

NOT FOR PUBLICATION UNTIL
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ARMED SERVICES COMMITTEE

STATEMENT OF
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BEFORE THE
HOUSE ARMED SERVICES COMMITTEE
SUBCOMMITTEE ON READINESS
ON
NAVY READINESS

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Chairman Forbes, Congresswoman Bordallo, and distinguished members of the House Armed Services Committee, Readiness Subcommittee, it is our honor to be with you today representing the over 600,000 men and women of the United States Navy, active, reserve, and civilians. Their dedicated service helps ensure the security of this Nation every day. Today, as always, our Navy is deployed globally, with over half the Fleet at sea and more than 24,000 personnel serving in the U.S. Central Command (CENTCOM) area of responsibility (AOR).

The readiness of the Navy to provide the maritime resources needed by our Combatant Commanders (CCDRs) is a function of both combat capability and force capacity. Achieving the required levels of each requires a fine balance between acquiring the right force structure along with new warfighting capabilities, and properly sustaining existing capabilities and platforms to achieve their expected service life. In developing our FY12 budget to accomplish that balance, the Navy first ensured our front line warfighters have the resources they need to accomplish their planned operations – and that is reflected in a continued high state of readiness of our deployed forces in their key mission areas.

The President's Budget for Fiscal Year 2012 provides the balanced funding necessary for the Navy to support today's force while developing the future capabilities and capacity necessary to continue to execute Navy missions in support of the National Military Strategy. Navy programming continues to be informed by our Maritime Strategy – "A Cooperative Strategy for 21st Century Seapower" or CS21. Since its publication in 2007, CS21 has provided a clear vision of the core capabilities the Navy must provide for the Nation. Based upon this foundation, the Chief of Naval Operations provides annual guidance on his principal focus areas for executing the Maritime Strategy – which have become enduring imperatives. They are:

- Build the Future Force. In previous testimony before this committee, Secretary Mabus and Admiral Roughead outlined our plans to build the Navy required to deliver our core capabilities into the future. The Navy budget submission balances these plans with acceptable risk across all our requirements to deliver a Navy program that most effectively employs the resources entrusted to us.
- Maintain Warfighting Readiness. The CCDRs demand for the capabilities delivered by Navy forces continues to grow. Concurrently, we continue to reset in stride to deliver our Global Force Management (GFM) commitments while taking proactive steps to improve the readiness of our forces, particularly our surface ships.
- Develop and Support our Sailors, Navy Civilians, and Families. We continue to expand our capabilities to support our Sailors and families. The service and sacrifice of our returning warfighters, particularly our Wounded Warriors and their families, place a special obligation upon us, one we will not shirk.

Our testimony today centers on the second of the CNO's focus areas and the contribution of Navy readiness accounts in maintaining our overall warfighting readiness. We will also address the ongoing actions to improve the readiness of our Surface Force ships, and plans to maintain our public shipyard infrastructure. The FY12 budget provides the resources to deliver Navy units ready today, and to sustain our ships, aircraft, equipment, and supporting capabilities to be ready for tomorrow.

Navy Units – Ready Today

Global trends in an uncertain world portend an increased demand for sea power. The safety and economic interests of the United States, its allies and partners rely upon the unimpeded trade and commerce that traverse the world's oceans. U.S. vital national interests are tied, therefore, to a secure maritime environment, which places global responsibilities on our Naval forces. The FY12 budget, including Overseas Contingency Operations (OCO) funding, supports Navy operations across this broad spectrum of responsibilities. Our readiness and operational support programs will meet the anticipated CCDR demand for Navy forces within force structure constraints and provide surge forces in support of operational plans, with an acceptable level of risk.

The Fleet Response Plan

The Fleet Response Plan (FRP) is the Navy's construct for the generation of ready forces. It was developed to improve Navy readiness to respond in unanticipated crisis situations and to ensure the ability to provide the surge forces required in the CCDR's war plans within the prescribed timelines. Prior to FRP implementation, training for the majority of our forces was focused almost exclusively on scheduled rotational deployments. Until forces entered a three to four month window prior to deployment, they were in a limited state of readiness which was not fully restored until 30 days prior to deployment. This was often referred to as "the readiness bathtub." Our personnel processes were also aligned to this cycle, resulting in a loss of key skills after deployment as well as a significant drop in overall crew experience levels.

The FRP cycle runs from the end of one depot maintenance period to the end of the next – and varies in length by ship type. It provides phased training beginning immediately after completion of a ship's depot maintenance period. "Basic phase" training prepares individual units for limited operations in a crisis situation, and positions them to be available for surge requirements within a 90 day window. The subsequent "integrated training phase" prepares units to work together at the task group level, as Carrier Strike Groups or Amphibious Ready Groups. This training culminates with a Joint Task Force exercise that emphasizes command and control in a Joint context and hones warfighting skills as part of a Joint force. In the follow-on "sustainment phase," these units are available to meet requirements to surge forces within a 30 day window for Combatant Commander war plans, and conduct scheduled deployments in support of named operations or presence requirements. Navy personnel processes were also realigned under the FRP to limit the previous swings in key skills and experience levels.

Another key readiness aspect of FRP is that units remain in the "sustainment phase" following return from deployment. They remain organized and trained to a level to respond to a 30 day surge requirement, or to conduct additional deployments, until the beginning of their next maintenance phase. In the past, the readiness of these units was allowed to degrade a short time after return from deployment, even if many months of potential employability remained prior to entering depot maintenance.

The availability of forces generated under the FRP is simply described as operational availability (Ao) in the following equation: $Ao = X + Y + Z$, where:

X = units deployed (driven by the Global Force Management (GFM) plan)

Y = units available for surge within 30 days (Integrated Phase Training complete)

Z = units available for surge within 90 days (Basic Phase Training complete)

The principal driver for the required Ao at any given time is the GFM plan in effect. When the requirement for deployed forces (X) exceeds what can routinely be generated within Navy force structure, then surge readiness (Y + Z) will be used.

Current Readiness and Trends

As described above, implementation of the FRP delivered an improvement in overall Navy readiness and provides flexibility in the employment of Navy forces in response to Combatant Commander requirements. However, the current level of demand across the Joint force has resulted in many types of Navy units deploying and re-deploying at a rate that impacts readiness to surge additional forces for Combatant Commander war plans, and reduces the time available for training and organizational level maintenance. In other words, readiness available for surge is being used for presence. This is unsustainable over the long term, and is reflected in a slight downward trend in overall readiness which began in 2007 and continues to the present.

Since the Navy is a traditional rotational force, our standing practice of reset-in-stride has resulted in a near steady overall readiness profile during the continuing operations in the CENTCOM AOR. However, the overall pace of operations has impacted both Navy personnel and equipment readiness, reducing the readiness of non-deployed forces, and requiring mission-tailored training for some deploying forces. To achieve the Expected Service Life (ESL) of our ships and aircraft over the long term, and to stabilize the surge readiness available under the FRP, operational demand and force structure must be rebalanced.

Developing Readiness Requirements

The Navy uses four budget models to determine the financial resources necessary to meet readiness goals for our primary operational forces:

- The Ship Operations model is used to determine the cost of meeting presence and training requirements for U.S. Navy ships and submarines.
- The Ship Maintenance model is used to determine the cost of meeting maintenance requirements at the intermediate and depot levels in both public and private repair facilities.
- The Flying Hour Program (FHP) model determines the cost of operational, training and support flights as well as the cost of flight crew training.
- The Aviation Depot model is used to determine the cost of depot maintenance for airframes and aircraft engines.

These models improve the accuracy of budget estimates by relying on data to produce verifiable and repeatable results. The model inputs are updated at least annually and incorporate the actual financial data from prior years as each year is closed out. Each of the models has been in operation for several years and has been certified by Johns Hopkins University.

Current Operations Accounts

Ship Operations

The FY12 budget (baseline plus OCO) provides the Ship Operations account with funding for an average ship's OPTEMPO of 58 steaming days per quarter (deployed) and 24 steaming days per quarter (non-deployed). This OPTEMPO enables the Navy to meet FRP training/certification requirements with acceptable risk. Measures, such as increased use of simulators, concurrent training and certification events while underway, and the judicious use of fuel, are used to mitigate risk. While the Navy met all

GFM commitments in FY10, including the operational requirements in support of Operation Iraqi Freedom (OIF)/Operation New Dawn (OND) and Operation Enduring Freedom (OEF), we continue to experience high OPTEMPO globally. Sustainment of this OPTEMPO remains dependent upon the receipt of OCO or similar supplemental appropriations.

Air Operations (Flying Hour Program)

The FHP account provides for the operation, maintenance, and training of ten Navy carrier air wings, three Marine Corps air wings, Fleet Air Support (FAS) squadrons, training commands, Reserve forces, and various enabling activities. The FY12 budget (baseline plus OCO) resources the FHP account to achieve Training-rating (T-rating) levels of T2.3 for Navy and T2.0 for the Marine Corps. With this funding, tactical aviation squadrons conduct strike operations, provide flexibility in dealing with a wide range of conventional and irregular threats, and provide long range and local protection against airborne surface and sub-surface threats. FAS squadrons provide vital Fleet logistics and intelligence. The Chief of Naval Air Training trains entry-level pilots and Naval Flight Officers, and Fleet Replacement Squadrons provide transition training in our highly capable, advanced Fleet aircraft. Reserve Component aviation provides adversary and logistics air support; makes central contributions to the counter-narcotics efforts; conducts mine warfare; and augments maritime patrol, electronic warfare, and special operations support.

Navy is increasing the use of simulation to reduce non-deployed flying hours and is continuing to invest in new simulators. We are also investing in improvements to existing simulators to enable further reductions in aircraft flying hours while maintaining requisite training levels for deployed operations.

Ensuring the Navy is Ready for Tomorrow

(Navy Platforms, Equipment, and Supporting Capabilities)

Sustaining the capital assets of the current force is essential to building the future Navy. Using the proven engineered maintenance planning of the carrier and submarine forces, Navy is investing in improvements in surface ship maintenance processes to enhance long-term surface ship material readiness. Investment in future F/A-18 service life extension will assist in managing strike-fighter force structure until sufficient F-35 resources are available in the Fleet. Supporting capabilities are also funded to ensure a ready Navy in the future.

Ship Maintenance

Keeping our ships in acceptable operating condition is vital to their ability to accomplish assigned missions and reach their ESL, a key factor in the Navy's 30-Year Shipbuilding Plan. Surface ships, aircraft carriers and submarines currently in commission comprise approximately 70% of the ships that will be in service in 2020. Reaching ESL requires an integrated engineering approach to plan, fund, and execute the right maintenance.

Improving Surface Ship Maintenance

- **Enhanced Maintenance Planning.** In October 2010, the Surface Ship Life Cycle Management Activity transitioned into the Surface Maintenance Engineering Planning and Procurement Activity (SURFMEPP). SURFMEPP reports directly to Naval Sea Systems Command (NAVSEA - SEA 21) - Navy's overall life cycle manager for surface ships - and is re-establishing surface ship engineered

requirements and Class Maintenance Plans (CMPs), based on disciplined engineering processes similar to those used by our carrier and submarine communities. This cross-enterprise alignment is a significant step forward for the Surface Force, as this rigor will result in proper planning and execution for surface ship maintenance, and achieving ESL.

Based on the CMP and actual ship condition, SURFMEPP is generating individual ship life cycle maintenance plans, from which a Baseline Availability Work Package (BAWP) is developed for each scheduled maintenance availability; all BAWP required maintenance actions are then tracked to completion. If a maintenance action is proposed for deferral, SURFMEPP reviews the request and ensures formal adjudication by the appropriate technical authority. If approved, the deferred action is scheduled for the follow-on availability, or a window of opportunity, as directed.

SURFMEPP is influencing future maintenance requirements through the production of Technical Foundation Papers (TFPs), which assess the ship's entire life cycle. TFPs are used to combine the requirements of the CMP with any known unique ship-specific maintenance requirements to determine the required maintenance for each ship. TFPs for DDG 51 and LSD 41/49 Classes were completed in time to inform the FY12 budget request; TFPs for CG's and LHDs will be completed to inform future budgets. The FY12 budget also includes new requirements for Surface Ship Material Condition Assessments, Fleet Technical Support, and additional oversight of contractor work based on increases in maintenance requirements identified by SURFMEPP in revising the CMPs.

- **Corrosion Control Initiatives.** A robust corrosion prevention and mitigation strategy is essential to minimizing the total ownership cost of our ships, while ensuring they reach ESL. An essential part of executing any corrosion prevention strategy is a clear understanding of the current condition of each asset. Until recently, surface ships did not have a rigorous approach to corrosion control, and though the science of corrosion is well known and methods to contain it are mature, our implementation of those methods was sporadic and usually reactive to the corroding events.

As discussed in testimony last year, the Navy piloted the Achieving Service Life Program, partnering with the American Bureau of Shipping (ABS), to perform detailed surface ship structural surveys using commercially proven processes and procedures. To date, inspections on over twenty surface combatants and amphibious ships, and exercising service life validation models have been completed. The results of this work and the constant review of waterfront maintenance activities will help to prioritize resources, shape the baseline work packages for these ships, and align repairs to enhance service life integrity.

Using ABS' commercial experience and tools, we are gaining knowledge on what is required of our ships to meet their ESL. Through this documentation and analysis, the maintenance community is better able to perform "condition based" planning to avoid serious material conditions that adversely impact a ship's operational availability. Current service life assessments have already demonstrated their value in informing the maintenance community of "corrosion hotspots" by class and will be a key input to SURFMEPP's Corrosion Control Programs.

SURFMEPP is actively involved in managing corrosion and is creating and maintaining a surface ship corrosion tracking database, similar to those used by the carrier and submarine communities, that details the condition of surface ship tanks and voids. Additionally, corrosion prevention and correction is being incorporated into individual ship life cycle maintenance plans and the BAWP as part of availability planning.

Along with the ABS assessments, the Navy is also conducting Maintenance Requirement Card (MRC) assessments, to drive both an engineered solution to the discovered problems and define the maintenance requirements by hull to inform the budget through a structured and defensible analytical process. As we gain knowledge on individual classes of ships, we expect to be able to target the critical areas subject to accelerated corrosion at the proper intervals. MRC assessments are being conducted by the Regional Maintenance Centers (RMCs) to ensure consistency, and uniform application of guidelines.

In addition, Navy has established a Corrosion Knowledge Sharing Network to focus surface ship corrosion control initiatives and address issues across the Fleet. Also, Corrosion Control Assistance Teams (CCATs) have been instituted at five sites with plans to expand to all major ship maintenance locations. They provide tools, technology, expertise and training to improve ship preservation efforts.

- **Enhancing Intermediate Maintenance.** To restore intermediate level maintenance capacity and capability on the waterfront, Navy is increasing both the Sailor and civilian manning at the RMCs. Sailors working at RMCs learn to self-assess, identify, and even correct maintenance issues that are typically more complex, and require a higher level of experience, than those routinely performed at the organizational level - valuable skills that they take with them back to the Fleet.

In December 2010, Navy established a new command, Navy Regional Maintenance Center (NRMC), to lead the operations of all RMCs in the execution of surface ship maintenance and modernization. NRMC is establishing common policies and processes in the oversight of operations and management of RMCs for the execution of private sector depot level repair and modernization, technical and engineering assistance, contract management services, and readiness assessments on Naval vessels.

Ship Maintenance Funding

The FY12 budget (including OCO) resources the ship maintenance account to 94 percent. This funding level represents the best balance between current force readiness and building the future force within available top line funding.

Navy is committed to the right level of ship maintenance at the most efficient cost but remains dependent upon the receipt of OCO or similar supplemental appropriations to fund ship maintenance requirements. We continue efforts to reduce the total cost of ownership of the Fleet, as we have done with SSN 688 and SSN 774 class submarines, through the analysis of engineered technical requirements and assessment of recently completed availabilities. The cyclic nature of ship and submarine depot availabilities from year to year continues to cause variations in budget requests and annual obligation levels.

Surface ship availabilities are conducted almost exclusively in the private sector. Nuclear submarine and aircraft carrier availabilities are primarily conducted in the public sector, with selected availabilities completed by nuclear capable private shipyards. Whenever practical, maintenance is performed in the ship's homeport to minimize the impact on our Sailors and their families. The Navy recognizes that maintenance organizations need a stable and level workload to maximize efficient execution. We will continue to level the workload to the maximum extent practicable within operational constraints.

Public Shipyard Infrastructure

Navy's four public shipyards, along with other elements of the Navy's shore infrastructure, are all critical in maintaining Fleet readiness and supporting ongoing worldwide operations. Naval shipyard infrastructure investments target the recapitalization of dry-docks, wharves, piers, and shops that directly support the Fleet.

While we must balance risk across the Navy to provide the most capability within fiscal constraints, we continue to make investments in our Naval shipyard infrastructure to meet mission requirements through Sustainment (ST), Restoration and Modernization (RM), and Military Construction (MILCON) funding. For fiscal years 2008 through 2010, Navy exceeded the minimum capital investment required by law (10 USC 2476), which mandates a minimum investment of 6% of the average of the previous three years of intermediate and depot maintenance revenue. By this measure, the Navy has provided investments of 9.5% in FY08; 9.9% in FY09; and 14.6% in FY10, and plans to invest 9.8% this year. The FY12 budget request includes \$67.3M for shipyard ST and RM projects and the following MILCON projects are programmed in FY12:

- Norfolk - \$74.2M Controlled Industrial Facility
- Puget Sound - \$13.2M Integrated Dry Dock Water Treatment Facility

Aviation Maintenance

Naval aviation maintenance is executed through the use of Reliability Centered Maintenance (RCM). Naval aircraft, engines, systems (i.e., weapons, aircrew escape systems, avionics, and electrical systems), and support equipment (i.e., avionics support equipment, non-avionics support equipment, and aircraft launch/recovery equipment) undergo an analytical process to determine preventative maintenance requirements and other actions necessary to ensure safe operation with cost-wise readiness. This approach ensures the proper balance of preventive maintenance (PM) tasks, prognostics and diagnostics (i.e., predictive and detective sensing devices), corrective maintenance, operational procedures, maintenance improvements, design changes, and training.

The process of developing PM requirements, with an auditable documentation package, is based on the reliability of the various components, the severity of the consequences related to safety and mission if failure occurs, and the cost effectiveness of the task. Thus, aircraft, engines, and systems have an established maintenance cycle documented in maintenance publications, which are based on flight hours, calendar days, or cycles (e.g., landings, take-offs, carrier landings, operation hours, prognostics, etc.). PM is accomplished by either by organizational, intermediate or depot level maintenance personnel, as specified in the maintenance publications.

The Aviation Depot Maintenance account ensures operational aviation units have sufficient Ready for Tasking aircraft to accomplish assigned missions. The FY12 budget request (baseline plus OCO) resources the Aviation Depot Maintenance account to 95 percent of requirement, and funds the repair and overhaul of 742 airframes and 2,577 engines. The shortfall results in a projected backlog of 23 airframes and 162 engines, which is moderate, but acceptable risk and below our one year red-line backlog of 100 airframes and 340 engines. The Naval Aviation Enterprise AIRSpeed strategy continues to deliver cost-wise readiness by focusing efforts to reduce the cost of end-to-end resourcing, increase productivity, and improve the operational availability of aircraft. This strategy provides a robust capability to use efficiencies to manage the highest priority requirements.

Conclusion

The President's Budget for Fiscal Year 2012 provides the balanced funding necessary for the Navy to support today's force while developing the future capabilities and capacity necessary to continue to execute Navy missions. Sustaining the capital assets of the current force is essential to building the future Navy. Using the proven engineered maintenance planning of the carrier and submarine forces, Navy is continuing to invest in improvements in surface ship maintenance processes to enhance long-term surface ship material readiness.

Together with the U.S. Marine Corps and the broader Joint force, our long term allies, and newer partners, the Navy remains ready to defend our Nation, and the common interests of the community of nations, from those countries or other actors who would seek to harm us. In the FY12 budget, we have balanced our resources to sustain Navy readiness today within acceptable risk in each of the core capabilities defined in our Maritime Strategy, while building the capacity to sustain the Navy of the future. We appreciate the Committee's consideration of our budget request and thank you again for your support of the Navy's mission and particularly for your commitment to the welfare of our Sailors, their families and our Navy civilians.