navy Commanders are leading six of the twelve U.S.-lead Provincial Reconstruction Teams in Afghanistan. A significant portion of the combat air missions over Afghanistan are flown by naval air forces. Our elite teams of Navy SEALs are heavily engaged in combat operations, Navy Explosive Ordnance Disposal platoons are defusing Improvised Explosive Devices and landmines. Our SEABEE construction battalions are rebuilding schools and restoring critical infrastructure. Navy sealift is delivering the majority of heavy war equipment to CENTCOM, while Navy logisticians are ensuring materiel arrives on time. Our Navy doctors are providing medical assistance in the field and at forward operating bases. Navy IAs are providing

combat support and combat service support for Army and Marine Corps personnel in Iraq and Afghanistan. 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 a member of joint task force/Combatant Commanders staffs. On the water, Navy Expeditionary Combat Command Riverine forces are working closely with the Iraqi Navy to safeguard Iraqi infrastructure and provide maritime security in key waterways. Navy forces are also intercepting smugglers and insurgents and protecting Iraqi and partner nation oil and gas infrastructure. We know the sea lanes must remain open for the transit of oil, the lifeblood of the Iraqi economy, and our ships and sailor are making that happen.

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 IAs, activated reservists and other special pays. Navy is requesting funding for 4,400 IAs in the FY 2011 OCO request for service members filling non-traditional Navy missions such as provincial reconstruction teams, detainee operations, civil affairs, training teams, customs inspections, counter IED, and combat support. Finally, both the FY 2010 and the FY 2011 full year requests reflect the initial shift in forces from Iraq to Afghanistan. The Department of the Navy requests $3.9 billion in FY 2010 for supplemental requirements and $18.5 billion for FY 2011 to support increased OPTEMPO for contingency operations. Since 2009, total funding trends reflect the Department's efforts to reduce reliance on supplemental appropriations and include OCO costs with the budget request. Figure 6 reflects the current status of FY 2009, FY 2010, and FY 2011 funding for OCO.

The FY 2011 OCO O&M request specifically provides the resources required to meet increased CENTCOM demand, to include a substantial increase in flight hours associated with the shift from OIF to OEF and the increased Carrier Strike Group

presence that ensures there are no Air Tasking Order gaps; the Navy's FY 2010 OCO appropriation did not fully capture OEF execution requirements.

The supplemental request for FY 2010 and the full-year request for FY 2011 supports the deployment, operation and sustainment of two regimental combat teams, a division-level headquarters unit, Seabee battalions, aviation and ship operations, combat support, base support, transportation of personnel and equipment into theater, and associated enabling forces to Afghanistan. The additional funding will support expansion into new areas of operation and establishment of a new command within the southern region of Afghanistan. Increased funding is also needed for service contracts supporting unmanned aerial systems (UAS) providing intelligence, surveillance, and reconnaissance (ISR) and additional in-theater maintenance. The amendment will also fund increased fuel costs in FY 2010.

Figure 6 - Department of the Navy Overseas Contingency Operations Funding Profile

Department of the Navy OCO Funding Profile

(Dollars in millions)	FY 2009 Allocated	FY 2010 Allocated	FY 2010 Supp. Request	FY 2010 Total Request	FY 2011 Total OCO
Military Personnel, Navy (MPN)	1,702	1,389	40	1,429	1,179
Reserve Personnel, Navy (RPN)	39	37	3	40	49
Operation and Maintenance, Navy (O&MN)	5,904	5,476	2,314	7,790	8,947
Operation and Maintenance, Navy Reserve (O&MNR)	69	68	62	130	94
Aircraft Procurement, Navy (APN)	637	853	105	958	420
Procurement Ammunition, Navy and Marine Corps (PANMC)	74	182		182	195
Other Procurement, Navy (OPN)	225	241	15	256	481
Weapons Procurement, Navy (WPN)	29	51		51	93
Research, Development, Test and Evaluation, Navy (RDT&EN)	250	49	5	54	39
National Defense Sealift Fund (NDSF)	-	-		-	-
Navy Working Capital Fund			155	155	-
Military Construction, Navy (MCON)	105	-		-	-
Medicare-Eligible Retiree Health Fund Contribution, Navy (DHAN)				-	26
USN Subtotal	**9,034**	**8,346**	**2,699**	**11,045**	**11,523**
Military Personnel, Marine Corps (MPMC)	1,580	779	83	862	644
Reserve Personnel, Marine Corps (RPMC)	29	31	1	32	31
Operation and Maintenance, Marine Corps (O&MMC)	3,934	3,430	1,072	4,502	4,137
Operation and Maintenance, Marine Corps Reserve (O&MMCR)	78	87	1	88	30
Procurement, Marine Corps (PMC)	2,091	893	19	912	1,778
Research, Development, Test and Evaluation, Navy (RDT&EN)	-	9		9	21
Procurement Ammunition, Navy and Marine Corps (PANMC)	275	494		494	370
Military Construction, Navy (MCON)	131	-		-	-
USMC Subtotal	**8,118**	**5,723**	**1,176**	**6,899**	**7,011**
DON Grand Total - Supplemental	**17,152**	**14,069**	**3,875**	**17,944**	**18,534**

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

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 post-war need to maintain future warfighting readiness will not be achieved.

Major elements of the FY 2011 request include:

- Personnel. The 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 2011 baseline submission supports the transition to a strength of 202,100 Marines, and no contingency funding is requested in FY 2011 for the Grow The Force initiative. The request includes special pays and entitlements for forward deployed naval personnel supporting overseas contingency operations, as well as for over 6,000 Marine Corps reservists. In addition, the OCO request includes Medicare-Eligible Retiree Health Care Fund (MERHCF) contributions for the 4,400 Navy IA's performing non-core missions in support of OCO. MERHCF contributions for Navy personnel

who perform core Navy missions are funded in the baseline budget request.

- Operating Support. Funds are requested to cover the incremental costs of military operations including pre-deployment training, flying hours, steaming days, transportation, supplies, communications, logistics, and sustainment of combat equipment. The operating tempo requirements include fuel, supplies, repair parts, etc., for Naval Forces conducting combat and counterinsurgency operations in continuously harsh conditions. The request recognizes the completion of the transition of the fighting force into Afghanistan and the refurbishment costs associated with equipment returning from theater. This transition and operational realities have increased the demand signal for Departmental assets in theater for irregular capabilities as well as outside of the more traditional boots-on-the-ground support. ISR, airborne electronic attack, combat support missions flown from carrier decks with long transit times, and expanded counter-piracy missions are all areas that have shown increasing and persistent demand signals from CENTCOM and necessitate increases in flying hours, ship operations, infrastructure support and expeditionary force support.

- Depot Maintenance. Funds are requested for the added incremental air, ship, and combat support equipment maintenance requirements due to the increased operating tempo of the on-going contingency operations. This increase includes support for surface ship life-cycle class maintenance plans, acceleration of a required aircraft carrier dry-docking availability, additional airframe and engine depot inductions, and contractor logistics costs for the repair of aeronautical components for aircraft systems and equipment under direct contractor logistics support, performance-based logistic, and power by the hour programs.

- Naval Aircraft. Funds are requested for three Marine Corps AH-1 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. Funding is required to continue the procurement of theater specific equipment for mobility, force protection, survivability information, surveillance and reconnaissance. Procurement dollars also provide reset and long-term reconstitution funding for destroyed and worn out equipment, as well as replenishment of artillery rocket munitions (HIMARS).

- Navy Ground Equipment. Funds are 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.

- Research. Due to unique in-theater requirements, funds are requested for National Intelligence Programs and for the RQ-7 UAV to incorporate a wide-angle camera to provide support for improved detection of threats.

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, promotion opportunities, health care, housing, and reasonable operational and personnel tempo. Our people are the critical component to the Department's Maritime Strategy. Quality of life and quality of service are key factors in attracting and retaining highly-motivated and qualified personnel. The Department remains committed to providing the right person with the right skills, at the right time and at the best value while ensuring the welfare of our Sailors, Marines and their families.

Military personnel FY 2011 budget estimates include a basic pay raise of 1.4 percent. Given the change in retention and loss behavior, we are focused on stabilizing the force through a targeted investment approach – reducing or eliminating monetary incentives where they are not needed. As a result of increased efficiencies ashore and a reduction in force structure, the Navy continues to budget for reduced strength levels in FY 2011 as we shape the force. A component of our force stabilization efforts is to provide opportunities for Sailors to seamlessly transition between active and reserve service throughout their careers. Navy is removing barriers to ease this transition while developing flexible service options and levels of participation to meet the individual Sailor's ability to serve the Navy throughout a lifetime of service. This continuum of service approach will ultimately enhance the effectiveness of the Navy Total Force. The Marine Corps has accomplished its goal of growing the force to 202,100 Marines. This will help to provide our Marines greater dwell time and will provide the opportunity to address other training and missions that have not been accomplished in our recent history.

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, linguists, Seabees, reconnaissance Marines, explosive ordnance disposal, and medical specialties.

The total naval workforce is shaped and optimized to support the National Defense Strategy. By maintaining U.S. maritime dominance, our Sailors and Marines promote security, stability, and trust around the world. Together, we provide a persistent forward presence, power projection abroad and protection of the world's sea lanes. Our Sailors and Marines, in cooperation with our foreign partners and allies, continue to provide training and deliver humanitarian aid, disaster relief and other assistance throughout the globe. In times of crisis, Navy and Marine Corps units are often already on the scene or the first U.S. assets to arrive in force. And they accomplish this all as a seaborne force with a minimum footprint.

America's naval forces are combat-ready because of the dedication and motivation of our sailors, Marines, and DON civilian workforce. 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 can also assist in preventing future conflict to the extent possible – whether by dissuasion, deterrence, humanitarian action or disaster relief. Our goal is a seamless Total Force valued for a lifetime of service.

MILITARY PERSONNEL

Active Navy Personnel

We remain invested in recruiting, training and retaining 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. Navy's goal is to maintain a balanced force in which seniority, experience and skills are matched to requirements. Our objectives remain: to align the personal and professional goals of our workforce with the needs of the joint force while ensuring the welfare of our Sailors and their families; to deliver a high performing, competency-based and mission-focused force to meet the full spectrum

of joint operations; and to provide the right person with the right skills at the right time as the best value to the joint force.

Navy continues to provide support to Sailors and their families through a "continuum of care" that covers all aspects of individual medical, physical, psychological and family readiness. The Navy's Safe Harbor program provides recovery coordination and advocacy for seriously wounded, ill and injured Sailors and Coast Guardsmen, as well as a support network for their families. The Anchor Program leverages the volunteer services of Navy Reserve members and retirees who assist Sailors in reintegrating with family and community. The Operational Stress Control program provides an array of initiatives designed to proactively promote psychological resilience and sustain a culture of psychological health among Sailors and their families. A formal curriculum is being developed which will be integrated into the career training continuum for all Sailors throughout their Navy careers. We continue to move mental health providers closer to the battlefield and have provided incentives for these military mental health providers to ensure the right providers are available.

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. 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 Maritime Strategy, issued by the Navy, Marine Corps and Coast Guard 2 years ago, continues to guide our efforts. The strategy recognizes the importance of naval partnerships and elevates the importance of preventing war to the ability to fight and win. The most important element in carrying out our mission is people. Beyond the fight in Iraq and Afghanistan, however, we remain an expeditionary force. We are engaged in missions from the Horn of Africa, to the Caribbean and the Philippines. In total, we have 53,000 sailors deployed and

15,600 in direct support of global Requests for Forces and Joint manning requirements. 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, and maintaining an appropriate force balance in terms of seniority, experience and skills. To succeed in our mission, we must align the personal and professional goals of our workforce with the needs of the Joint force while ensuring the welfare of our Sailors and their families and deliver a high-performing, competency-based and mission-focused force to meet the full spectrum of Joint operations. In essence, we need to provide the right person with the right skills at the right time and at the best value to the Joint Force.

Our Sailors are fully engaged on the ground, in the air, and at sea in support of operations in Iraq and Afghanistan. The Navy provides approximately 15,600 sailors in the form of IAs, including 3,800 personnel in the training pipeline, to fulfill the OCO mission requirements of the 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 DON's FY 2011 baseline budget request includes 2,700 in permanent end strength to support adaptive core IA missions. The FY 2011 OCO 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 8,500 IAs are supporting maritime missions including maritime and port security, airlift support, and JTF/COCOM staff support.

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 7 displays active Navy end strength for FY 2009 through FY 2011.

Figure 7 - Active Navy Personnel Strength

	FY 2009	FY 2010	FY 2011
Officers	51,615	52,543	53,115
Enlisted	273,177	271,907	271,235
Midshipmen	4,512	4,350	4,350
Total: Strength	**329,304**	**328,800**	**328,700**

**FY 2010 and FY 2011 include 4,400 strength requested for overseas contingency operations*

To ensure we attract the best and brightest for our team, the Navy will align its human capital efforts to five Strategic Imperatives. These five imperatives are for our team to be: responsive to the Joint Warfighter; competitive for the best talent in the nation; diverse; a learning organization; and a leader in human resource solutions.

Recruiting Command 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 2009 was 95% high school graduates, 78% test score category I-IIIA and 12% with some college experience.

Figure 8 – Active Navy Recruiting Productivity

	FY 2009	FY 2010	FY 2011
# of Recruiters	3,978	4,100	4,100
# of Recruits (New Contracts)	33,928	35,100	35,300
# of Recruits per Recruiter	8.5	8.6	8.6
Size of Delayed Entry Program (DEP) (Beginning of FY)	20,961	26,750	17,000
Accession mission	35,500	36,200	35,100
Size of DEP as percent of accessions	59.0%	73.9%	48.4%
Enlisted Accessions	35,527	36,200	34,000
Percent High School Graduates	95%	95%	95%
Percent above average Armed Forces Qual Test	78%	70%	70%

The Navy will increase the number of E-4 to E-9 (Top 6) to 73.25% in FY 2011 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 9 – Navy Enlisted Reenlistment Rates

	FY 2009	FY 2010	FY 2011
Zone A (<6 years)	58%	58%	59%
Zone B (6 to 10 years)	67%	62%	63%
Zone C (10 to 14 years)	83%	72%	77%

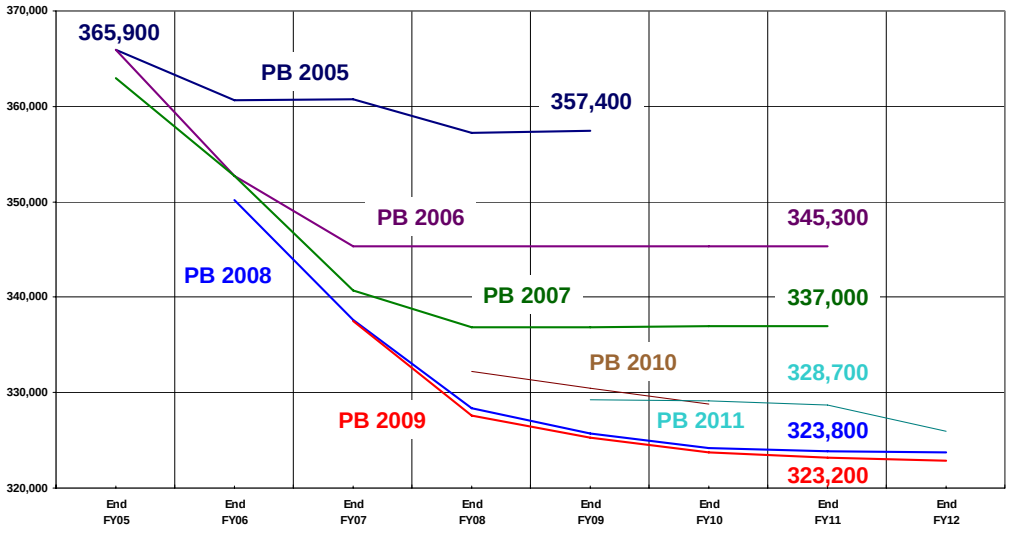
Note: Strength Plans categorize reenlistments as First Term (Zone A) and Career. Zones B and C rates derived using extrapolated Center for Career Development historical data.

Figure 10 - Navy Enlisted Attrition

	FY 2009	FY 2010	FY 2011
Zone A (<6 years)	8.5%	7.7%	7.9%
Zone B (6 to 10 years)	2.5%	2.4%	2.3%
Zone C (10 to 14 years)	2.0%	1.8%	1.8%

The Navy made significant manpower reductions between FY 2005 and FY 2009. In contrast, the FY 2011 budget shows only minor deviation from last year. The change includes reducing the end-strength based on the Fleet's force structure in FY 2011 through FY 2015, 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 for Cyber Operations.

Figure 11 – Active Navy Manpower Trend



Note: FY 2010 and FY 2011 include 4,400 over strength funded in OCO

Reserve Navy Personnel

The Navy Reserve, a full partner in the Navy Total Force, continues to provide strategic depth and operational capabilities to our Navy and Marine Corps team and joint forces, both in peace and war. Vital to this effort are our Reserve personnel who are ready and able to surge forward across a wide spectrum of operations. 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 2011 budget request supports Navy Reserve strength levels of 65,500, providing pay and allowances for drilling Navy Selected Reservists (SELRES) and Full Time Support (FTS) personnel.

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 FY 2011 request is no exception and serves to optimize the effectiveness of Navy's Total Force through the following new initiatives: the realignment of 179 Reserve Helicopter Combat Squadron billets to create the first dedicated Special Operating Forces Squadron and the realignment of 238 FTS and SELRES billets to create a fourth Riverine Squadron and first-ever RC Riverine Training Squadron within the Navy Expeditionary Combat Command (NECC). Additionally, the Navy Reserve will continue to expand upon and enhance the effectiveness of the Yellow Ribbon program, a pre- and post- mobilization training program designed to address the challenges that members and their families experience during this critical and demanding time.

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 supported by a single integrated pay and personnel system, is the paradigm by which a Sailor may serve and reenlist during the course of a lifetime. This 'Sailor for Life' philosophy allows 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 12 - Reserve Navy Personnel Strength

	FY 2009	FY 2010	FY 2011
Drilling Reserve	55,374	54,682	54,812
Full Time Support	11,134	10,818	10,688
Total: Strength	**66,508**	**65,500**	**65,500**

Active Marine Corps Personnel

The FY 2011 submission supports the transition to a strength of 202,100 Marines achieved in 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 26,000 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.

The increase of Marine Corps Active Component end strength goes a long way toward reducing the strain on the individual Marines and the institution. This plan increases 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 2009	FY 2010	FY 2011
Officers	20,639	21,230	21,630
Enlisted	182,147	180,870	180,470
Total: Strength	**202,786**	**202,100**	**202,100**
Enlisted Accessions	31,193	28,680	30,180
Percent High School Graduates	99%	95%	95%
Percent above average Armed Forces Qual Test	69%	63%	63%
Reenlistments	15,014	16,607	16,603

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. 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 – Active Marine Corps Reenlistments

	FY 2009	FY 2010	FY 2011
First Term Alignment Plan (<6 years)	7,334	7,334	7,334
Subsequent Term Alignment Plan (Career)	7,680	9,273	9,269

In addition, the budget provides the necessary resources to shape the rank and Military Occupational Specialty (MOS) structure to achieve full operational capability using streamlined and targeted enlistment and re-enlistment bonuses. The primary objectives of the retention and recruitment bonus programs are to maintain an adequate level of experienced and qualified enlisted personnel to meet mission requirement. These funds provide a monetary incentive to encourage highly qualified individuals to enlist or reenlist in a particular military skill. The FY 2011 program represents a reduction in funding due to favorable recruiting and retention conditions and the achievement of the Grow the Force end strength objectives. The figures below show the number of members and the funding proposed.

Figure 15 Enlistment/Re-Enlistment Bonus Program

	FY09 Estimate		FY10 Estimate		FY11 Estimate	
	# of Members	Amt ($M)	# of Members	Amt ($M)	# of Members	Amt ($M)
Re-enlistment Bonus	12,743	468	11,377	348	5,752	150
Enlistment Bonus	10,447	69	6,362	43	5,928	40

Reserve Marine Corps Personnel

The FY 2011 Marine Corps Reserve budget request ensures that the individual Marine Reservist has what he/she needs to sustain the success of the Marine Corps in the future. Specifically, the 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 national defense missions as well as civil-military missions such as disaster relief. The budget request 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 Support structure complementing the active operating force in its "augment and reinforce" mission, continues to serve the nation well as it lessens deployment requirements of the Active Component. 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, bonus and incentive programs are funded at the minimum 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 high operational tempo has led to additional manpower programs to adapt to this always changing dynamic. In an effort to fully prepare our personnel and their families for mobilization into theater, the Marine Corps has worked jointly with the other services to enhance and improve its Yellow Ribbon program. This program provides training sessions before, during and after deployment to help members and their families manage the challenges associated with this event.

The Marine Corps Reserve is a full partner within the Marine Corps Total Force concept. Marine reservists continue to prove their dedication to our nation and its citizens. Their honor, courage, and commitment to warfighting excellence and close ties to their community truly set them apart as "citizen soldiers."

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

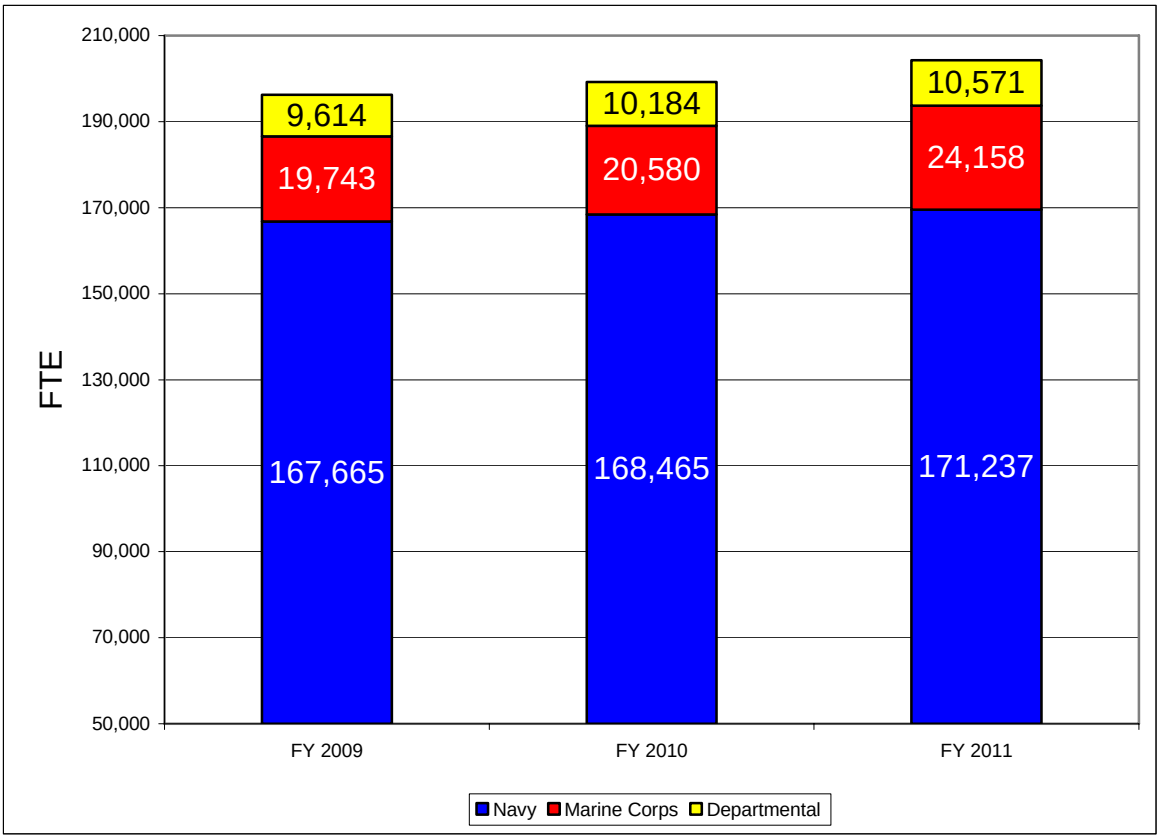
Figure 16 - Reserve Marine Corps Personnel Strength

	FY 2009	FY 2010	FY 2011
Drilling Reserve	36,311	37,337	37,339
Full Time Support	2,199	2,263	2,261
Total: Strength	38,510	39,600	39,600

CIVILIAN PERSONNEL

DON civilians support the mission and daily functions of the Navy and Marine Corps, and are an integral part of the total workforce. 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 17 - 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 the conversion of any contracted service/function to civilian or military performance. 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 the FY 2010 budget, the Department of Defense initiated 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. As detailed in Figure 18, FY 2011 results in an overall cumulative increase in government civilian personnel of 2,737 full-time equivalents for the Department of the Navy.

Figure 18 – In-sourcing

	FY 2010	FY 2011
Authorizations (ES)	2,411	2,737
Workyears (FTE)	1,204	2,737

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. The acquisition focus will be on program management, engineering, contracting, logistics, cost estimating, and financial management functions. The non-acquisition focus will be on information technology; professional, administrative, and management support; and maintenance functions. Also included in the civilian personnel increase are human resource specialists to assist with recruitment actions and acquisition oversight personnel to improve the management of continuing contracts. Using government employees will also alleviate the perception of undue influence by contractor staff and preserve inherently governmental functions and decision making. Detailed in-sourcing plans are in the early stages of development within the DON. As our in-sourcing plans mature, close monitoring of budget implications associated with sustainment costs (e.g. training, facilities, equipment) will be required.

Managing the Multi-Sector Workforce

The Department uses both federal employees and private sector contractors to provide goods and services to citizens. To operate at optimal levels, management practices must recognize the proper role of each sector's labor force and draw on their respective skills. Therefore, in conjunction with in-sourcing and other workforce planning requirements, the Department is developing plans for managing the multi-

sector workforce. The initial framework will focus on workforce planning, sourcing determination, and overall management.

National Security Personnel System (NSPS)

The NSPS was authorized in the FY 2004 National Defense Authorization Act (NDAA), to provide flexibility in hiring and managing civilian workers, and to link pay and performance to the mission and accomplishment of organizational goals. Since conversions began in April 2006, the Department of the Navy has converted approximately 67,000 employees to NSPS. However, in compliance with the FY 2010 NDAA, the Department of Defense has halted NSPS conversions and plans to have all employees revert to their previous pay systems NLT 1 January 2012.

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." Additional changes related to the reversal of the Medical military to civilian conversions consistent with Section 721 of the FY 2008 NDAA are reflected in the FY 2011 submission. 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.

Civilian Personnel Levels

Figure 19 displays total civilian personnel FTEs by component, appropriation, and special interest area. The increases in civilian personnel levels are largely attributable to in-sourcing and the Marine Corps Grow the Force initiative. The FY 2011 pay raise is 1.4%.

Figure 19- DON Civilian Manpower Full-Time Equivalent

	FY 2009	FY 2010	FY 2011
Total — Department of the Navy	197,022	199,229	205,966
By Component			
Departmental	9,614	10,184	10,571
Navy	167,665	168,465	171,237
Marine Corps	19,743	20,580	24,158
By Type Of Hire			
Direct	185,809	188,540	195,309
Indirect Hire, Foreign National	11,213	10,689	10,657
By Appropriation/Fund			
Operation and Maintenance, Navy	98,340	100,981	103,104
Operation and Maintenance, Navy Reserve	982	1,023	1,034
Operation and Maintenance, Marine Corps	18,076	17,863	21,689
Operation and Maintenance, Marine Corps Reserve	227	254	295
Total - Operation and Maintenance	**117,625**	**120,121**	**126,122**
Military Construction, Navy	2,741	2,684	2,684
Research, Development, Test & Evaluation, Navy	1,268	1,411	1,419
Military Assistance	69	69	69
Family Housing (N/MC)	698	752	764
Total - Other	**4,776**	**4,916**	**4,936**
Total - Working Capital Funds	**74,621**	**74,192**	**74,908**
Select Special Interest Areas			
Installation Mgmt/Base Support	40,169	39,250	42,820
Warfare Centers	29,431	29,843	31,017
Shipyards	25,792	26,891	27,388
Engineering/Acquisition Commands	21,786	21,711	21,345
Medical (DHP)	12,936	13,280	14,111
Fleet Activities	12,012	12,385	12,528
Aviation/MC Depots	11,566	11,049	10,795
Departmental *(includes PEO acquisition)*	9,614	10,184	10,571
Military Support	10,719	11,380	11,890
Supply/Distribution/Logistics Centers	9,620	8,832	8,494
Transportation	7,736	8,325	8,006

SECTION IV – PROTECTING READINESS TO MEET TODAY'S CHALLENGES

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) and Marine Expeditionary Forces (MEFs) 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. The evolving dynamics of the 21st-century security environment require our forces to be ready to deploy globally. We must continue funding 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.

The Navy's FY 2011 allocation of O&M resources is tightly focused on meeting increased Combatant Commander OPTEMPO requirements, properly sustaining and maintaining ships and aircraft to reach expected service lives, sustaining the enduring T 2.5/2.0 USN/USMC flight hours readiness requirement in the base budget, and funding price increases, most notably in fuel. Additionally, aircraft depot maintenance funding provides required aircraft and engine availability to the fleet, to include meeting engine readiness goals through increased inductions/repairs and funding component depot-level repairs associated with the ramp up of the Joint Strike Fighter (JSF), MV-22 and KC-130J contract logistics

support programs. The FY 2011 O&M budget is increased over FY 2010 based on these requirements.

Seabee skill sets are in great demand both now and into the foreseeable future. The balance of the active and reserve naval construction force provides a 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 is funded 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 (MEUs). 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, which 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 mission capabilities. The Department's goal is to deliver the capability to manuever and engage in combat operations in all enviroments 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 284 ships in FY 2011, as shown in Figure 20. This level of operational funding supports 11 aircraft carriers and 29 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 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 manuever as required to meet all support requirements.

In FY 2011 seven battle force ships will be commissioned: three Guided Missile Destroyers (DDG), one Nuclear Attack Submarine (SSN), one Transport Dock (LPD), and two Dry-Cargo Ammunition ships (T-AKE).

Ten battle force ships will be decommissioned: three Ammunition ships (AE), one Assault Ship (LHA), three Frigates (FFG), one Nuclear Attack Submarine (SSN), and two Transport Dock (LPD).

Figure 20 – DON Battle Force Ships

	FY 2009	FY 2010	FY 2011
Aircraft Carriers	11	11	11
Fleet Ballistic Missile Sub	14	14	14
Guided Missile (SSGN) Subs	4	4	4
Nuclear Attack Submarines	53	53	53
Surface Combatants	110	112	112
Expeditionary Warfare Ships (Amphibious)	31	31	29
Combat Logistics Ships	31	31	29
Mine Warfare Ships	14	14	14
Support Ships	17	17	18
Battle Force Ships	**285**	**287**	**284**

Active Forces

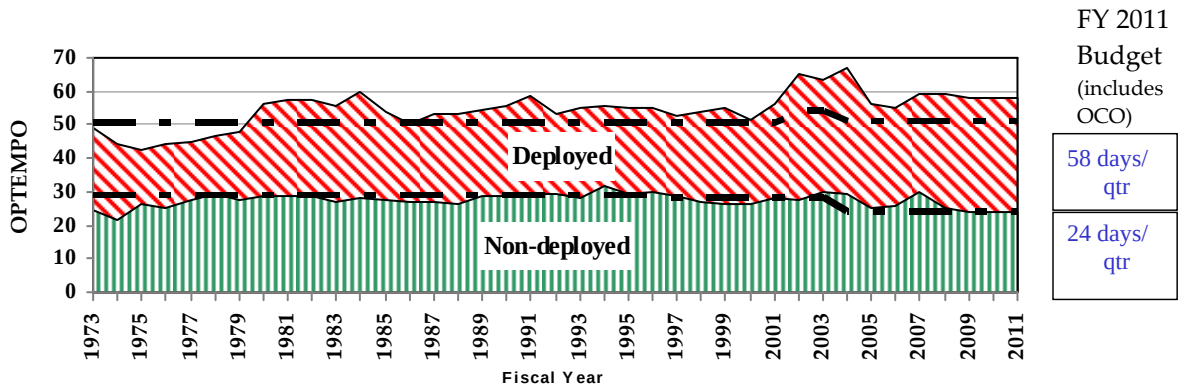
The Department is committed to providing naval forces with an inherent ability to quickly maneuver and engage our country's adversaries, whether they are conventional blue water based navies or unconventional terror based organizations. Additionally, we must be able to assure our allies of our steadfast 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 harm's way. 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 2011, deployed ship operations are budgeted to maintain ready forces prepared to operate jointly across the full-spectrum of military activities, and

to meet forward deployed commitments in support of the National Military Strategy. The FY 2011 budget request supports the FRP, enabling ships to surge and reconstitute 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 in the baseline. 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.

Figure 21 illustrates historical and budgeted OPTEMPO. The lines are the deployed and non-deployed goals. Fluctuations from the goals reflect real world operations and revised requirements. FY 2011 reflects baseline and overseas contingency operations funded OPTEMPO. Requested funding for contingency operations will support deployed steaming of approximately 13 days per quarter.

Figure 21 - Active Force Ship OPTEMPO



Mobilization

Providing rapid response to contingencies is an ever increasing need. The Navy's mobilization forces, displayed in Figure 22, are resourced to provide this needed logistics capability throughout the world. In support of a strong logistics capability, the prepositioning 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., Reduced Operating Status 4 (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 22.

Figure 22 – Strategic Sealift

	FY 2009	FY 2010	FY 2011
Prepositioning Ships:			
Maritime Prepo Ships (O&M,N)	14	16	16
USPACOM Ammo Prepo (O&M,N)	1	1	1
Army Prepo Ships (O&M,A)	6	7	8
Air Force Prepo Ships (O&M,AF)	2	2	2
DLA Prepo Ships (DWCF)	1	1	1
Surge Ships:			
Large Medium-Speed RORO Ships (NDSF)	11	10	10
Aviation Logistics Support (NDSF)	2	2	2
Hospital Ships (NDSF)	2	2	2
Ready Reserve Force Ships (NDSF)	50	49	49
Prepositioning Capacity (millions of square feet)	4.8	5.2	5.2
Surge Capacity (millions of square feet)	9.0	8.7	8.7
Total Sealift Capacity (millions of square feet)	13.8	13.9	13.9

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 in 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 aviation maintenance ships and the hospital ship missions 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 Defense Logistics Agency (DLA) prepositioning ship is an Offshore Petroleum Distribution System (OPDS) ship; a contracted system, using one contracted vessel to meet the requirement.

The ten Navy Surge Large Medium-Speed RORO ships (LMSR) are maintained in a four-day ROS and provide the initial surge sealift capacity required to transport combat forces equipment 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

Humanitarian Assistance and Disaster Relief (HADR) efforts. In FY 2009, the Navy deployed the *USNS Comfort* hospital ship to seven Caribbean, Central and South American countries for the operation "Continuing Promise", a joint civil-military operation to provide valuable humanitarian assistance (direct medical services and preventive medical care) to medically underserved communities throughout the region. In FY 2010, the *USNS Comfort* surged to respond to the earthquake in Haiti in addition to *USNS Mercy's* scheduled deployment to Southeast Asia. In FY 2011, the Navy will continue the annual deployment of one hospital ship per year, recognizing the goodwill continuously generated by these humanitarian aid and disaster relief missions.

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 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 though 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.

Ship maintenance funding reflects the Navy's commitment to the 30 year plan for a ship force to provide sustainable global presence. Attaining this goal requires that ships be properly sustained for current operations and to reach expected service

lives; the Ship Maintenance and Ship Depot Operations Support budgets reflect this commitment, to include establishment of the Surface Ship Life Cycle Management (SSLCM) Activity.

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 2011. An additional 20 percent of the total requirement is supported in the request driven by overseas contingency operations.

Beginning in FY 2010, the Department realigned the SSBN Engineered Refueling Overhaul (ERO) funding to align the ERO work and budget responsibilities with those of other ship depot maintenance. In FY 2011 the repair portion of all SSBN engineered overhauls is funded in O&MN and the equipment procurement portion is funded in OPN. Projected work on refueling overhauls remains 100 percent funded in FY 2011.

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 23. 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 23 reflect only those individual years' deferred maintenance, not a cumulative amount.

Figure 23 - Department of the Navy Ship Maintenance

(Dollars in Millions)	FY2009	FY2010	FY2011
Active Forces			
Ship Maintenance	4,139	4,264	4,762
Depot Operations Support	1,172	1,144	1,345
Baseline Ship Maintenance (O&M,N)	**5,311**	**5,408**	**6,107**
Overseas Contingency Operations	995	1,001	1,267
Total Ship Maintenance (O&M,N)	**6,306**	**6,409**	**7,374**
Percentage of Projection Funded	99%	97%	99%
Annual Deferred Maintenance	$50	$186	$34
CVN Refueling Overhauls (SCN)	613	1,770	1,664
SSBN Refueling Overhauls (SCN)	276	-	-
Total: Ship Maintenance (SCN)	**889**	**1,770**	**1,664**
% 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.

Figure 24 – DON Aircraft Force Structure

	FY 2009	FY 2010	FY 2011
Active Forces	**21**	**21**	**21**
Navy Carrier Air Wings	10	10	10
Marine Air Wings	3	3	3
Patrol Wings	4	4	4
Helicopter Maritime Strike Wings	2	2	2
Helicopter Combat Support Wings	2	2	2
Primary Authorized Aircraft (PAA) - Active	**3,459**	**3,460**	**3,470**
Navy	2,357	2,360	2,319
Marine Corps	1,102	1,100	1,151
Total Aircraft Inventory (TAI)	**3,838**	**3,906**	**3,958**
Active	3,538	3,599	3,653

Aircraft OPTEMPO

FRP provides 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 when required. The flying hour program has been priced using the most recent cost per hour experience.

The base budget Flying Hour Program meets FY 2011 training and readiness demands associated with an inventory increase of three tactical aircraft and 18 training aircraft, and restores tactical flight hours funding to sustain the enduring T2.5/T2.0 USN/USMC readiness requirement in the base budget.

Fleet Replacement Squadron (FRS) operations are budgeted at 84 percent in FY 2011 for student training requirements. 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 2011, Fleet Air Support (FAS) is funded to meet 94 percent of the total notional hours required. Figure 25 displays active flying hour readiness indicators.

Figure 25 – DON Flying Hour Program

	FY 2009	FY 2010	FY 2011	GOAL
Active				
TACAIR- Navy	*T-2.6*	*T-2.8*	*T-2.5*	*T-2.5*
TACAIR- USMC	*T-2.2*	*T-2.0*	*T-2.0*	*T-2.0*
Fleet Replacement Squadrons (%)	*94%*	*87%*	*84%*	*94%*
Monthly Flying Hours per Crew (USN & USMC)	14.7	19.4	20.1	N/A
with overseas contingency operations	20.3	20.6	22.7	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 the 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% of

PAA for non-deployed squadrons for the Navy and Marine Corps. The engine rework program objective is to obtain zero net bare firewalls and fill 90% of authorized engine pool 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 contractor logistics support, V-22 Osprey and F-35 Joint Strike Fighter performance based logistics, and the V-22 power by the hour program.

The FY 2011 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 acceptable risk. 100% of engine type-model-series meet the CNO readiness goals of zero bare firewalls and 94% of engine types meet the RFI engine pool goal. The engine pool goal is impacted by external factors such as capacity constraints and engineering challenges. Figure 26 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 in some cases repaired at Army and Air Force depot maintenance activities. In return, Fleet Readiness Center Cherry Point conducts repairs and overhauls on select Air Force and Army helicopters.

Figure 26 - DON Aircraft Depot Maintenance

(Dollars in Millions)	FY 2009	FY 2010	FY 2011
Active Forces			
Airframes	597	566	510
Engines	363	310	448
Other Components	159	211	263
Baseline Active Aircraft Depot Maintenance	**$1,119**	**$1,087**	**$1,221**
Overseas Contingency Operations	195	159	223
Total	**$1,314**	**$1,246**	**$1,444**

	% at Goal		*% at Goal*		*% at Goal*	
Airframes - Active Forces						
Deployed Squadrons meeting goal of 100% PAA	111	100%	111	100%	113	100%
Non-Deployed Squadrons meeting goal of 90% PAA	181	100%	176	97%	176	97%
Engines - Active Forces						
Engine TMS meeting Zero Bare Firewall goal	33	100%	33	100%	33	100%
Engine types meeting RFI Spares goal of 90%	58	88%	52	79%	62	94%

Navy Expeditionary Forces

Navy Expeditionary Combat Command (NECC) is a global force provider of expeditionary combat service support and force protection 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 is also a key

element of the Navy's operational Irregular Warfare (IW) efforts in the area of operational support to the Navy forces in OIF and OEF. In the FY 2011 budget, NECC funding is increased to address increased requirements for NECC Global Force Management (GFM) presence, operational plans surge, and equipment life cycle sustainment.

NECC provides 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), and the remaining mission capabilities throughout the command.

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

MARINE CORPS OPERATIONS

Active Operations

In the FY 2011 budget, the United States is responding to a wide range of challenges to include prosecuting continuing contingency operations across the spectrum of conflict and around the globe. This includes kinetic operations against terrorist organizations and rebuilding Iraq/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. Therefore, our Marines and Sailors in combat are the number one priority. 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 2011 budget continues support for the Marine Corps rightsizing 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 to ensure our nation has a force that is fully prepared for employment as a Marine Air Ground Task Force (MAGTF) across the spectrum of conflict. Additionally, the FY 2011 budget supports the priorities of resetting the force and modernizing for tomorrow. The equipment has passed the test of sustained operations. However, we must continue to reset and modernize to "be most ready when the nation is least ready." This is not easy with the intense usage and harsh environmental conditions in which our Marines operate. 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 the next generation of equipment.

The FY 2011 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 our Marines and Sailors. Prudently managing these resources, while transitioning to modernization, remains a primary responsibility.

The FY 2011 budget is also structured to improve the quality of life for our Marines and their families. This 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.

Furthermore, this budget continues the Marine Corps efforts in irregular warfare training. These 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 teams at the battalion and regimental levels. The instruction is focused on integrated ground combat element operations in a MAGTF context, using 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.

Figure 27 – DON Marine Corps Land Forces

	FY 2009	FY2010	FY2011
Total USMC End Strength	202,786	202,100	202,100
Navy End Strength Support	9,535	9,572	9,766
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	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 Traffi c Control Det 1 Tactical Air Control Det 1 Marine Air Communication Det Plus up - Logistics, Maintainers, Communications Technicians	2 CH-53E Squadrons 1 H-1 Squadron 1 JSF Squadron 1 Logistics Company 2 Bridge Companies Plus up Foreign/Regional Officers (24) 1 MC Training Advisory Group (29 Palms)

As reflected in Figure 27, 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, 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 Marine Corps procurement 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. As shown in figure 28, the FY 2011 budget funds 100% of the projected requirement.

Figure 28 -- Marine Corps Ground Equipment Depot Maintenance

($ million)	FY 2009		FY 2010		FY 2011	
Funding Profile:						
Baseline	$71.0		$78.7		$78.9	
Overseas Contingency Operations	$368.4		$454.0		$523.3	
Total	**$439.4**		**$532.7**		**$602.2**	
Active Forces		*% Rqmt*		*% Rqmt*		*% Rqmt*
Combat Vehicles	$213.5	100%	$96.0	100%	$71.6	100%
Tactical Missiles	$4.0	100%	$2.3	100%	$2.3	100%
Ordnance	$22.9	100%	$49.2	100%	$38.9	100%
Electrical Communication	$36.9	100%	$63.0	100%	$61.6	100%
Construction Equipment	$34.8	100%	$35.9	100%	$29.5	100%
Automotive Equipment	$127.4	100%	$286.3	100%	$398.3	100%
Total Active Forces	**$439.5**	**100%**	**$532.7**	**100%**	**$602.2**	**100%**

RESERVE OPERATIONS

The mission of the Department's Reserve Components (RC) 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 2011, 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 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 any situation. The Navy and Marine Corps Reserve end-of-year operating aircraft inventory totals 273 airframes in FY 2011. The Navy Reserve ship inventory will end the year at seven Battle Force ships, as two frigates are decommissioned (*USS Boone* and *USS Stephen W. Groves*). In addition, funding is used to operate and maintain

Reserve Component activities and commands in all fifty states. There will be 135 Navy Reserve and 182 Marine Corps Reserve facilities at the end of FY 2011.

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 within the baseline. Requested funding for contingency operations will support deployed steaming of approximately 6 days per quarter. 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 seven frigates assigned at the close of FY 2011.

Figure 29 – Navy Reserve Battle Force Ships

	FY 2009	FY 2010	FY 2011
Surface Combatants	9	9	7
Reserve Battle Force Ships*	**9**	**9**	**7**

**Also included in Figure 20*

Navy Reserve Ship Maintenance

RC ship maintenance is integrated with the Active Component program. The increase from 2010 to 2011 is driven by the differences in the maintenance induction schedule. In FY 2011, two more Docking Selected Restricted Availabilities (DSRA) and two more SRAs are scheduled to occur. Neither of the ships decommissioning in FY 2011 are scheduled for maintenance in FY 2010 or FY 2011. The shipyards have the capability to execute the FY 2011 ship maintenance as well as those deferred maintenance amounts reflected in Figure 30.

Figure 30 - Navy Reserve Ship Maintenance

Dollars in Millions	FY 2009	FY 2010	FY 2011
Reserve Forces			
Baseline Ship Maintenance	$69	$42	$91
Overseas Contingency Operations	-	$9	$1
Total Ship Maintenance	**$69**	**$51**	**$92**
Percentage of Projection Funded	100%	96%	99%
Annual Deferred Maintenance	0	2	1

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), two Helicopter Sea Combat squadrons, two integrated Helicopter Mine Countermeasures squadrons, two Maritime Patrol squadrons, and one Helicopter Anti-Submarine Squadron Light. The 4th Marine Aircraft Wing (MAW) consists of nine squadrons and supporting units.

Figure 31 – Reserve Component Aircraft Force Structure

	FY 2009	FY 2010	FY 2011
Reserve Forces	**3**	**3**	**3**
Navy Tactical Support Air Wing	1	1	1
Navy Logistics Support Air Wing	1	1	1
Marine Aircraft Wing	1	1	1
Primary Authorized Aircraft (PAA) – Reserve	**275**	**271**	**273**
Navy	162	162	164
Marine Corps	113	109	109

The Navy's RC fulfills the preponderance of the Department's adversary and intra-theater logistics requirements. The Navy RC helicopter footprint in Iraq and the CENTCOM AOR has been continuous since 2003, supporting special operations ground force missions in urban and rural areas, psychological operations, and medical and casualty evacuations. The FY 2011 request creates the first dedicated Special Operating Forces Helicopter Combat Squadron.

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 (TSW) 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. E-2C Hawkeye Airborne Early Warning aircraft of the TSW deploy six months every year to the SOUTHCOM AOR providing counter-narcotics operations. RC aircrews and maintainers also conduct mine warfare 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. Marine Corps RC helicopters, KC-130T refueling tankers, and F/A-18 strike fighter aircraft have been activated and repeatedly 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, OIF and OEF-A pre-deployment training for all infantry battalions held in Twenty-nine Palms, CA.

Figure 32 displays RC flying hour readiness indicators. This level of combined baseline and contingency funding allows Navy and Marine Corps RC aircrews to meet minimum flight time requirements, maintain readiness in all mission areas and meet operational demands.

Figure 32 – Reserve Component Flying Hour Program

	FY 2009	FY 2010	FY 2011	GOAL
TACAIR - Navy	*T-2.6*	*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%*	*97%*	*98%*
Monthly Flying Hours per Crew (USNR & USMCR)	13.6	13.8	13.3	N/A

Reserve Component Aircraft Depot Maintenance

The RC 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 squadrons for the Active and Reserve Components. The engine rework program objective is to obtain zero net 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 2011 budget provides optimized capability within fiscal constraints. Figure 33 displays baseline and overseas contingency operations funding requests and readiness indicators for RC aircraft depot maintenance.

Figure 33 - Reserve Component Aircraft Depot Maintenance

(Dollars in Millions)	FY 2009		FY 2010		FY 2011	
Reserve Forces						
Airframes	$102		$89		$99	
Engines	$42		$37		$42	
Baseline Reserve Aircraft Depot Maintenance	**$144**		**$126**		**$141**	
Overseas Contingency Operations	$8		$4		$18	
Total Reserve Aircraft Depot Maintenance	**$152**		**$130**		**$159**	
		% at Goal		**% at Goal**		**% at Goal**
Airframes - Reserve Forces						
Non-Deployed Squadrons meeting goal of 90% PAA	54	*100%*	44	*81%*	52	*96%*
Engines - Reserve Forces						
Engine TMS meeting Zero Bare Firewall goal	20	*100%*	20	*100%*	20	*100%*
Engine TMS meeting RFI spares goal of 90%	41	*98%*	39	*95%*	39	*98%*

Note: Totals may not add due to rounding.

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). Blending the AC and RC brings strength to the force and is an important part of the Navy's ability to carry out the Naval Maritime Strategy from blue water into green and brown water and in direct support of the Joint Force. The Navy Reserve trains and equips 51% of Sailors supporting NECC missions, including Naval construction and explosive ordance disposal in the CENTCOM AOR as emphasis shifts from Iraq to Afghanistan, as well as maritime expeditionary security, expeditionary logistics (cargo handling battalions), maritime civil affairs, expeditionary intelligence, and other mission capabilities seamlessly integrated with operational forces around the world.

The FY 2011 budget includes the establishment of a new RC riverine training squadron which will compliment the three existing AC riverine squadrons. The fourth riverine squadron will increase the riverine capacity to conduct brown water training and partnership activities in order to meet COCOM demands.

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 2011 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.

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SECTION V – REBALANCING INVESTMENT TO MEET GLOBAL REQUIREMENTS

OVERVIEW

In keeping with the priorities of the Secretary of Defense, the FY 2011 budget continues 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 2011 budget concentrates investment in platforms and systems that maintain the advantage against future threats and across the full spectrum of operations. Procurement of the Littoral Combat Ship (LCS), 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.

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 Navy's shipbuilding budget represents the best balance between high-end, hybrid and irregular warfare capabilities. It funds a continuum of forces ranging from the covert Virginia class submarine, the multi-mission DDG-51 destroyer, the multi-role Landing Helicopter Assault Replacement (LHA(R)), to the Littoral Combat Ship (LCS) and the Joint High Speed Vessel (JHSV) with their greater access to littoral areas. This balance continues to pace future threat capabilities while fully supporting current irregular warfare operations and supporting maritime security and stability operations in the littorals.

The FY 2011 shipbuilding budget funds approximately $14 billion per year in new construction (see figure 34).

Figure 34 –Shipbuilding Plan

	FY10	FY11	FY12	FY13	FY14	FY15	FY11-15
CVN 21	-	-	-	1	-	-	1
SSN 774	1	2	2	2	2	2	10
DDG 1000	-	-	-	-	-	-	0
DDG 51	1	2	1	2	1	2	8
LCS	2	2	3	4	4	4	17
LPD 17	-	-	1	-	-	-	1
LHA (R)	-	1	-	-	-	-	1
T-AKE	2	-	-	-	-	-	0
T-ATF	-	-	-	-	-	1	1
MLP	-	1	-	1	-	1	3
JHSV	1	1	1	2	2	2	8
New Construction Total	7	9	8	12	9	12	50
LCAC SLEP	3	4	4	4	4	4	20
Oceanographic Ships	-	1	1	-	-	-	2
Ship to Shore Connector /1	-	1	-	1	2	4	8
Moored Training Ships	-	-	-	-	-	1	1
CVN RCOH	-	-	-	1	-	-	1

/1 Lead SSC is funded in RDT&E

The FY 2011 shipbuilding budget funds nine ships, including the two *Virginia* class submarines, the third Joint High Speed Vessel (JHSV) for the Navy, one Landing Helicopter Assault Replacement Ship (LHA(R)), one Mobile Landing Platform (MLP) and two Littoral Combat Ships (LCS). The FY 2011 budget also includes two Arleigh Burke destroyers, a continuation of the restarted DDG 51 program.

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*. 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 fourth and final increment of full funding for construction of the lead ship, the *USS Gerald R. Ford* (CVN-78), and advance procurement funding for CVN-79. As per the Secretary of Defense's guidance from earlier this year, this budget maintains a build rate of 1 ship every 5 years. The budget also provides for the third and final increment of full funding for the *USS Theodore Roosevelt* (CVN 71) Refueling Complex Overhaul (RCOH), and advance procurement funding for *USS Abraham Lincoln* (CVN 72) RCOH.

The Amphibious Assault Ship replacement program (LHA(R)) is the follow on ship for the *Tarawa*-class LHA. LHA (R) will provide the Marine Corps with a continued means of ship-to-shore movement by air as well as by landing craft. The LHA (R) is designed to accommodate the Marine Corps' future Air Combat Element (ACE) including F-35B Joint Strike Fighter (JSF) and MV-22 Osprey with additional aviation maintenance capability and increased fuel capacities. The FY 2011 budget includes the first increment of full funding for LHA-7, the second ship of the *America*-class.

Surface combatants are the workhorses of our Fleet and central to our traditional Navy core capabilities. The Navy is concerned about evolving capability gaps in the outer air battle in the blue water, particularly against improved ballistic missile capabilities emerging worldwide. The FY 2011 budget requests funding for two DDG 51s, a proven, multi-mission guided missile destroyer and one of the Navy's most capable ships against ballistic missile threats.

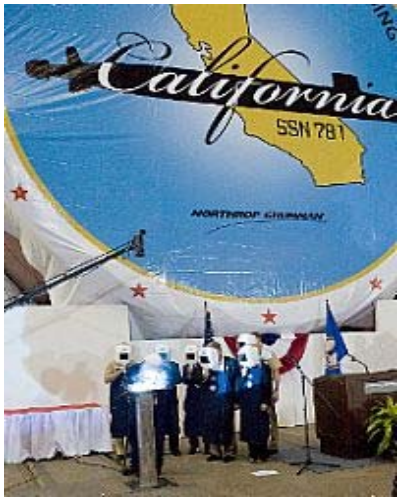
The Littoral Combat Ship (LCS) is a fast, agile and stealthy surface combatant capable of operating against anti-access, asymmetric threats in the littorals. LCS will influence behavior and deter adversaries by its ability to operate in environments previously impractical for larger multi-mission ships. 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 the second LCS, *USS Independence*, in December 2009. LCS-3 and LCS-4 were funded in FY 2009 and have been awarded. In FY 2010, as a result of a revised acquisition strategy, the Department intends to procure two LCSs by pursuing a downselect strategy in order to further reduce cost and risk to the program. In FY 2011, the Department is budgeting for procurement of two more LCSs along with an investment in advance procurement for economic order quantities for future ships. Across the FYDP, the Department re-phased the LCS procurement profile to achieve steady state procurement while maintaining the same inventory objective of 55 ships and bringing on a second shipbuilder in FY 2012.

The Guided Missile Cruiser (CG 47 Class) 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 2011 budget includes funds for the sixth CG Mod availability and the long lead-time procurement of equipment for the modernization of three CGs.

The Guided Missile Destroyer (DDG 51 Class) Modernization program (DDG Mod) is a significant, integrated advancement in class combat systems 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 2011 budget includes funds for three DDG Modernization availabilities and the long lead-time procurement of equipment for the modernization of five DDGs.

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 Shipbuilding, Newport News. The sixth *Virginia* Class submarine (SSN-779) was delivered to the fleet in December 2009. FY 2009 funded the first of eight *Virginia* Class submarines under a new multi-year procurement (MYP) contract awarded in December 2008. FY 2011 funds the third and fourth *Virginia* Class submarines in the MYP contract and advance procurement funding for future submarines, including economic order quantity procurements to achieve savings under the MYP contract. The Department will continue to procure two SSNs per year in the FYDP.

Logistics Platforms

The Department intends to procure a Mobile Landing Platform (MLP) in FY 2011, leveraging advance procurement in FY 2010. Two more MLPs will be procured in FY 2013 and FY 2015, providing the required at-sea surface connector capability. These planned MLP's, a lower-cost commercial variant of the MPF(F) MLP program,

will supplement the current maritime prepositioning force and will provide in-theater capability to support resupplying a Marine Expeditionary Brigade (MEB).

The FY 2011 budget procures the Navy's third Joint High Speed Vessel (JHSV) and supports COCOM requirements for the rapid intra-theater lift of medium payloads of military rolling stock and cargo along with cohesive units of military personnel.

The Landing Craft Air Cushion (LCAC) craft modernization program continues with a service life extension for four craft in FY 2011. LCACs provide rapid over the horizon movement of USMC forces from the sea base to the beach. Additionally, the budget requests RDT&E funding to procure the lead Ship to Shore Connector (SSC), which is the follow-on to the LCAC program.

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. The FY 2011 budget also includes $50.3 million for the Electro Magnetic Aircraft Launch System (EMALS) and $33 million for the Advanced Arresting Gear (AAG) system. EMALS will replace the current steam catapult on CVN 78 Class ships. The Ship Contract Design/Live Fire Testing and Evaluation Program includes $21 million for 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. The FY 2011 budget includes $581 million for the final software release (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 2011 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

The Department's FY2011 budget includes $226 million in FY 2011 for LCS research and development. This 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) and Surface Warfare (SUW) mission packages.

CG(X)

The Department proposes to terminate the CG(X) program. This decision was driven by affordability considerations. Instead of procuring CG(X), the Navy is considering other options including maturing the air and missile defense radar program and using technologies from other similar kinds of ships such as DDG-1000 and DDG-51 destroyers.

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. The FY 2011 budget of $155 million funds bow array efforts, integrated low pressure electrolyzer development, system level and subsystem improvements to *Virginia* Class electronic systems, and Block IV Reduced Total Ownership Costs.

OHIO Replacement

Continuing in FY 2011, the department has budgeted $672 million, which represents a significant increase in funding for the *Ohio* Class submarine replacement program (SSBN(X)). Research and development efforts will focus on the propulsion plant, missile compartment development, and platform development technologies like the propulsor, electric actuation, maneuvering/ship control, and signatures. These

funds provide for joint development of missile launch technologies in support of longstanding bilateral agreements with the United Kingdom. These RDT&E efforts are critical to meeting required procurement and delivery dates needed to support the OHIO replacement program.

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, the FY 2011 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 has decreased to 19.1 years in 2009. Multi-year aircraft procurement contracts for MH-60R/S and MV-22B continue to provide significant savings and stretch available procurement funds. The next MH-60R/S mission systems and common cockpit multi-year procurement contract starts in FY 2011. Development funding continues for F-35, P-8A, CH-53K, and Broad Area Maritime Surveillance (BAMS) Unmanned Aerial System (UAS).

Figure 35 –Major Aircraft Programs

	FY10	FY11	FY12	FY13	FY14	FY15	FY11-15
Fixed Wing							
F-35B (STOVL JSF)	16	13	14	25	22	24	98
F-35C (CV JSF)	4	7	7	13	15	19	61
F/A-18E/F	18	22	1	25	-	-	48
EA-18G	22	12	24	-	-	-	36
E-2D AHE	3	4	5	7	8	8	32
P-8A (MMA)	6	7	9	13	17	23	69
C-40A	1	-	-	-	-	3	3
KC-130J (NAVY)	-	-	-	-	-	2	2
KC-130J (USMC)	-	-	-	2	5	6	13
Rotary Wing							
AH-1Z/UH-1Y	23	28	30	30	30	30	148
MV-22B	30	30	30	24	24	24	132
MH-60R	24	24	24	24	30	36	138
MH-60S	18	18	18	18	18	8	80
UAV							
MQ-8B (VTUAV)	5	3	3	4	6	6	22
BAMS UAS	-	-	-	-	4	4	8
Training							
T-6A/B (JPATS)	37	38	43	35	-	-	116
Total Major Aircraft Programs	**207**	**206**	**208**	**220**	**179**	**193**	**1,006**

Fixed Wing

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 state of the art aircraft will enable the Navy and Marine Corps team to command and maintain global air superiority in an increasingly dynamic and dangerous world. FY 2011 is the fourth LRIP for STOVL variant and the second for the carrier variant with thirteen and seven aircraft respectively.

The Super Hornet (F/A-18E/F) currently leads naval aviation in the fighter/attack role. The FY 2011 budget continues single year procurement of twenty-two F/A-18E/F aircraft. F/A-18E/F production has also been extended until FY 2013 to enable the procurement of an additional 26 EA-18G aircraft in FY 2011 and FY2012.

The EA-18G Growler, which replaces the EA-6B, continues to assume the airborne electronic attack role, supporting all operational requirements and fully integrating into strike packages. Ongoing joint demand for electronic attack in theater has led the Department of Defense to cancel the retirement of four Navy expeditionary EA-6B squadrons. The EA-6B aircraft will be extended until 2014 and replaced with twenty-six additional EA-18G aircraft procured in FY 2011 and FY 2012 to provide a joint, long-term expeditionary electronic attack capability. To this end, the FY 2011 budget increases procurement of EA-18G aircraft to twelve, and delays the combined F/A-18E/F and EA-18G production line shutdown until 2013.

The E-2D Advanced Hawkeye program continues Low Rate Initial Production with the procurement of four aircraft in FY 2011. 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 combined with SM-6, Cooperative Engagement Capability (CEC) and the AEGIS combat system is a key component of Naval Integrated Fire Control – Counter Air (NIFC-CA), enabling use of the missile at its

maximum kinetic range. The E-2D will ensure the "eyes" of the nation's sea-based strike capability remain focused on emerging threat systems.

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 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 for the joint task force commander. Additionally, the P-8A, which has the second LRIP award of seven aircraft in FY 2011, will have increased capabilities over the P-3 as it addresses emerging technologies and ever evolving irregular threats.

Rotary Wing

The UH-1Y/AH-1Z aircraft fulfills the Marine Corps attack and utility helicopter missions. The FY 2011 budget supports the AH-1Z new build strategy with construction of two AH-1Z aircraft in FY 2011. The budget also includes the remanufacture of eight AH-1Z aircraft and the new construction of eighteen UH-1Y aircraft 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 Osprey MV-22B Tilt Rotor continues multi-year procurement with the Air Force which extends through FY 2012. The MV-22B fills a critical capability role with the Marine Corps by incorporating the advantages of a Vertical/Short Takeoff and Landing (V/STOL) aircraft that can rapidly self-deploy to any location in the world. The joint program will procure MV and CV variants to support the Marine Corps and Air Force respective requirements.

The Department supports the multi-year procurement (FY 2007-2011) of both the MH-60R Seahawk and MH-60S Knighthawk helicopters, which are part of a joint contract with the Army's UH-60M Blackhawk. FY 2011 starts the next MH-60R/S common cockpit and mission systems multi year procurement. The follow-on MH-60R/S airframe multi year procurement commences in FY 2012. The MH-60R replaces the aging SH-60B and SH-60F helicopters, whose primary 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.

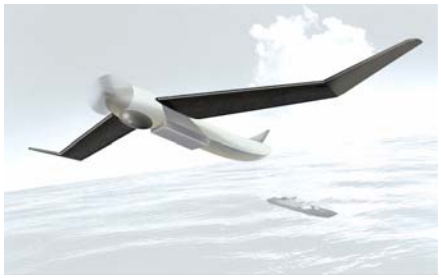
The MH-60S, which is primarily employed as a logistics platform, will sustain the forward deployed fleet in missions ranging from rapid airborne delivery of materials and personnel to support amphibious operations through search and rescue coverage. Armed helicopter and organic airborne mine countermeasures are new mission areas and will be added as block upgrades.

Unmanned Aerial Vehicles

The FY 2011 budget continues to transform the force by investing in a broad range of unmanned platforms in support of Joint Force and Combatant Commander demands for increased ISR capability and capacity. These programs support the warfighter by providing a persistent ISR capability through the continued development, acquisition, and fielding of Unmanned Aerial Vehicle (UAV) systems such as the MQ-8 Vertical Take Off and Landing Tactical UAV (VTUAV), RQ-7 Marine Corps Tactical Unmanned Aerial System (MCTUAS), the Small Tactical Unmanned Aircraft System (STUAS), RQ-4 Broad Area Maritime Surveillance (BAMS) system, and technology demonstrations of the Navy Unmanned Combat Aerial System (NUCAS) and a Medium Endurance Marinized Unmanned Aerial System.

The MQ-8 VTUAV conducts missions including over-the-horizon tactical reconnaissance, classification, targeting, laser designation, and battle management. The MQ-8 launches and recovers vertically and can operate from air capable ships (DDG, CG, LCS), as well as confined area land bases.

The RQ-7 MCTUAS was procured through joint efforts with the Army's Shadow program. The last eleven air vehicles were procured in FY 2010 with Tactical Common Data Link (TCDL) modifications continuing in FY 2011. The Shadow UAS is providing Marine Tier III UAS capability to the MAGTF commander, while replacing the legacy Pioneer UAS. The RQ-7 Shadow UAS is interoperable, compatible, and maintainable with Army Shadow units.



The STUAS is a combined Navy and Marine Corps program for a common solution that provides Persistent Intelligence, Surveillance, and Reconnaissance/Target Acquisition (ISR/TA) support for tactical level maneuver decisions and unit level force defense/force protection for naval amphibious assault ships (multi-ship classes) and Navy and Marine land forces. FY 2011 is the initial procurement of 18 air vehicles. STUAS has a planned IOC of FY 2012 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. This system will fill the ISR capability shortfalls currently filled by the ISR services contracts.

RQ-4 BAMS system development and demonstration continues in FY 2011 with $529 million to provide a High Altitude-Long Endurance Unmanned Aircraft System designed to provide persistent maritime ISR of nearly all the world's high-density sea-lanes, littorals, and areas of national interest. Envisioned as an unmanned adjunct to the P-8A Multi-Mission Maritime Aircraft (MMA), and crucial to the recapitalization of Navy's airborne maritime ISR capability, the system will seek to leverage Maritime Patrol and Reconnaissance Force (MPRF) manpower, training and maintenance efficiencies. The BAMS UAS air vehicle features sensors designed to provide near worldwide coverage through a network of five CONUS and OCONUS orbits, with sufficient air vehicles to remain airborne for 24 hours a day, 7 days a week, out to ranges of 2000 nautical miles. Onboard sensors will provide detection, classification, tracking and identification of maritime targets and

include maritime radar, electro-optical/infrared (EO/IR), and Electronic Support Measures (ESM) systems. Additionally, BAMS will have a communications relay capability designed to link dispersed forces in the theater of operations and serve as a node in the Navy's FORCEnet strategy.

The FY 2011 budget also includes $266 million to continue the Navy Unmanned Combat Aerial System (NUCAS) program to conduct a carrier demonstration of a low observable NUCAS platform and $26 million to initiate an amphibious ship demonstration of a Medium Endurance Marinized Unmanned Aerial System. The NUCAS program will demonstrate carrier operations, including Autonomous Aerial Refueling (AAR), in order to mature technologies to support a potential acquisition program.

Training

The Department of the Navy 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 student naval aviators and student naval flight officers. The JPATS' upgraded avionics, communications and navigation systems will provide our student aviators with aircraft systems more representative of what they 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 funding for EP-X has been removed from the FY 2011 budget. A follow-on to the EP-3E Signals Intelligence (SIGINT) platform will be re-evaluated after completion of the Analysis of Alternatives. Connecting multi-service platforms and ground stations for ISR will be a focus of the follow-on platform, migrating 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. The sixth year of system development and demonstration continues in FY 2011.

The VH-71 Presidential Helicopter program has been cancelled by direction of the Secretary of Defense and the Under Secretary of Defense (Acquisition, Technology & Logistics). The FY 2011 RDT&E,N budget includes $95 million for program close-out costs and $65 million for initiation of a follow-on program to replace the legacy VH-3 and VH-60 Presidential helicopters.

Weapons Programs

Figure 36 –Weapons Quantities

	FY10	FY11	FY12	FY13	FY14	FY15
Ship Weapons						
TACTOM	196	196	196	196	196	196
SM2 (AUR)	34	8	-	-	-	-
SM6 (AUR)	11	59	113	154	152	149
SM2 MODS (IIIB)	91	32	32	54	54	54
RAM (AUR)	90	90	90	90	90	90
ESSM	43	33	35	35	51	94
TRIDENT II MODS	24	24	24	-	-	-
MK 48 HWT	85	46	91	86	79	78
MK 54 LWT	120	0	80	97	190	286
Aircraft Weapons						
AIM-9X	161	146	145	146	185	188
AMRAAM	79	101	165	226	232	253
JSOW C	357	333	360	366	408	412
AARGM	36	44	92	152	199	232
HELLFIRE	818	575	281	1,000	730	715
APKWS	325	600	1,000	1,000	1,000	1,000

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 2011 at the minimum sustaining rate. 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 missile program continues with Low Rate Initial Production (LRIP) in FY 2011. 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 these 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 full rate production in FY 2011. Investment in this important program ensures that all *Ohio* Class submarines will deploy fully loaded, while guaranteeing sufficient inventory exists for periodic required test launches.

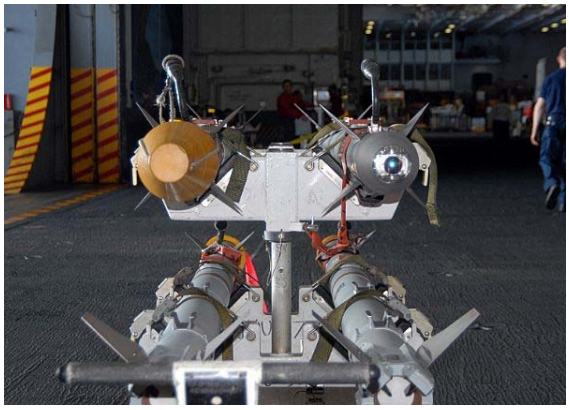
The MK 48 Advanced Capability (ADCAP) heavyweight torpedo is used solely by submarines and is employed as the primary anti-submarine warfare and anti-surface warfare weapon aboard attack, ballistic missile, and guided missile submarines. With sophisticated sonar, all digital guidance and control systems, and propulsion improvements, the last ADCAP heavyweight torpedo was delivered in 1996, with modifications and improvements to existing weapons occurring since 1997. FY 2011 efforts will continue to focus on Common Broadband Advanced Sonar System (CBASS), as well as Guidance and Control (G&C) 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 COTS digital signal-processing technology to provide improved performance against modern day threats. Torpedo production deficiencies have been corrected and the Department plans to award a combined FY 2010 and FY 2011 competitive contract in the first quarter of FY 2011.

Several land attack research and development efforts critical to future littoral warfare continue in FY 2011, including the Advanced Gun System (AGS), the Naval Fire Control System (NFCS), and the Distributed Common Ground System (DCGS). The Navy has recently completed 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 employs passive infrared energy for acquisition and tracking of enemy aircraft. The continued procurement of the AIM-9X in FY 2011

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 threats against enemies using infrared 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. Upgrades to the AMRAAM incorporate an active radar in conjunction with an inertial reference unit and microcomputer system which makes the missile less dependent upon the aircraft fire control system. This advanced capability enables the pilot to aim and fire several missiles at multiple targets.

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 2011 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. LRIP 1 deliveries are scheduled to commence in FY 2010, with FY 2011 funding providing for procurement of 44 modification kits for All Up Rounds and Captive Air Training missiles.

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.

The AGM-114 Hellfire is a family of laser guided missiles employed against point and moving targets by both rotary and fixed wing aircraft. The variants include shaped charge warheads for use against armored targets and blast fragmentation warheads for use against urban structures. The AGM-114N is a thermobaric blast fragmentation warhead that maintains the capability provided by the AGM-114M while adding a unique capability against confined compartmented spaces, a typical target type observed in current combat operations. The versatility of the Hellfire missile helps make it the "weapon of choice" in overseas contingency operations. Because of the AH-1/H-60 armed helicopter requirements, this weapon is essential to Sea Shield and Sea Strike.

Ground Weapons

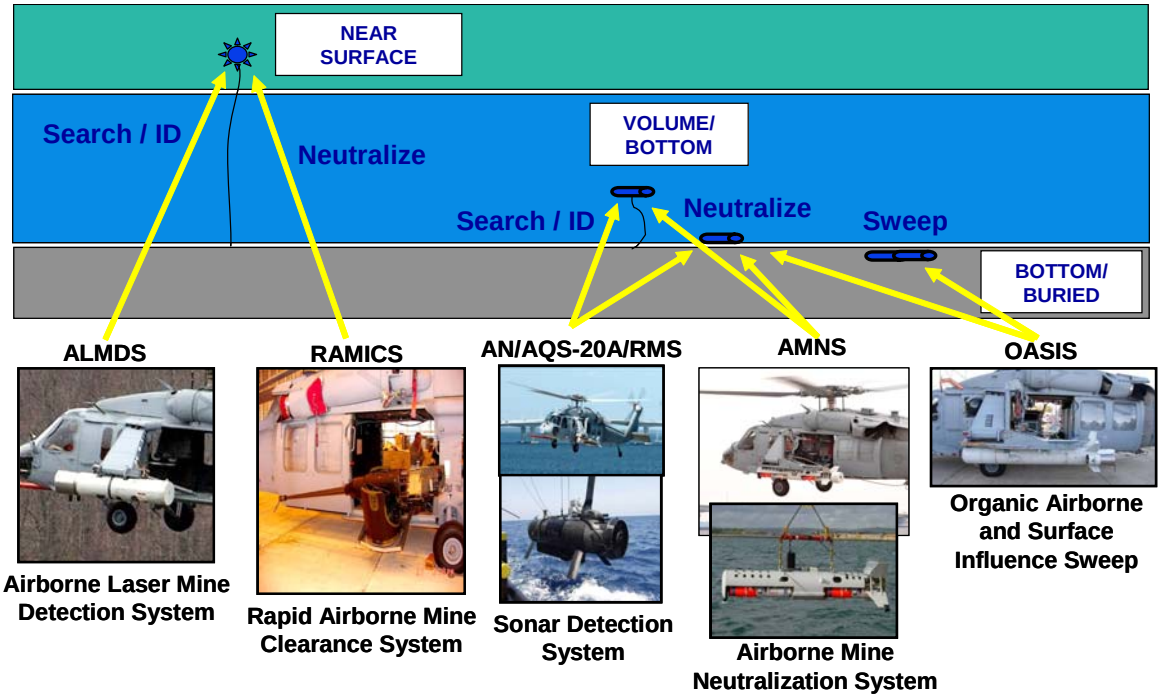
Ground-based, indirect fires are a key component of the reach and lethality of the MAGTF. The Marine Corps' fire support triad includes three systems supported by funding in the FY 2011 budget. The first element, the Light Weight 155mm Howitzer, is 40% lighter than the aging and less mobile M198 Howitzer allowing for greater tactical mobility and range, with improved weapon stability, accuracy, and durability. FY 2011 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 2011. The Expeditionary Fire Support System (EFSS) is the third and final element in the land-based fire support triad with 10 systems procured in FY 2011. 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

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 2011 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 Ships (LCS), and to continue to advance the mine countermeasures roadmap through the sustained development and application of new technologies. Figure 37 displays Mine Warfare efforts included in the FY 2011 budget.

Figure 37 – Mine Warfare



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 Rapid Airborne Mine Clearance System (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 Remote Multi-Mission Vehicle (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 2011 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 Mine Countermeasures (MCM) 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). Developmental Testing will continue in FY 2010 with Operational Testing starting in fourth quarter of FY 2010. OAMCM systems already delivered to the first LCS MCM Mission Package include the ALMDS and the AMNS. Other systems being developed for introduction in subsequent LCS Mission Modules include OASIS and RAMICS. Additionally, the OAMCM program provides funding for integration and testing of each MCM system on the MH-60S through a common console interface. These vital systems will provide the fleet with a flexible, organic MCM capability.

NETWORKS AND C4I PROGRAMS

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 2011 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. In concert with C4I, cyberspace capabilities are critical to achieving DON objectives in every warfighting domain and enterprise business model. The Department of

Defense is undergoing a significant transformation in organization, structure, and alignment to enable the full range of operations in cyberspace. Accordingly, the DoN must enhance the way it is organized to man, train, and equip for its cyberspace missions and tasks. The associated mission areas of computer network operations, Network Operations (NETOPS), and Information Assurance (IA) will be enabled by common technologies and must be highly synchronized. Figure 38 displays C4I programs included in the FY 2011 budget by their capability area.

Figure 38 – Major C4I Programs

Major C4I Programs

($ in millions)

Capability Area / Program	FY09	FY10	FY11
NMCI *(Note 1)*	1,252	1,288	878
NGEN *(Note 1)*	124	240	761
CANES	0	47	98
MDA	89	26	30
JTRS	731	865	203
MUOS	843	896	911
Satellite Communications Systems	233	134	45
DCGS	82	40	33
Submarine Communications Program	79	49	60
Tactical Command System	80	71	70

Note 1: Programs (with the exception of NMCI and NGEN) include investment and R&D funding only.

The Navy Marine Corps Intranet (NMCI) is the DON's shore-based enterprise network. NMCI provides a single integrated, secure IT environment for reliable, stable information transfer. NMCI represents about 70 percent of all DON IT operations and is second only to the internet in size.

The current NMCI contract with prime contractor, Electronic Data Systems (EDS), expires on September 30, 2010. The DON has begun to negotiate with EDS for a sole-source Continuity of Services Contract (CoSC) that will be used to provide IT services during the transition from the existing NMCI contract to the proposed Next Generation Enterprise Network (NGEN) solution.

The Next Generation Enterprise Network (NGEN) will improve upon the successes of NMCI. A significant distinction is that NGEN will ultimately be government managed and controlled. NGEN management will be more centralized to support the computing demands of the DON 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 meet the desired net-centric element embedded in DoD capability portfolio management.

The FY 2011 budget estimate supports the NGEN program, and a phased buyback of select computing assets and infrastructure (hardware/software). Also included are personnel to support command and control network operations, network defense and security.

The Consolidated Afloat Networks and Enterprise Services (CANES) program provides Navy ships and submarines, with reliable, high-speed local area networks at all classification levels. CANES provides for real-time information exchange within the ship, between ships, and their commanders. 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 FY 2011 investment completes the competition phase of dual contractor system design and development and down-select to one prime system developer for low rate initial production. FY 2011 investment also funds procurement of developmental units for operational assessment, integration and regression testing, as well as procuring units for shore sites and force level platforms. CANES Technical Insertion is planned to achieve Milestone C in FY 2011.

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 2011 provides funding for continued operational sustainment of MDA Spiral 1 and for acquisition activities associated with maritime fusion and analysis services and end to end data sharing.

The FY 2011 budget continues to fund the **Joint Tactical Radio System (JTRS)** development and procurement. 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. 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. FY 2011 funding continues research and development for the various JTRS systems and starts procurement of JTRS Airborne Mobile Fixed (AMF).

The advanced **Ultra High Frequency (UHF) Mobile User Objective System (MUOS)** development and procurement funding continues in the FY 2011 budget, supporting on-orbit capability in FY 2012 and full operational capability in FY 2015. The budget reflects changes to the launch and on-orbit capability of satellites one through five. These changes are a result of technical design and development challenges with satellite one. Satellite five will be procured in FY 2011 and funding for the last launch vehicle is included in FY 2013. Additional RDT&E funding was also added to complete the production of the first two satellites due to the adjusted launch schedule. 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. In the Information Systems Security program, FY 2011 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 2011 funding also continues to provide cryptologic equipment and secure communications equipment for Navy ships, shore sites, aircraft, Marine Corps and Coast Guard.

The **Distributed Common Ground System – Navy (DCGS-N)** is the Navy's portion of the defined DoD DCGS ISR systems architecture. 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 2011 funds support the procurement and installation of five block one systems (for one shore command, two carriers, and two amphibious ships). These DCGS-N systems will replace the currently fielded Joint Services Imagery Processing System – Navy (JSIPS-N) and 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. Ship Signal Exploitation Equipment (SSEE) Increments E and F are tactical cryptological and information operations exploitation and attack systems fielded and in development. Increment E is a highly sensitive automated electronic support measure and electronic attack system that provides automatic signal acquisition, direction finding, target geo-location and Information Operations capability fielded on over forty surface combatants. FY 2011 funding will support the low rate initial production installations and the procurement of ten full rate production SSEE Increment F systems. Funding will also be used to expand existing processing capability to allow collection of the newest high priority threat signals outside the frequency range of existing systems.

The **Submarine Communications** program's mission is to create a common, automated, open system architecture radio room for all submarine classes, 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 modifications to support new satellite communications and data link capability. 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 the transition of the *Los Angeles* class radio room to the common submarine radio room and upgrades to *Seawolf*, *Virginia* and *Ohio* class submarines radio rooms.

Marine Corps Radio and Switching Modernization: The Marine Corps will continue to procure the latest state of the art radio systems for the warfighters (IISR, PRC-117, PRC-150, PRC-148). It will also continue to upgrade multi-channel (TRC-170, SMART-T) with hardware and software that increases bandwidth, reliability, and security for our tactical C2 users. Additional investments include COMSEC upgrades to existing radio systems, and continued Very Small Aperture Terminal (VSAT) procurements that have become the backbone of small units C2 in OIF/OEF.

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. GCCS-M Increment 1 is the maritime component of the GCCS Family of Systems (FoS). It provides maritime commanders at all echelons of command with a single, integrated, scalable C4I system that fuses, correlates, filters, maintains, and displays location and attribute information on friendly, hostile, and neutral land, sea, and air forces, integrated with available intelligence and environmental information, to support command decision making. GCCS-M Increment 2 will continue the fielding of a GCCS FoS based system aboard force level ships and major command centers. The GCCS-M program office will look to field a more readily scalable and modular Command and Control capability aboard unit and group level ships. The FY 2011 budget supports continued fielding and support of GCCS-M Increment 1 in addition to the development activities and test events associated with the release of GCCS-M Increment 2.

The Maritime Operations Center (MOC) concept of operations creates a maritime headquarters networked 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. Variance has been reduced and baselines have been established among the MOCs, and in FY 2011, the next Spiral will bring enhanced C2 and Battlespace Awareness enhancements to the MOCs.

The **Command and Control Processor (C2P)** program is in the process of making modifications to the Next Generation Command and Control Processor (NGC2P) system to accommodate changes from Automated Digital Network System (ADNS) upgrades. The changes to the NGC2P software baseline will be part of the Common Data Link Monitoring System (CDLMS) version 3.7. CDLMS 3.7 will process Link 16 Imagery messages from aircraft. This upgrade will handle the digital image messages and provide an operator interface to send and receive Link 16 messages.

The **Tactical Mobile (TacMobile)** program provides evolutionary systems and equipment upgrades to support the maritime component commanders and maritime patrol and reconnaissance force commanders with the capability to plan, direct and control the tactical operations of joint and naval expeditionary forces and other assigned units within their respective area of responsibility. These missions are supported by the Tactical Operations Centers, the Mobile Tactical Operations Centers, and the Joint Mobile Ashore Support Terminal. During FY 2011, the program will be continuing Increment 2.0 installations, conducting technical refreshes and conducting the test and evaluation of Increment 2.1 which will support the P-8A.

Deployable Joint Command and Control (DJC2) is a SECDEF and CJCS priority initiative that provides Geographic Combatant Commanders (GCCs) with a standardized, deployable, and scalable joint C2 headquarters capability tailored to support Joint Task Force (JTF) operations. DJC2 enables a GCC to rapidly deploy and activate a JTF headquarters equipped with a common C2 package with which to plan, control, coordinate, execute, and assess operations across the spectrum of conflict and domestic disaster relief.

The FY 2011 DJC2 funding continues to integrate COTS and GOTS systems into DJC2 systems of the 21st Century. FY 2011 funding also continues to research and evaluate information technology, intelligence and communications equipment for integration and incorporation into Joint Command and Control operational commands.

Marine Corps C2 Modernization: Three C2 systems will provide improved command and control capability for the Marine Air Ground Task Force (MAGTF) as a result of procurement and R&D efforts in FY11. Continued procurement of Combat Operations Center (COC) Systems provides a critical, deployable and adaptable capability for the austere conditions that our Command and Ground Combat Elements face. In addition, the Marine Corps will improve its logistical

support by procuring the Global Combat Support System-Marine Corps (GCSS-MC) for the Logistics Combat Element. GCSS-MC is scheduled for a Milestone C in 2nd Qtr FY10, with a field enterprise release to III MEF and selected I/II MEF units following FUE activities 2nd Qtr FY10. GCSS-MC is the primary technology enabler for the Marine Corps' Logistics Modernization Strategy, and will greatly increase the Commanders C2 capabilities across the Logistics Warfighting function.

Common Aviation Command and Control Systems (CAC2S) is an aviation modernization effort that will replace existing aviation C2 equipment, and provide a common equipment set for aviation C2 units to control aviation functions for the Commander. CAC2S will consist of a Processing and Display Subsystem (COC), and Communication Subsystem (AN/MRQ-12 Radio System), and the Sensor and Data Subsystem (Still in development). In FY11, the Marine Corps will buy Engineering Change Proposal Kits to update and upgrade existing subsystems to match the latest version of the Combat Operations Center, as well as the latest generation radio systems.

MARINE CORPS GROUND EQUIPMENT

The Marine Corps continues to balance its ground equipment procurement and system development efforts to ensure that Marines are supported in the current fight and to recapitalize and modernize to support future contingencies. Baseline budget procurement addresses the spectrum of combat capability. Whether buying force protection and individual combat equipment for the individual Marine, continuing procurement of mature systems such as the LVSR to recapitalize our logistics support capabilities, or continuing the research and acquisition of our ground tactical mobility portfolio, our efforts ensure that Marines will have what they need regardless of whether they're engaged in irregular warfare, joint forcible entry operations, or sustained operations ashore.

Major Programs

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.

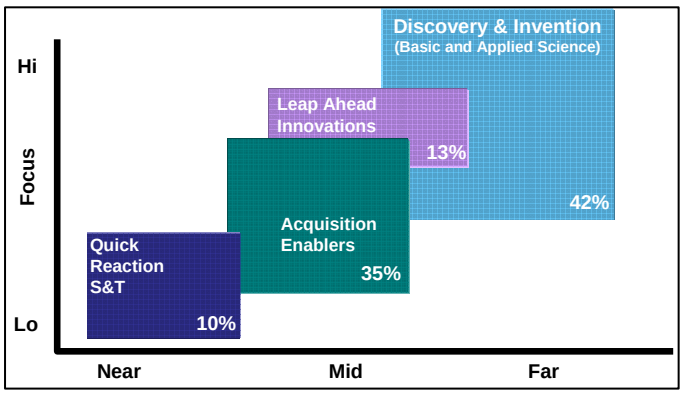
RESEARCH AND DEVELOPMENT SUPPORT

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 2011 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 2011 budget requests $2.0 billion for the S&T program. The FY 2011 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 and updated in February 2009. By design, it is a broad strategy that provides strong direction for the future, but also retains sufficient flexibility and freedom of action to allow the Navy to meet emerging challenges or quickly 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 2011 S&T portfolio is aligned to support 13 discrete naval S&T focus areas composed of: 1) power and energy; 2) operational environments; 3) maritime domain awareness, 4) asymmetric and irregular warfare, 5) information superiority and communication; 6) power projection; 7) assure access and hold at risk; 8) distributed operations; 9) naval warrior performance and protection; 10) survivability and self-defense; 11) platform mobility; 12) fleet/force sustainment; and 13) total ownership cost (formally 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 S&T capacity vital to naval interests, 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, such as the National Naval Responsibility (NNR) including ocean acoustics, underwater weapons, underwater medicine, and naval engineering. D&I investments are planned and coordinated to leverage other military services,

government agency, industry, international, and general research community investments. While most of the D&I program is performed by university researchers, the Naval Research Laboratory and Naval Warfare Centers supporting NAVAIR, NAVSEA, and SPAWAR also execute a substantial portion of the D&I portfolio.

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. 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 Technology Solutions and Experimentation which are responsive to the immediate needs identified by the Fleet, operating forces, or Navy leadership. Technology Solutions address urgent needs identified by the fleet with research that

provides 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 (NWDC), continuously surveys the changing frontier of technology and identifies candidates with the greatest potential to provide dramatic increases in warfighting 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 2011 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 2011 budget continues to finance joint 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
- S&T Management

Seventy-five percent of management and support funding in FY 2011 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.

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

Dollars in Millions

Significant RDT&E,N Activities	**FY 2009**	**FY 2010**	**FY 2011**
Science and Technology	2,121	2,100	1,961
Basic Research	525	549	556
Applied Research	775	719	679
Advanced Technology Development	821	822	726
Advanced Component Development	3,342	4,365	3,914
System Development and Demonstration	8,312	8,205	6,852
RDT&E Management Support	1,350	995	849
Operational Systems Development	4,316	4,253	4,117
Total RDT&E,N	**19,441**	**19,908**	**17,693**

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:

- Right size 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 2011 budget request achieves the Department's key goals, financing 98 military construction projects. Of these: 28 are for the active Navy and 66 for the active Marine Corps, two for the Navy Reserve Component and two for the Marine Corps Reserve Component.

Figure 40 - Summary of MILCON Funding

Military Construction Summary (Active and Reserve)

Dollars in Millions	**FY 2009***	**FY 2010**	**FY 2011**
Navy	1,229	1,094	1,099
Marine Corps	1,913	2,618	2,720
Planning and Design	249	183	122
Congressional Reductions	-51	-235	
Foreign Currency	11		
TOTAL	**3,351**	**3,660**	**3,941**

**Note: FY 2009 OCO funding of $236 million not included.*

Growing the Marine Corps Force

The FY 2011 request reflects $1.2 billion for new construction that will support the Marine Corps' end-strength of 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.

- Quality of life ($578 million)
- Operational and training facilities ($266 million)
- Infrastructure improvements ($249 million)
- Maintenance facilities ($138 million)
- Planning and Design ($18 million)

Improving Quality of Life

The Department continues to improve the quality of life for our Sailors and Marines. The FY 2011 program provides a total of $836 million for quality of life initiatives, including the funds listed above associated with USMC force growth. Projects include:

- BEQ, homeport ashore, San Diego, CA ($75 million)
- BEQ, Camp Pendleton, CA ($43 million)
- BEQ, WTBn, Quantico, VA ($38 million)
- Student Officer Quarters, Quantico, VA ($56 million)
- Fitness center, Camp Smith, HI ($30 million)
- Fitness center, Beaufort, SC ($15 million)

Marine Corps University ($50 million)

To position the Marine Corps to meet the dynamic professional military education needs of Marines in the future, the Commandant of the Marine Corps directed upgrades to Marine Corps University. The Fiscal Year 2011 military construction budget request includes funding for a research center addition at Marine Corps University and an addition to the MCB Quantico Staff NCO Academy.

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 2011, the Department's budget provides $427 million for Guam construction projects.

- Finegayan site preparation and utilities ($147 million)
- Anderson AFB north ramp parking, Phase 2 ($94 million)
- Anderson AFB north ramp utilities, Phase 2 ($79 million)
- DAR road improvements ($67 million)
- Apra Harbor Wharves Improvement Inc 2 ($40 million)

The FY 2011 budget also supports improvements in global posture supporting other missions. Projects include logistical upgrades and security and safety improvements. Some examples include:

- Navcent Ammunition Magazines, Bahrain ($89 million)
- Waterfront development, phase 3, NSA, Bahrain ($64 million)
- Operations and support facility, NSA, Bahrain ($60 million)
- Joint operations center, Djibouti ($28 million)
- Air Traffic Control Tower, Rota, Spain ($23 million)
- HQ facility, Djibouti ($12 million)
- General warehouse, Djibouti ($7 million)
- External paved roads, Djibouti ($4 million)

Facility Improvements

As facilities reach the end of their 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:

- Berthing Pier 12, San Diego, CA ($108 million)
- Joint POW/MIA HQ, Hickam AFB, HI ($99 million)

- Agile chemical facility, Phase 2, Indian Head, MD ($34 million)
- Electromagnetic sensor facility, Newport, RI ($27 million)
- Pier 1 upgrades, USNS COMFORT, Norfolk, VA ($10 million)
- Logistics capability, Blount Island ($75 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, Broad Area Maritime Surveillance (BAMS) UAV and DDG 1000. Some associated military construction projects include:

- Aircraft maintenance hangar, Beaufort, SC ($47 million)
- Broad area surveillance T&E facility, Patuxent River ($42 million)
- Pier 9 & 10 upgrades for DDG 1000, Norfolk, VA ($2 million)

Operations, Training and Security Facilities

These projects range from strategic weapons security, training ranges upgrades, landing field upgrades and simulator facilities. Some examples include:

- T-6 solo capable OLF, Milton, FL ($29 million)
- Waterfront restricted area vehicle barriers, Kitsap, WA ($19 million)
- Small arms magazine – Edson Range, Camp Pendleton, CA ($4 million)

Nuclear Weapons Security

The Navy is seeking to eliminate potential security vulnerabilities for nuclear weapons. These projects will help provide a secure environment to safeguard those weapons.

- Security Enclave and Vehicle Barriers, Kings Bay, GA ($45 million)
- Waterfront Restricted Area Emergency Power, Kitsap, WA ($25 million)
- Limited Area Emergency Power, Kitsap, WA ($16 million)
- Waterfront Emergency Power, Kings Bay, GA ($16 million)

BASE REALIGNMENT AND CLOSURE (BRAC)

The Department continues to fund BRAC initiatives in the FY 2011 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 $342 million in FY 2011 to continue implementation of the 2005 BRAC Commission recommendations. The Department's implementation plan meets the statutory requirement for closure and realignment by September 15, 2011.

BRAC 2005 accomplishments

- Closed Naval Station Pascagoula and returned Singing River Island for local use
- 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
- Relocated mine countermeasure ships and functions from Naval Station Ingleside, TX to Naval Station San Diego, CA.
- Relocated Navy Reserve Forces Command from Naval Support Activity New Orleans, LA to Naval Station Norfolk, VA.

The FY 2011 budget finances operational movements at key closure and realignment locations, outfitting of newly constructed buildings, environmental cleanup, and military PCS. FY 2010 was the final year for BRAC construction projects.

The continuation of non-construction closure efforts begun in FY 2006 through FY 2010 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 non-construction realignment efforts begun in FY 2006 through FY 2010 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 Reparable 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 32 military family housing privatization projects totaling over 61,000 homes for Sailors, Marines, and their families. Over 90 percent of Navy and Marine Corps family housing has been privatized. As a result of these projects, almost $9 billion will be invested in the construction of new housing and the replacement or renovation of existing housing. The Department has contributed approximately $1 billion towards this initiative, thus leveraging its resources by nine to one. Furthermore, the Department's approach to privatization will ensure that quality of the privatized housing is sustained over the long term.

The Department's FY 2011 construction budget contains $35 million to fund the replacement of 71 units at Naval Station Guantanamo Bay, Cuba. Additionally, $28 million is budgeted in post-acquisition construction for the improvement and repair of 116 homes located overseas in Japan. The DON's budget also includes $330 million for the operation, maintenance and leasing of more than 14,400 units located worldwide.

The Marine Corps FY 2011 request for post-acquisition construction includes $119 million to support the construction of 104 units at Camp Pendleton, California and 220 units and an addition to a DoDEA high 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 $11 million for improvements and repairs to 44 homes located in Sasebo, Japan. The Marine Corps' budget also includes $26 million for the operation, maintenance and leasing of approximately 800 units located worldwide.

Figure 41 - Family Housing Units

	FY 2009	FY 2010	FY 2011
New construction projects	3	2	1
New construction units	146	30	71
New privatization projects/units	6 / 2,228	1 / 231	2 / 324

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 was updated to fix errors in the way the Navy accounted for multiple tenants within a facility and Joint Basing transfers which resulted in an increased requirement from the model. The budget provides minor program growth to account for this increase while funding 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 2010 which changed the recapitalization rate metric from "years" to recapitalize the inventory to a "percentage" of model requirement. DoD has not established a goal for this model.

Funding for Base Operating Support (BOS) and FSRM address new requirements for Joint Base transfers at Pearl Harbor – Hickam and Anacostia – Bolling, and moves enduring funding for shore Regional and Installation Operation Centers from OCO into the baseline. Funding is also provided for renovations/retrofitting of existing facilities to meet Energy Independence and Security Act and other Department energy initiatives.

The Restoration and Modernization (R&M) investments include operation & maintenance, BRAC, MILCON, NWCF and OCO funds as applicable. The budget reflects the end of BRAC funding in FY 2010, as well as reductions in Navy MILCON. The Marine Corps R&M investments remain at historically normal levels.

Figure 42 summarizes the Department's FSRM program.

Figure 42 - Facility Sustainment, Restoration, and Modernization

(In Millions of Dollars)	**FY 2009**	**FY2010**	**FY2011**
Facility Sustainment Funding			
Navy	1,274	1,456	1,541
Marine Corps	536	589	617
Total DON Facility Sustainment (all Appropriations)	**1,810**	**2,045**	**2,158**
Annual Unfunded Sustainment			
Navy	259	112	134
% of Model Funded*	83%	93%	92%
Marine	17	65	68
% of Model Funded	97%	90%	90%
Total Unfunded Sustainment	**276**	**177**	**202**

* Navy "% model funded" for FY10 &FY11 includes increased funding for Joint Base (JB) functional transfers, but the model requirements were not updated to account for the JB facilities.

Restoration and Modernization (R&M) Funding			
Navy	2,160	1,406	1,096
Marine Corps	1,066	161	172
Total DON R&M (All appropriations)	**3,226**	**1,567**	**1,268**
Facilities Recapitalization Rate**			
Navy	50	87%	60%
Marine Corps	28	31%	34%

** Rate measured in years for FY 2009 and % of FMM Model in FY 2010 & FY 2011

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 OCO. 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 2011 is approximately $27 billion. No major changes to the business base are expected in FY 2011 over FY 2010 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 OCO 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. Navy Supply continues deployment of the Navy Enterprise Resource Planning (ERP) system. Implementation at the Naval Inventory Control Point began in FY 2010 and continues through FY 2011. Three Fleet Industrial Supply Centers (FISCs) will also complete implementation in FY 2011 and the final FISCs, Yokosuka and Sigonella, go live in FY 2012. The phase implementation was scheduled in order to minimize any impact to the fleet.

During this period, the major 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. Additionally, repair and parts demand for the newly supported V-22 Osprey have exceeded original forecasts and significantly increased anticipated costs. 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

2011 is often material intensive, requiring fewer direct labor hours to repair. Contractors are used to supplement the organic workforce during workload peaks.

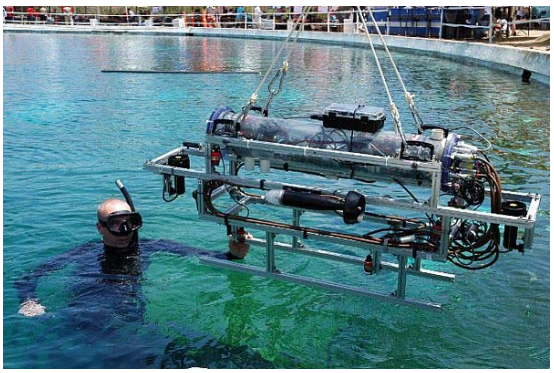
Since the FY 2010 President's Budget, MRAP vehicle workload has continued to grow at the Marine Corps Depots and includes repairs and upgrades to vehicles in-theater as well as some work at the depots. Current projections of other workload includes repair of combat-damaged equipment and weapons systems returning from OIF/OEF as well as armor/ballistic protection upgrades prior to OCO deployments. The impacts of the changing force levels associated with OCO continue to develop and will have an impact on depot maintenance operations. Increases in workload over current projections can be accommodated by deferring or canceling planned FY 2011 civilian workforce reductions.

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. 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 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). Workload at R&D activities remains robust and relatively constant between FY 2009 and FY 2011, of approximately $12 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 went 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. This budget reflects the realignment of the Naval Air Warfare Center Training Systems Division (NAWCTSD) from mission funding to the NWCF beginning in FY 2011. NAWCTSD provides a full range of innovative training solutions, products, and services. Their core competencies include requirements analysis, systems engineering, systems acquisition, fielding and sustainment over the training systems life cycle. Customers include Navy, Army, Air Force, Department of Defense, and Coast Guard.
- 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 and ensure 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.

Even though the FECs are impacted by higher purchased utilities costs and the addition of new customer workload due to the Joint Base Initiative, they are implementing energy conservation measures that are expected to limit the growth in the quantities of electricity and natural gas consumed. They have also incorporated initiatives to standardize and contain vehicle and equipment operating costs. With regard to facility management and services, the FECs are curbing the cost growth associated with facility service contracts by maximizing the use of regional contracts and seeking fewer and longer term contracts while still maintaining small business commitments.

Transportation

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.

Transportation is comprised of the Military Sealift Command (MSC) which supports the fleets, Naval Sea Systems Command, and Space and Naval Warfare Systems. 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 in FY 2011 are for the delivery of two T-AKEs. Deactivation changes in FY 2011 are for three T-AE Ammunition Ships, and two T-AO Tanker Ships.

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 fluctuates due primarily to the return of excess accumulated operating results for prior year gains and the transition to ERP.

Figure 43 - Summary of NWCF Costs

COST *(In Millions of Dollars)*	**FY 2009**	**FY 2010**	**FY 2011**
Supply (Obligations)	6,265	6,628	6,785
Depot Maintenance - Aircraft	2,151	1,842	1,871
Depot Maintenance - Ships	11	0	0
Depot Maintenance - Marine Corps	592	448	348
Transportation	2,438	2,766	2,740
Research and Development	11,562	11,902	12,171
Base Support	2,831	2,829	2,937
TOTAL	**$25,850**	**$26,415**	**$26,852**
CAPITAL INVESTMENT			
Supply	15	9	7
Depot Maintenance - Aircraft	33	45	45
Depot Maintenance - Ships	0	0	0
Depot Maintenance - Marine Corps	10	10	10
Transportation	11	17	16
Research and Development	100	115	127
Base Support	19	29	20
TOTAL	**$188**	**$225**	**$226**

SECTION VII – IMPROVING PERFORMANCE

The Department of the Navy continues its commitment 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.

TRANSFORMATION MANAGEMENT INFRASTRUCTURE

In July 2009, DON issued a report to Congress on initiatives in Business Transformation which summarized the progress and evolution of business transformation efforts. The Department created a new senior position, Deputy Under Secretary of the Navy for Business Operations and Transformation who also serves as the DON Deputy Chief Management Officer (DCMO). The DCMO has been given several prominent coordinating roles including designing DON's business transformation strategy, identifying opportunities to streamline and improve core business processes, and enabling DON leadership to manage business processes using key metrics. The Business Operations and Transformation Office's initial efforts have been focused in three areas: leveraging and integrating existing organizational processes to improve business operations, defining enterprise policies for business processes and establishing and monitoring business value metrics.

A DON business transformation plan will be developed to serve as a roadmap from the existing suite of business systems to the future target environment of improved systems. The future environment will be charted using a portfolio management process and link existing business systems to the phasing-in of ERP. Transformation efforts build upon many of the initiatives underway in various business mission areas.

CONTINUOUS PROCESS IMPROVEMENT (CPI)

The Department continues to employ CPI as an enabler to manage the Department of the Navy's processes and enhance warfighting capabilities and readiness. 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.

With the establishment of the Deputy Under Secretary of the Navy for Business Operations and Transformation, the Department will bring together processes and organizations for the accomplishment of strategic and corporate business objectives; identify opportunities to streamline, align and improve core business processes and systems to achieve efficiencies in DON business operations and orchestrate the actions required to pursue these opportunities; and synchronize, integrate and coordinate business processes. The Department is also reengineering its approach to business transformation by migrating from a systems-centric approach based on capabilities across its business missions.

A Department-wide CPI process is now being developed to socialize the governance of top down and bottoms up improvement projects crossing multiple command lines to help close performance gaps. Additionally, best practices will be communicated throughout the Department using strategic communications to provide transparency and opportunity for replication of best business practices.

Below are some recent examples of Department of the Navy process improvement efforts. These efforts are complete and funding adjustments have been incorporated into the FY 2011 President's Budget request.

- The CVN 74 USS Stennis significantly reduced non-value added steps in their Ordnance test and repair processes that saved over 4 hours for every Ordnance Test Readiness Review. The resulting impact to the Aviation Squadrons is that high demand Ordnance Items will be immediately available for tasking.
- NAVAIR reduced Aviation Support Equipment fuel servicing wait time by 20% (4.8K man-hours; 1.7 miles travel distance); and increased availability by 30% (reclaimed 9K gallons annually). There was an overall reduction of P-3C community fuel cost for support equipment (SE) by reclaiming residual fuel SE.

- The Navy reviewed a number of internal acquisition reporting requirements and found that there was some duplication. By consolidating and streamlining the reporting process, spending was reduced by $0.4 million per year.
- A team analyzed the Marine recruit training cycle time and determined that it took 12-45 business days to discharge a recruit leaving Marine Recruit Depot San Diego. During this time, resources were expended to billet the recruit and keep the recruit busy. Changes were implemented and the discharge time was reduced by 62% thereby avoiding costs. This project is being replicated at the Parris Island Recruit Depot.
- The Navy maintains ships through regular maintenance availabilities at public and private shipyards. Maintenance efforts per availability were reviewed to assess man-days needed to complete the work package that was required at the time the review was conducted. As a result of the review the mandays associated with the defined scope of work was reduced. This effort afforded the Navy the opportunity to reduce funding on certain availabilities, increase needed maintenance requirements on certain ships, or reduce the ship maintenance backlog.

The Administration conducted a government-wide SAVE initiative in 2009 requesting that government personnel recommend alternatives to improve the operation of the government. The DON is evaluating three of the suggestions to determine their viability. The remaining suggestions were either not executable or had been implemented in prior years. If any of the three ideas under evaluation are determined viable, they will require a more in-depth review.

BUSINESS TRANSFORMATION

The Department of the Navy continues to develop its vision for Business Transformation. Because of the size and complexity of DON's business operations it is imperative that the Navy-Marine Corps team continues to change its business practices to be more agile, efficient, and increasingly responsive to the warfighter.

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 ERP program was created to modernize, streamline and standardize how the Navy manages people, money, programs, equipment and supplies. Navy ERP combines business process reengineering (BPR) and industry best practices, supported by commercial off-the-shelf software, and integrates all facets of Navy business operations, using a single database to manage shared common data. The program enables DON compliance with the Chief Financial Officers Act of 1990 and the DoD Information Assurance Certification and Accreditation Process.

Additional benefits of the program include the delivery of transparent and timely financial information improving decision making and reducing business operating costs. Standardizing and automating key business practices across the DON will create efficiencies, reduce the cost of business and enable easier career mobility within the workforce. Cost savings will be realized by the retirement of redundant, stove-pipe, legacy IT systems, a reduction in supply inventories due to improved inventory management and visibility, and increased business process efficiencies.

The Navy ERP system Release 1.0 (Acquisition and Financial Management functionality) has been operational since October 2007 and is currently deployed to 38,000 users at NAVAIR, NAVSUP, and SPAWAR. The Commander, Operational Test and Evaluation Force (COMOPTEVFOR) stated, in July 2009, that Navy ERP was operationally effective and suitable and recommended full fielding of Release 1.0. Implementation of Release 1.1 (Wholesale and Retail Supply functionality) will begin in Spring 2010. When the Program of Record deployments are completed in Oct 2012, Navy ERP will serve over 65,000 users and be used to manage 53.8% of the

Navy Total Obligation Authority (TOA). Plans are being made to extend Navy ERP to the rest of the DON.

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 (SBR), 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. In addition, DON has set a goal to achieve audit readiness on the Departmental SBR by the end of 2012. 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 both transparent and accountable to DON's stakeholders – the Department of Defense, Congress, and the American taxpayer.

DON OBJECTIVES AND PERFORMANCE METRICS

The Department of the Navy FY 2011 performance metrics are aligned with the National Defense Strategy and the FY 2010 QDR Risk Management Framework as illustrated in Figure 44. As an organizing framework, the 2010 QDR used risk categories that have been employed since 2001. The Department's goals are aligned to this framework as follows:

Operational Risk – Goals for minimizing operational risk include ensuring force availability, maintaining force readiness, shaping force posture and linking contingency planning to capabilities and resources.

Force Management Risk – Goals related to this category include maintaining a quality force, ensuring sustainable military tempo and workforce satisfaction, maintaining reasonable force costs and shaping the force for the future.

Future Challenges Risk – Goals to minimize future challenges risk include driving innovative joint operations, defining human capital skills and competencies, developing more effective organizations and dividing and developing transformation capabilities.

Institutional Risk – Institutionalizing capabilities based planning, improving financial management, and driving acquisition excellence; improving the readiness and quality of key facilities, managing overhead/indirect cost and realigning support to the warfighter are goals affecting institutional risk.

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 supporting current DON objectives and the FY 2011 budget submission.

Figure 44 – Objective and Performance Metrics

Risk Category	Defense Strategy	DON Objective	Performance Metrics	Page #
Operational Risk	**Prevail in Today's Wars**	**Use the Navy-Marine Corps Team to aggressively prosecute the Global War on Terrorism**	Number of Deployed Marines	1-12
			Ships Deployed	1-12
			Ships Underway	1-12
			Active/Reserve Navy/Marine Corps Strength	1-12
			OCO Request	2-5
			Battle Force Ships	4-4
			Active Steaming Days Per Quarter	4-6
			Surge Sealift Ships and Capacity	4-7
			Prepositioning Ships and Capacity	4-7
			Reserve Battle Force Ships	4-20
			Reserve Steaming Days Per Quarter	4-6
			Ship Maintenance % Requirement Funded	4-10, 4-21
			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	4-14, 4-24
			Aircraft Engine Bare Firewalls	4-14,4-24
			Aircraft Engine Spares Ready-to-Issue	4-14, 4-24
			Reserve Air Wings	4-22
			Reserve Flying Hours T-Rating	4-23
			Reserve Primary Authorized Aircraft (PAA)	4-22
			Ground equipment maintenance	4-19
			Ship Construction Plan	5-2
			Aviation Procurement Plan	5-9
Force Management Risk	**Preserving and Enhancing the All-Volunteer Force**	**Provide a Total Naval Workforce capable and optimized to support the National Defense Strategy**	Navy – Active End Strength	3-5
			Navy – Enlisted Accessions	3-5
			Navy - Number of Recruiters	3-5
			Navy - Number of Recruits	3-5
			Navy - Size of Delayed Entry Program	3-5
			Navy - Enlisted Attrition Rates	3-6
			Navy – Active Enlisted Reenlistment Rates	3-6

Risk Category	Defense Strategy	DON Objective	Performance Metrics	Page #
			Navy – Reserve End Strength	3-8
			Navy - Costs for Accession/Basic Skills/Advanced Training	A-5
			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	4-17
			Number of Marine Battalions	4-17
			Marine Corps – Reserve End Strength	3-11
			Marine Corps - Costs for Accession/Basic Skills/Advanced Training	A-6
			Civilian Personnel Levels	3-12,3-16
Future Challenges	**Preparing for a wide range of contingencies.**	**Build the Navy-Marine Corps Force for Tomorrow**	Aviation/Ship Weapons Quantities	5-16
			Funding for R&D Activities	5-35
Institutional Risk		**Provide first-rate facilities to support stationing, training and operations of Naval forces.**	Base Realignment and Closure	6-4,6-5,6-7
			FSRM Recapitalization Rate	6-10
			Family housing units	6-8
			Number of Privatization Projects	6-8
			Number of Reserves Activated	1-12
			Number of Deployed Sailors	1-12

SECTION VIII - FINANCIAL SUMMARY

Total Obligation 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 45 below, result from a combination of several factors.

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

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

Figure 45 – TOA vs BA

(In Millions of Dollars)	**FY 2009**	**FY 2010**	**FY 2011**
Total Obligational Authority (TOA)	**$146,898**	**$156,002**	**$160,609**
Receipts and Other Funds	-75	-290	-289
Expiring Balances	684		
Rescission of Prior Year Programs	-337	-156	
NWCF Contract Authority	330		
Construction / Housing Transfers	200		
Programs Financed with Unobligated Balances	-17		
Total Budget Authority	**$147,683**	**$155,556**	**$160,320**

Note: Baseline only. Does not include Overseas Contingency Operations or American Recovery and Reinvestment Act funding.

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 2008 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 2009 through FY 2011 along with DON outlay estimates are summarized in Figure 46.

Figure 46 - TOA, BA, and Outlays

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

	TOA			BA			OUTLAYS		
Account	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2009**	**FY 2010**	**FY 2011**
MPN**	24,146	25,289	25,951	24,038	25,289	25,951	24,937	26,880	25,945
MPMC	11,775	12,800	13,250	11,757	12,800	13,250	13,133	13,520	13,249
RPN	1,868	1,909	1,944	1,869	1,909	1,944	1,914	1,922	1,941
RPMC	619	614	617	623	614	617	653	671	620
DHAN	1,771	1,826	1,817	1,771	1,826	1,817	1,771	1,826	1,817
DHAMC	1,053	1,136	1,142	1,053	1,136	1,141	1,053	1,136	1,142
DHANR	240	234	242	240	234	242	240	234	242
DHAMCR	134	129	132	134	129	132	134	129	132
OMN	33,963	34,671	38,134	34,814	34,671	38,134	44,501	40,171	38,525
OMMC	5,477	5,532	5,590	5,464	5,532	5,590	9,375	9,029	6,985
OMNR	1,248	1,272	1,368	1,315	1,272	1,368	1,282	1,367	1,381
OMMCR	211	223	285	212	223	285	336	307	303
ERN	-	286	305	-	286	305	-	129	213
NWCF	2	-	-	315	-	-	401	-	-
APN	14,128	18,586	18,509	14,128	18,586	18,509	11,996	14,759	17,211
WPN	3,200	3,347	3,360	3,200	3,347	3,360	2,975	3,181	3,234
SCN	13,022	13,839	15,725	12,686	13,839	13,725	12,183	12,841	13,652
OPN	5,170	5,424	6,450	5,255	5,339	6,450	6,379	5,653	5,777
PMC	1,259	1,517	1,344	1,268	1,517	1,344	5,264	5,085	3,658
PANMC	1,073	798	818	1,073	798	818	1,245	1,446	1,419
RDTEN	19,441	19,908	17,693	19,678	19,888	17,693	19,919	19,608	18,479
NDSF	2,003	1,666	935	1,667	1,668	935	2,218	1,585	1,241
Total DoD Bill	**141,801**	**151,008**	**155,611**	**142,560**	**150,901**	**155,611**	**161,909**	**150,170**	**150,556**
MCN	3,293	3,534	3,879	3,333	3,483	3,879	2,948	3,236	3,519
MCNR	57	126	62	57	126	62	74	71	96
BRCIV	224	228	162	224	228	162	-	200	185
BRCV	753	592	342	753	592	342	635	828	583
FHCON	385	147	186	380	147	186	124	296	283
FHOPS	384	369	366	376	368	366	384	382	362
Total MILCON	**5,096**	**4,995**	**4,998**	**5,123**	**4,945**	**4,998**	**4,165**	**3,661**	**4,912**
Receipts and Other Funds				**-75**	**-290**	**-289**	**-75**	**-290**	**-283**
Sub Total, DON	**$146,898***	**$156,002**	**$160,609**	**$147,683**	**$155,556**	**$160,320**	**$191,286**	**$153,535**	**$155,166**
OCO ***	17,152	17,944	18,534	17,152	17,944	18,534	*	*	*
Total, DON	**$164,050**	**$173,946**	**$179,143**	**$164,835**	**$173,500**	**$178,854**	**$165,991**	**$153,535**	**$155,166**

* FY 2009 total does not include $1.2 billion in ARRA.
** Outlays associated with OCO are represented in the baseline account. Totals may not add due to rounding.
*** FY 2010 OCO includes $3.9B Supplemental request.

Derivation of FY 2010 Estimates

Figure 47 displays a track of changes to the Department of the Navy appropriations for FY 2010, beginning with the FY 2010 President's Budget request. The changes reflect the impact of congressional action associated with enactment of the Consolidated Appropriations Act, 2010 (P.L. 111-117) and the DoD Appropriations Act, 2010 (P.L. 111-118), including appropriations supporting overseas contingency operations (Title IX). Funding associated with the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) is also displayed.

Figure 47

Department of the Navy

Derivation of FY 2010 Estimates

(In Millions of Dollars)

	FY 2010 President's Budget	DoD/Consolidated Appropriations Acts, 2010	Available Prior Year Balances	Revised Economic Assumptions	DON Baseline Total	Transfers	Title IX Appropriations	DON Baseline with Sup'l Appropriations
Military Personnel, Navy	$25,504	-$215			$25,289		1,389	$26,678
Military Personnel, Marine Corps	12,916	-116			$12,800		779	$13,579
Reserve Personnel, Navy	1,938	-29			$1,909		37	$1,946
Reserve Personnel, Marine Corps	618	-4			$614		31	$645
Health Accrual, Navy	1,826				$1,826			$1,826
Health Accrual, Marine Corps	1,136				$1,136			$1,136
Health Accrual, Navy Reserve	234				$234			$234
Health Accrual, Marine Corps Reserve	129				$129			$129
Operation & Maintenance, Navy	35,070	-356		-43	$34,671		5,476	$40,147
Operation & Maintenance, Marine Corps	5,536	3		-7	$5,532		3,430	$8,962
Operation & Maintenance, Navy Reserve	1,279	-5		-2	$1,272		68	$1,340
Operation & Maintenance, MC Reserve	229	-6			$223		87	$310
Environmental Restoration, Navy	286				$286			$286
Aircraft Procurement, Navy	18,378	265		-57	$18,586		853	$19,439
Weapons Procurement, Navy	3,453	-95		-11	$3,347		51	$3,398
Shipbuilding & Conversion, Navy	13,777	105		-43	$13,839			$13,839
Other Procurement, Navy	5,661	-220		-17	$5,424		241	$5,665
Procurement, Marine Corps	1,601	-79		-5	$1,517		893	$2,410
Procurement of Ammunition, Navy/MC	841	-40		-3	$798		676	$1,474
Research, Development, Test & Eval, Navy	19,271	720		-83	$19,908		59	$19,967
National Defense Sealift Fund	1,643	30		-5	$1,668			$1,668
Military Construction, Navy	3,763	-229			$3,534			$3,534
Military Construction, Naval Reserve	64	62			$126			$126
Family Housing Construction, N & MC	147				$147			$147
Family Housing Operations, N & MC	369				$369			$369
Navy Working Capital Fund	0				$0			$0
Base Realignment and Closure	760				$760	60		$820
TOTAL	**$156,429**	**-$209**	**$0**	**-$276**	**$155,944**	**$60**	**$14,070**	**$170,074**
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 2009	FY 2010	FY 2011
Pay and Allowances of Officers	6,463	6,755	6,993
Pay and Allowances of Enlisted	15,781	16,393	16,755
Pay and Allowances of Midshipmen	70	73	75
Subsistence of Enlisted Personnel	903	1,047	1,069
Permanent Change of Station Travel	792	955	880
Other Military Personnel Costs	135	65	179
Sub Total: MPN	**$24,146**	**$25,289**	**$25,951**
Overseas Contingency Operations *	1,702	1,429	1,179
Total: MPN	**$25,848**	**$26,718**	**$27,130**

* FY2010 OCO includes Supplemental request.

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 2009	FY 2010	FY 2011
Health Accrual	1,771	1,826	1,817
Sub Total: DHAN	**$1,771**	**$1,826**	**$1,817**
Overseas Contingency Operations	-	-	26
Total: DHAN	**$1,771**	**$1,826**	**$1,843**

MILITARY PERSONNEL, MARINE CORPS

Table A-2a

Department of the Navy

Military Personnel, Marine Corps

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Pay and Allowances of Officers	2,297	2,531	2,646
Pay and Allowances of Enlisted	8,293	8,981	9,173
Subsistence of Enlisted Personnel	627	746	807
Permanent Change of Station Travel	474	427	523
Other Military Personnel Costs	85	115	102
Sub Total: MPMC	**$11,775**	**$12,800**	**$13,250**
Overseas Contingency Operations *	1,580	862	644
Total: MPMC	**$13,355**	**$13,662**	**$13,894**

* FY2010 OCO includes Supplemental request.

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 2009	FY 2010	FY 2011
Health Accrual	1,053	1,136	1,142
Total: DHAMC	**$1,053**	**$1,136**	**$1,207**

RESERVE PERSONNEL, NAVY

Table A-3a

Department of the Navy

Reserve Personnel, Navy

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Reserve Component Training and Support	1,868	1,909	1,944
Sub Total: RPN	**$1,868**	**$1,909**	**$1,944**
Overseas Contingency Operations *	39	40	49
Total: RPN	**$1,907**	**$1,949**	**$1,993**

* FY2010 OCO includes Supplemental request.

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 2009	FY 2010	FY 2011
Health Accrual	240	234	242
Total: DHANR	**$240**	**$234**	**$247**

RESERVE PERSONNEL, MARINE CORPS

Table A-4a

Department of the Navy

Reserve Personnel, Marine Corps

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Reserve Component Training and Support	619	614	617
Sub Total: RPMC	**$619**	**$614**	**$617**
Overseas Contingency Operations *	29	32	31
Total: RPMC	**$648**	**$646**	**$648**

* FY2010 OCO includes Supplemental request.

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 2009	FY 2010	FY 2011
Health Accrual	134	129	132
Total: DHAMCR	**$134**	**$129**	**$132**

OPERATION AND MAINTENANCE, NAVY

Table A-5

Department of the Navy

Operation and Maintenance, Navy

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Operating Forces			
Air Operations	6,304	5,598	6,255
Ship Operations	8,978	9,379	10,532
Combat Operations/Support	2,982	2,937	3,349
Weapons Support	1,962	2,077	2,184
Base Support	6,697	6,773	7,224
Total - Operating Forces	**$26,922**	**$26,763**	**$29,544**
Mobilization			
Ready Reserve and Prepositioning Forces	352	401	424
Activations/Inactivations	110	200	185
Mobilization Preparedness	55	52	98
Total - Mobilization	**$517**	**$652**	**$707**
Training and Recruiting			
Accession Training	276	287	295
Basic Skills and Advanced Training	1,318	2,073	2,405
Recruiting & Other Training and Education	561	558	567
Total - Training and Recruiting	**$2,155**	**$2,918**	**$3,268**
Administration and Servicewide Support			
Servicewide Support	1,766	1,791	1,936
Logistics Operations and Technical Support	1,514	1,415	1,510
Investigations and Security Programs	1,084	1,126	1,164
Support of Other Nations	5	6	6
Total - Administration and Servicewide Support	**$4,369**	**$4,337**	**$4,616**
Sub Total: O&MN	**$33,963**	**$34,671**	**$38,134**
Overseas Contingency Operations *	5,904	7,790	8,947
Total: O&MN	**$39,867**	**$42,461**	**$47,081**

* FY2010 OCO includes Supplemental request.

OPERATION AND MAINTENANCE, MARINE CORPS

Table A-6

Department of the Navy
Operation and Maintenance, Marine Corps

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Operating Forces			
Expeditionary Forces	1,392	1,404	1,483
USMC Prepositioning	75	77	72
Base Support	2,716	2,849	2,801
Total - Operating Forces	**$4,183**	**$4,330**	**$4,357**
Training and Recruiting			
Accession Training	17	17	17
Basic Skills and Advanced Training	394	430	443
Recruiting & Other Training and Education	318	324	315
Base Support	205	0	0
Total - Training and Recruiting	**$933**	**$770**	**$775**
Administration and Servicewide Support			
Servicewide Support	340	432	371
Base Support	21	0	0
Logistics OPS & Technical Support	0	0	88
Total - Administration and Servicewide Support	**$361**	**$432**	**$459**
Sub Total: O&MMC	**$5,477**	**$5,532**	**$5,590**
Overseas Contingency Operations *	3,934	4,502	4,137
Total: O&MMC	**$9,411**	**$10,034**	**$9,727**

* FY2010 OCO includes Supplemental request.

OPERATION AND MAINTENANCE, NAVY RESERVE

Table A-7

Department of the Navy

Operation and Maintenance, Navy Reserve

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Operating Forces			
Air Operations	724	716	756
Ship Operations	122	98	157
Combat Operations/Support	140	152	156
Weapons Support	5	5	5
Base Support	243	278	269
Total - Operating Forces	**$1,234**	**$1,249**	**$1,345**
Administration and Servicewide Support			
Servicewide Support	14	19	20
Logistics Operations and Technical Support	0	4	4
Total - Administration and Servicewide Support	**$14**	**$23**	**$24**
Sub Total: O&MNR	**$1,248**	**$1,272**	**$1,368**
Overseas Contingency Operations *	69	130	94
Total: O&M	**$1,317**	**$1,402**	**$1,462**

* FY2010 OCO includes Supplemental request.

OPERATION AND MAINTENANCE, MARINE CORPS RESERVE

Table A-8

Department of the Navy

Operation and Maintenance, Marine Corps Reserve

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Operating Forces			
Expeditionary Forces	67	100	121
Base Support	114	97	139
Total - Operating Forces	**$181**	**$197**	**$260**
Administration and Servicewide Support			
Servicewide Support	28	26	26
Base Support	2	0	0
Total - Administration and Servicewide Support	**$30**	**$26**	**$26**
Sub Total: O&MMCR	**$211**	**$223**	**$285**
Overseas Contingency Operations *	78	88	30
Total: O&MMCR	**$289**	**$311**	**$315**

* FY2010 OCO includes Supplemental request.

ENVIRONMENTAL RESTORATION, NAVY

Table A-9

Department of the Navy
Environmental Restoration, Navy
(Dollars in Millions)

	FY 2009	FY 2010	FY 2011
Environmental Restoration Activities	0	286	305
Total: ERN	**$0**	**$286**	**$305**

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 2009		FY 2010		FY 2011	
	QTY	$	QTY	$	QTY	$
Combat Aircraft	148	10,050	164	14,512	165	14,882
Airlift Aircraft	2	151	1	74	0	0
Trainer Aircraft	43	287	37	255	38	266
Other Aircraft	5	200	5	131	3	71
Modification of Aircraft	0	1,689	0	1,866	0	1,624
A/C Spares & Repair Parts	0	1,166	0	1,254	0	1,245
A/C Support Equip & Facilities	0	586	0	493	0	421
Sub Total: APN	**198**	**$14,128**	**207**	**$18,586**	**206**	**$18,509**
Overseas Contingency Operations *	10	637	2	958	3	420
Total: APN	**208**	**$14,765**	**209**	**$19,544**	**209**	**$18,929**

* FY2010 OCO includes Supplemental request.

WEAPONS PROCUREMENT, NAVY

Table A-11

Department of the Navy

Weapons Procurement, Navy

(Dollars in Millions)

	FY 2009		FY 2010		FY 2011	
	QTY	$	QTY	$	QTY	$
Ballistic and Other Missiles						
TRIDENT II Mods	24	1,085	24	1,052	24	1,107
ESSM	50	85	43	51	33	48
Tomahawk	207	280	196	277	196	300
AMRAAM	57	89	79	138	101	156
Sidewinder	114	57	161	54	146	52
JSOW	280	143	357	142	333	131
STANDARD	69	221	45	189	67	296
RAM	90	71	90	70	90	75
Hellfire	1,068	92	325	59	600	44
Aerial Targets	-	79	-	43	-	44
Other	-	540	-	708	-	684
Torpedoes and Related Equipment						
Mk-54 Torpedo Mods	120	27	120	90	-	42
Mk-48 Torpedo ADCAP Mods	-	53	85	56	46	44
Torpedo Support Equipment	-	42	-	35	-	44
Other	-	24	-	27	-	26
Other Weapons/Spares						
CIWS MODS	-	163	22	158	2	41
Gun Mount Mods	-	13	-	36	-	44
Other	-	86	-	97	-	120
Spares and Repair Parts	-	53	-	65	-	59
Sub Total: WPN		**$3,200**		**$3,347**		**$3,360**
Overseas Contingency Operations		29		51		93
Total: WPN		**$3,229**		**$3,398**		**$3,453**

SHIPBUILDING AND CONVERSION, NAVY

Table A-12

Department of the Navy
Shipbuilding and Conversion, Navy

(Dollars in Millions)	FY 2009		FY 2010		FY 2011	
	QTY	$	QTY	$	QTY	$
New Construction						
CVN-21	0	3,916	0	1,220	0	2,640
SSN-774	1	3,573	1	3,957	2	5,133
DDG-51	0	199	1	2,484	2	2,970
DDG-1000	1	1,504	0	1,379	0	186
LCS	2	1,017	2	1,077	2	1,509
LPD-17	1	963	0	1,153	0	0
LHA(R)	0	192	0	169	1	950
JHSV	1	181	1	177	1	181
T-AKE	2	*	2	*	0	0
MLP	0	0	0	0	1	89
Total New Construction	**8**	**$11,546**	**7**	**$11,616**	**9**	**$13,658**
Other						
CVN RCOH	1	613	0	1,770	0	1,664
SSBN ERO	1	276	0	0	0	0
LCAC SLEP	6	111	3	64	4	83
Outfitting	0	428	0	386	0	307
Service Craft	0	48	0	4	0	14
Total Other	**8**	**$1,476**	**3**	**$2,223**	**4**	**$2,067**
Total: SCN	**16**	**$13,022**	**10**	**$13,839**	**13**	**$15,725**

* Funded in NDSF.

OTHER PROCUREMENT, NAVY

Table A-13

Department of the Navy

Other Procurement, Navy

(Dollars in Millions)

	FY2009	FY2010	FY2011
Ship Support Equipment	1,421	1,720	2,329
Communications and Electronics Equipment	1,989	1,887	1,932
Aviation Support Equipment	375	379	345
Ordnance Support Equipment	617	678	776
Civil Engineering Support Equipment	100	90	97
Supply Support Equipment	105	104	95
Personnel and Command Support Equipment	340	320	660
Spares and Repair Parts	223	247	216
Sub Total: OPN	**$5,170**	**$5,424**	**$6,450**
Overseas Contingency Operations *	225	256	481
Total: OPN	**$5,395**	**$5,680**	**$6,931**

* FY2010 OCO includes Supplemental request.

PROCUREMENT, MARINE CORPS

Table A-14

Department of the Navy

Procurement, Marine Corps

(Dollars in Millions)

	FY2009	FY2010	FY2011
Weapons and Combat Vehicles			
LW155MM Lightweight Howitzer	3	7	10
HIMARS	100	71	22
LAV-PC	42	35	41
AAV7A1 PIP	5	6	8
Weapons and Combat Vehicles under $5 million	13	16	26
MOD Kits	11	35	41
Other	56	42	23
Guided Missiles and Equipment			
Ground Based Air Defense (GBAD)	9	11	5
Other	5	73	46
Communication and Electronics Equipment			
Repair and Test Equipment	34	32	26
Comm Switching & Control Systems	42	92	32
Common Computer Resources	41	115	259
Radio Systems	63	49	41
Night Vision Equipment	24	10	0
Comm & Elec Infrastructure Support	21	15	15
Command Post Systems	25	50	33
Other	136	151	249
Support Vehicles			
5/4T Truck HMMWV (MYP)	3	10	5
Logistics Vehicle System Rep.	255	217	134
Other	61	74	64
Engineer And Other Equipment	299	364	251
Spares and Repair Parts	12	41	14
Sub Total: PMC	**$1,259**	**$1,517**	**$1,344**
Overseas Contingency Operations	2,091	912	1,778
Total: PMC	**$3,350**	**$2,429**	**$3,122**

* FY2010 OCO includes Supplemental request.

PROCUREMENT OF AMMUNITION, NAVY AND MARINE CORPS

Table A-15

Department of the Navy

Procurement of Ammunition, Navy and Marine Corps

(Dollars in Millions)

	FY2009	FY2010	FY2011
Navy Ammunition	489	408	459
Marine Corps Ammunition	585	391	359
Sub Total: PANMC	**$1,073**	**$798**	**$818**
Overseas Contingency Operations	349	676	565
Total: PANMC	**$1,422**	**$1,474**	**$1,383**

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Table A-16

Department of the Navy

Research, Development, Test and Evaluation, Navy

(Dollars in Millions)

	FY2009	FY2010	FY2011
Basic Research	525	549	556
Applied Research	775	719	679
Advanced Technology Development	821	822	726
Advanced Component Development	3,342	4,365	3,914
System Development and Demonstration	8,312	8,205	6,852
RDT&E Management Support	1,350	995	849
Operational Systems Development	4,316	4,253	4,117
Sub Total: RDT&E,N	**$19,441**	**$19,908**	**$17,693**
Overseas Contingency Operations *	250	63	60
Total: RDT&E,N	**$19,691**	**$19,971**	**$17,753**

* FY2010 OCO includes Supplemental request.

NATIONAL DEFENSE SEALIFT FUND

Table A-17

Department of the Navy

National Defense Sealift Fund

(Dollars in Millions)

	FY2009	FY2010	FY2011
Strategic Sealift Acquisition	1,308	1,087	411
DoD Mobilization Assets	269	199	159
Strategic Sealift Support	-	5	5
Research and Development	85	73	28
Ready Reserve Force	341	305	332
Total: NDSF	**$2,003**	**$1,668**	**$935**

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)

	FY2009	FY2010	FY2011
Significant Programs			
Operational & Training Facilities	677	1,005	1,152
Maintenance & Production Facilities	202	247	659
R&D Facilities	108	34	85
Supply Facilities	14	88	143
Administrative Facilities	100	329	270
Housing Facilities	1,591	652	790
Community Facilities	246	271	333
Utility Facilities & Ground Improvements	13	389	216
Pollution Abatement	103	264	131
Unspecified Minor Construction	14	12	21
Planning and Design	243	167	120
Foreign Currency	11	-	-
Sub Total: Navy	**$3,293**	**$3,534**	**$3,879**
Overseas Contingency Operations	236	-	-
Total: Navy	**$3,529**	**$3,534**	**$3,879**
Naval Reserve			
Operational & Training Facilities	55	64	57
Maintenance & Production Facilities	-	59	-
Unspecified Minor Construction	-	-	2
Planning and Design	2	3	2
Total: Naval Reserve	**$57**	**$126**	**$61**

FAMILY HOUSING, NAVY AND MARINE CORPS

Table A-19

Department of the Navy

Family Housing, Navy and Marine Corps

(Dollars in Millions)

	FY2009	FY2010	FY2011
Navy			
Construction	125	52	68
O&M	347	335	340
Total: Navy	**$472**	**$387**	**$408**
Marine Corps			
Construction	260	94	118
O&M	37	34	26
Total: Marine Corps	**$297**	**$128**	**$144**
Total: FH,N&MC	**$769**	**$515**	**$552**

BASE REALIGNMENT AND CLOSURE ACCOUNTS

Table A-20

Department of the Navy

Base Realignment and Closure Accounts

(Dollars in Millions)

	FY2009	FY2010	FY2011
Base Realignment and Closure IV	224	228	162
Base Realignment and Closure V	753	592	342
Total: BRAC	**$977**	**$820**	**$504**

NAVY WORKING CAPITAL FUND

Table A-21

Department of the Navy

Navy Working Capital Fund

(Dollars in Millions)

	FY2009	FY2010	FY2011
Navy Working Capital Fund	2	-	-
Overseas Contingency Operations *	-	155	-
Total: NWCF	**$2**	**$155**	**$0**

* FY2010 OCO includes Supplemental request.

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LIST OF ACRONYMS

A

AAG – Advanced Arresting Gear
AAR- Autonomous Aerial Refueling
AARGM - Advanced Anti-Radiation Guided Missile
AC - Active Component
ACE – Air Combat Element
ADCAP – Advanced Capability
ADNS - Automated Digital Networking System
AE – Ammunition Ship
AGS - Advanced Gun System
AIS - Automatic Identification System
ALMDS - Airborne Laser Mine Detection System
AMF – Airborne Mobile Fixed
AMNS - Airborne Mine Neutralization System
AMRAAM - Advanced Medium Range Air-to-Air Missile
APKWS - Advanced Precision Kill Weapon System
ARRA – American Recovery and Reinvestment Act
ASW – Anti-Submarine Warfare

B

BA - Budget Authority
BAMS - Broad Area Maritime Surveillance
BOS – Base Operating Support
BPR – Business Process Reengineering
BRAC - Base Realignment and Closure

C

CAC2S - Common Aviation Command and Control Systems
CANES - Consolidated Afloat Networks and Enterprises Services
CBASS - Common Broadband Advanced Sonar System
CEC - Cooperative Engagement Capability
CENTCOM - US Central Command
CG - Cruiser
CNO - Chief of Naval Operations
COBRA - Coastal Battlefield Reconnaissance and Analysis
COC - Combat Operations Center
COCOMs - Combatant Commanders
COMOPTEVFOR – Commander, Operational Test and Evaluation Force
CONPLAN - Contingency Plan
CONUS – Continental United States
COTS - Commercial Off-the-Shelf
CPI – Continuous Process Improvement
CSGs - Carrier Strike Groups
CSTRS - Carriage, Stream, Tow, and Recovery System
CTOL - Conventional Take Off and Landing
CVN – Nuclear Aircraft Carrier
CVW – Carrier Air Wing
C2 – Command and Control
C2P - Command and Control Processor
C4I - Command, Control, Communication, Computers and Intelligence
C4ISR - Command, Control, Communications, Computer, Intelligence Surveillance and Reconnaissance

D

DAWDF – Defense Acquisition Workforce Development Fund
DCGS - Distributed Common Ground System
DCMO – Deputy Chief Management Officer
DDG – Guided Missile Destroyer
D&I - Discovery and Invention
DJC2 – Deployable Joint Command and Control
DLA - Defense Logistics Agency
DoD – Department of Defense
DON – Department of the Navy
DPRI - Defense Policy Review Initiative
DSRA – Docking Selective Restricted Availability

E

ECV - Enhanced Capacity Vehicle
EFSS - Expeditionary Fire Support System
EFV - Expeditionary Fighting Vehicle
EMALS – Electromagnetic Aircraft Launch System
EMIO – Expanded Maritime Interdiction Operations
EOD - Explosive Ordnance Disposal
EO/IR – Electro-Optical/Infrared
ERAM - Extended Range Active Missile
ERM - Extended Range Munitions
ERO – Engineered Refueling Overhaul
ERP - Enterprise Resource Planning
ESGs - Expeditionary Strike Groups
ESSM - Evolved SEA SPARROW Missile

F

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
FISC – Fleet Industrial Supply Center
FMM – Facility Modernization Model
FNCs - Future Naval Capabilities
FOC - Full Operational Capability
FOS – Family of Systems
FRC - Fleet Readiness Center
FRP - Fleet Response Plan or Full Rate Production
FRS - Fleet Replacement Squadrons
FSRM – Facility Sustainment, Restoration, and Modernization
FTE - Full-Time Equivalent
FTS - Full Time Support
FYDP - Future Years Defense Plan

G

GCCS - Global Command and Control System
G&C – Guidance and Control
GFM - Global Force Management
GMLRS - Guided Multiple Launch Rocket System
GNOSC - Global Network Operations and Security Center
GPS - Global Positioning System
GTF – Grow the Force

H

HADR – Humanitarian Assistance and Disaster Relief
HARM - High-Speed Anti Radiation Missile
HDLD - High Demand, Low Density
HF – High Frequency
HIMARS - High Mobility Artillery Rocket System
HM&E - Hull, Mechanical and Electrical

I

IA – Individual Augmentees
INP - Innovative Naval Prototypes
IOC - Initial Operational Capability
IR – Infrared
ISR - Intelligence, Surveillance and Reconnaissance
ISR/T - Intelligence, Surveillance and Reconnaissance/Targeting
ISR/TA - Intelligence, Surveillance and Reconnaissance/Target Acquisition
ITV - Internally Transportable Vehicle
IW – Irregular Warfare

J

JDAM - Joint Direct Attack Munitions
JFN - Joint Fires Network
JHSV - Joint High Speed Vessel
JLTV - Joint Light Tactical Vehicle
JPATS - Joint Primary Aircraft Training System
JSF - Joint Strike Fighter
JSOW - Joint Standoff Weapon
JTF - Joint Task Force
JTRS - Joint Tactical Radio System

L

LCAC - Landing Craft Air Cushion
LCS - Littoral Combat Ship
LHA - Landing Helicopter Assault

LHA(R) - Landing Helicopter Assault (Replacement)
LHD - Amphibious Assault Ship
LMSR - Large, Medium, Speed Roll-On/Roll-Off
LPD – Amphibious Dock Ship
LRIP - Low Rate Initial Production
LRLAP - Long Range Land Attack Projectile
LVSR - Logistic Support Vehicle Replacement

M

MAGTF - Marine Air-Ground Task Force
MAW—Marine Air Wing
MCM - Mine Countermeasures
MCTAUS - Marine Corps Tactical Unmanned Aircraft System
MDA - Maritime Domain Awareness
MEB - Marine Expeditionary Brigade
MEF - Marine Expeditionary Force
MEUs - Marine Expeditionary Units
MILCON - Military Construction
MIW – Mine Warfare
MLP - Mobile Landing Platform
MMA - Multi-mission Maritime Aircraft
MOC - Maritime Operations Centers
MOS – Military Occupation Specialty
MPF(F) - Maritime Prepositioning Force (Future)
MPRF - Maritime Patrol and Reconnaissance Force
MPS - Maritime Prepositioning Ships
MPT&E - Manpower, Personnel, Training and Education
MRAP - Mine Resistant Ambush Protected
MSC - Military Sealift Command
MUOS - Mobile User Objective System
MYP – Multiyear Procurement

N

NAWCTSD – Naval Air Warfare Center Training Systems Division
NDAA - National Defense Authorization Act
NDSF - National Defense Sealift Fund
NECC - Navy Expeditionary Combat Command
NETOPS – Network Operations
NFCS - Naval Fire Control System
NFESC - Naval Facilities Engineering Service Center
NGEN - Next Generation Networks
NIFC-CA - Naval Integrated Fire Control - Counter Air
NMCI – Navy-Marine Corps Intranet
NNR - National Naval Responsibilities
NSFS - Naval Surface Fire Support
NSPS - National Security Personnel System
N-UCAS – Navy Unmanned Combat Air System
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
OSC – Operations Stress Control

P

PAA - Primary Authorized Aircraft
PSA - Primary Shakedown Availability
PTSD – Post Traumatic Stress Disorder

Q

QDR - Quadrennial Defense Review

R

RAM - Rolling Airframe Missile
RAMICS - Rapid Airborne Mine Clearance System
RC - Reserve Component
RF/IR - Radio Frequency/Infrared
RFI – Ready for Issue

R&M - Restoration and Modernization
RMS – Remote Mine hunting System
RMMV – Remote Multi-mission Vehicle
RORO – Roll On Roll Off
ROS - Reduced Operating Status
RRF - Ready Reserve Force
RTT - Rapid Technology Transition

S

SATCOM – Satellite Communication
SBIR - Small Business Innovation Research
SC/MAGTF – Security Cooperation Marine Air Ground Task Force
SELRES – Selective Reserve
SIGINT - Signals Intelligence
SLBM - Submarine Launched Ballistic Missile
SM - Standard Missile
SMCR - Selected Marine Corps Reserve
SOCOM - Special Operations Command
SRM - Sustainment, Restoration and Modernization
SSC – Ship to Shore Connector
SSGN – Guided Missile Submarine
SSLCM – Surface Ship Life Cycle Management
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
TAMD – Theater Air Missile Defense
TBI – Traumatic Brain Injury
TCDL – Tactical Common Data Link
TMS – Type-Model-Series
TOA - Total Obligation Authority
TSCE – Total Ship Computing Environment
TSW - Tactical Support Wing

U

UAS - Unmanned Aircraft System
UAV - Unmanned Aerial Vehicle
UCAS - Unmanned Combat Air System
UCAV - Unmanned Combat Aerial Vehicle
UHF - Ultra High Frequency

V

VHF - Very High Frequency
VSAT - Very Small Aperture Terminal
V/STOVL – Vertical/Short Take Off and Vertical Landing
VTUAV - Vertical Take Off and Landing Tactical Unmanned Aerial Vehicle