# NOT FOR PUBLICATION UNTIL RELEASED BY THE SENATE ARMED SERVICES COMMITTEE SUBCOMMITTEE ON SEAPOWER

#### **STATEMENT**

OF

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BEFORE THE

SUBCOMMITTEE ON SEAPOWER OF THE

SENATE ARMED SERVICES COMMITTEE

ON

DEPARTMENT OF THE NAVY SHIPBUILDING PROGRAMS

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Mr. Chairman, Senator Hirono, and distinguished members of the subcommittee, thank you for the opportunity to appear before you today to address the Department of Navy's shipbuilding programs.

The Fiscal Year (FY) 2016 President's Budget submission is governed by the 2014 Quadrennial Defense Review (QDR), which implements the 2012 Defense Strategic Guidance (DSG) and continues our efforts to ensure our ability to protect the homeland, build security globally, and project power and win decisively. In balancing resources and requirements, the Department continues to place a priority on maintaining a sea-based strategic deterrent, sustaining forward presence, strengthening our means to defeat and deny aggression, focusing on critical readiness, sustaining or enhancing our asymmetric capabilities, and sustaining a relevant industrial base, including providing stability in our shipbuilding programs. The Navy and Marine Corps remain well suited and uniquely positioned to perform the missions of the DSG, including appropriate readiness, warfighting capability, and forward presence. Our principal requirement remains to equip the Navy and Marine Corps with the most effective warfare systems, through procurement, modernization, and sustainment, to address the security challenges of today and tomorrow. These principles guide the priorities and direction of the Department's FY 2016 President's Budget request. The Department will continue to work closely with Congress to maintain the right balance across capacity, capability, readiness, and the industrial base.

Though budget issues have challenged the Department, our Sailors and Marines deployed around the world continued to perform the mission and operate forward, being where it mattered when it mattered. Among these missions, the *George H.W. Bush* Strike Group relocated from the Arabian Sea to the north Arabian Gulf and was on-station within 30 hours, ready for combat operations in Iraq and Syria. Navy and Marine strike fighters from the carrier generated 20 to 30 combat sorties each day for 54 days to project power against the Islamic State of Iraq. The *George Washington* Strike Group also provided disaster relief to the Philippines in the wake of the Super Typhoon Haiyan approximately a year ago. USS *Truxton* established a U.S. presence and reassured our allies in the Black Sea within a week after Russia invaded Crimea. USS *Fort Worth*, on her maiden deployment, joined USS *Sampson* in support of the Indonesia-led search effort for Air Asia flight 8501 within days of arrival in theater.

Marine Corps units deployed to every Geographic Combatant Command (GCC) and executed numerous Theater Security Cooperation (TSC) exercises to help strengthen

relationships with allies and build partner capacity. Marine Corps Special Purpose Marine Air-Ground Task Force (MAGTFs) and ship based Marine Expeditionary Units also responded to emergent crises in Sudan, Iraq and Libya, and most recently off the coast of Yemen to participate in strikes or reassure American allies. Innovative force packages were provided to the GCCs with Special Purpose MAGTF Crisis Response for the Middle East and Africa. These fully capable ground-based MAGTFs responded to crisis when called upon in a matter of hours to reinforce or evacuate embassies in South Sudan and Libya. Furthermore, in December, the Marines turned over control of Regional Command Southwest and redeployed its last combat forces from Afghanistan, and remain committed to support the continuing North Atlantic Treaty Organization efforts.

The Department maintained a steady pace of over 200 engagements, more than 30 amphibious operations, 150 TSC events, and 130 exercises over the year. This included Rim of the Pacific, an exercise off Hawaii that featured participants from 22 nations (including China for the first time), and the international mine countermeasures exercise in the 5th Fleet's arena in and around the Arabian Gulf that included participants from 44 nations. In addition, the Marine Corps deployed numerous other units globally. The newly developed Marine Security Guard Security Augmentation Unit deployed 29 times during 2014 to augment posts at the request of the State Department to a variety of embassies. Marine Rotational Force-Darwin based in Darwin, Australia, conducted bi-lateral training and exercises. The Black Sea Rotational Force continued their enduring activities in the European Command area of operations and Fleet Anti-Terrorism Security Teams provided forward-deployed platoons to four GCCs in support of dynamic mission tasking such as embassy reinforcement in Baghdad, Iraq.

The Department's FY 2016 budget represents the bare minimum to execute the DSG in the world we face, but still results in high risk in two of the most challenging DSG missions that depend on adequate numbers of modern, responsive forces. The principal risk to the Department's ability to meet the DSG remains the uncertainty in future funding, which affects our planning and the ability to balance near- and long-term readiness and capability. The FY 2014 President's Budget was the last budget submission to fully meet all of the missions of the DSG. The Department made difficult, strategy-based choices to reprioritize within available resources, but that is not sustainable. The FY 2013 sequestration was manageable in part because of key budget reprogramming actions made by the Department with Congressional support. In order to accomplish this, however, the Department applied mitigating actions to

ships in execution and deferred costs to future years in order to avoid breaking programs. While the Bipartisan Budget Act of 2013 (BBA) provided some relief from sequestration-level funding in FY 2014 and FY 2015, significant shortfalls remained compared to the FY 2014 President's Budget. The Department was compelled to further reduce the capability of weapons and aircraft, slow modernization, and delay upgrades to all but the most critical shore infrastructure. As a result, the Department is challenged with maintenance backlogs, compressed training for modernization, and impacts on our people and their families due to extended deployments.

If sequestration returns in FY 2016, a revisit and revision of the defense strategy would be necessary. With limited ability to mitigate the impacts as we did in FY 2013, sequestration in FY 2016 would force the Department to further delay critical warfighting capabilities, reduce readiness of forces needed for contingency response, further downsize weapons capacity, and forego or stretch force structure procurements as a last resort. The Marine Corps would assume additional significant risk in long-term modernization and infrastructure sustainment, delay of major acquisition programs, forced sustainment of aged legacy systems resulting in increased operations and support costs, as well as further detrimental impacts to readiness, which will lead to morale issues and quality of life degradation. The Department's capability and capacity to meet operational requirements over the long-term will be reduced, including our ability to deploy forces on the timeline required by GCCs in the event of a contingency.

#### The Fiscal Year 2016 President's Budget Request

The FY 2016 President's Budget submission continues to balance force structure, readiness, and capability to meet national security commitments. The Department's shipbuilding plan is built around stability, balancing near-term and long-term requirements to enable efficient planning and procurement, improve cost performance, and sustain the critical shipbuilding and supplier industrial base. A brief overview of Navy shipbuilding programs follows.

#### **Shipbuilding**

The FY 2014 update to the 2012 Force Structure Assessment (FSA) to meet the Department of the Navy's required missions in support of the DSG, has increased the objective to 308-ships to account for evolving force structure decisions and real-world changes to assumptions made in 2012. The Department's FY 2016 shipbuilding plan continues to build toward the balanced force required by the FSA. As such, the FY 2016 President's Budget

requests funding for nine ships: two *Virginia* class attack submarines, two DDG 51 *Arleigh Burke* class destroyers, three Littoral Combat Ships (LCS), the first next generation logistics fleet resupply ship T-AO(X), and the remaining funding for the Amphibious Transport Dock (LPD 28) that Congress added in FY 2015. The FY 2016 submission for the Future Years Defense Program (FYDP), FY 2016 to FY 2020, plans for the procurement of 48 ships. Additionally, the budget request includes funding for the aircraft carrier USS *George Washington's* refueling and complex overhaul (RCOH).

An additional key component of our budget submission is the modernization of 11 cruisers, which are the most capable ships for controlling the air defense of a carrier strike group. The Navy's cruiser modernization plan in accordance with FY 2015 Congressional direction will allow the Navy to reduce some funding requirements while increasing the capability and extending the service life of our large surface combatants.

The key elements of the FY 2016 shipbuilding plan will now be discussed for each area of the plan.

#### **Aircraft Carriers**

Our aircraft carriers are central to our nation's defense strategy, which calls for forward presence; the ability to simultaneously deter potential adversaries and assure our allies; and capacity to project power at sea and ashore. These national assets are equally capable of providing our other core capabilities of sea control, maritime security, and humanitarian assistance and disaster relief. Our carriers provide our nation the ability to rapidly and decisively respond globally to crises, with a small footprint that does not impose unnecessary political or logistical burdens upon our allies or potential partners.

Nimitz and Ford class carriers will be the premier forward deployed asset of choice for crisis response and early decisive striking power in major combat operations for the next half-century. The Department has established a steady state Ford class procurement plan designed to deliver each new ship in close alignment with the Nimitz class ship it replaces. The design improves warfighting capability, survivability, operational availability, and quality of life for Sailors, while reducing the ship's crew by between 500 and 900 personnel and decreasing total ownership costs by approximately \$4 billion per ship. Gerald R. Ford (CVN 78), the lead ship of the class, was launched in November 2013. As of January 2015, CVN 78 is 87 percent complete, 37 percent of compartments have been turned over to the crew, 9.4 million feet of the

9.8 million feet of cabling (96 percent) has been installed, and 36 percent of the shipboard testing program is complete. CVN 78 land-based catapult testing commenced in December 2014. CVN 78 is planned for delivery in FY 2016.

The Navy is committed to delivering CVN 78 within the \$12.887 billion Congressional cost cap. Sustained efforts to identify cost reductions and drive improved cost and schedule on this first-of-class aircraft carrier have resulted in highly stable performance since 2011.

Parallel efforts by the Navy and shipbuilder are driving down and stabilizing aircraft carrier construction costs for the future *John F Kennedy* (CVN 79) and estimates for the future *Enterprise* (CVN 80). As a result of the lessons learned on CVN 78, the approach to carrier construction has undergone an extensive affordability review. The Navy and the shipbuilder have made significant changes on CVN 79 to reduce the cost to build the ship as detailed in the 2013 CVN 79 report to Congress. The benefits of these changes in build strategy and resolution of first-of-class impacts on CVN 79 are evident in metrics showing significantly reduced manhours for completed work from CVN 78. These efforts are ongoing and additional process improvements continue to be identified.

The Navy extended the CVN 79 construction preparation contract into 2015 to enable continuation of ongoing planning, construction, and material procurement while capturing lessons learned associated with lead ship construction and early test results. The continued negotiations of the detail design and construction (DD&C) contract afford an opportunity to incorporate further construction process improvements and cost reduction efforts. Award of the DD&C contract is expected in third quarter FY 2015. This will be a fixed price-type contract.

Additionally, the Navy will deliver the CVN 79 using a two-phased strategy. This enables select ship systems and compartments to be completed in a second phase, wherein the work can be completed more efficiently through competition or the use of skilled installation teams responsible for these activities. This approach, key to delivering CVN 79 at the lowest cost, also enables the Navy to procure and install shipboard electronic systems at the latest date possible.

The FY 2014 National Defense Authorization Act (NDAA) adjusted the CVN 79 and follow ships cost cap to \$11,498 million to account for economic inflation and non-recurring engineering for incorporation of lead ship lessons learned and design changes to improve affordability. In transitioning from first-of-class to first follow ships, the Navy has maintained *Ford* class requirements and the design is highly stable. Similarly, we have imposed strict

internal controls to drive changes to the way we do business in order to ensure CVN 79 is delivered below the cost cap. To this same end, the FY 2016 President's Budget request aligns funding to the most efficient build strategy for this ship and we look for Congress' full support of this request to enable CVN 79 to be procured at the lowest possible cost.

Enterprise (CVN 80) will begin long lead time material procurement in FY 2016. The FY 2016 request re-phases CVN 80 closer to the optimal profile, therefore reducing the overall ship cost. The Navy will continue to investigate and will incorporate further cost reduction initiatives, engineering efficiencies, and lessons learned from CVN 78 and CVN 79. Future cost estimates for CVN 80 will be updated for these future efficiencies as they are identified.

With more than half of the service life of the *Nimitz* class still remaining, RCOH continues as a key enabler for the enduring presence of the aircraft carrier Fleet. USS *Abraham Lincoln* (CVN 72) completed her RCOH undocking in November 2014. This year's budget request restores funding for the USS *George Washington* (CVN 73) RCOH. The CVN 73 thirty month RCOH advanced planning, long lead time material procurement, engineering, and early fabrication contract was awarded in February 2015.

#### **Submarines**

Submarines' stealth and ability to conduct sustained forward-deployed operations in antiaccess / area-denial environments serve as force multipliers by providing high-quality
Intelligence, Surveillance, and Reconnaissance (ISR) as well as indication and warning of
potential hostile action. In addition, attack submarines are effective in anti-surface warfare
(ASuW) and undersea warfare in almost every environment, thus eliminating any safe-haven that
an adversary might pursue with access-denial systems. As such, they represent a significant
conventional deterrent. The Navy is mitigating an impending attack submarine force structure
shortfall in the 2020s through multiple parallel efforts: continuing procurement of two *Virginia*class submarines per year; reducing the construction span of *Virginia* class submarines;
extending the service lives of select attack submarines (SSN 688s) with the potential to eliminate
10-15 attack submarine (SSN) years from the SSN shortfall of 51 years. While each of the
Navy's attack submarines provides considerable strike capacity, guided missile submarines
(SSGN) provide substantially more strike capacity and a robust capability to deploy special
operations force (SOF) personnel. Lastly, the Navy's 14 ballistic missile submarines (SSBNs)

provide the nation with an around-the-clock, credible, modern and survivable sea-based strategic deterrent.

SSBNs, coupled with the TRIDENT II D-5 Strategic Weapons System, represent the most survivable leg of the Nation's strategic arsenal and provide the Nation's most assured nuclear response capability. Originally designed for a 30-year service life, the Ohio class was extended to its limit at 42 years of operation. With the Ohio class SSBNs being an average of 25.5 years old, the U.S. must continue development of the follow-on twelve ship Ohio Replacement (OR) SSBN program as the current SSBNs' life cycles cannot be extended further. This is our top priority program within the Department of the Navy.

The FY 2016 President's Budget requests full funding of two *Virginia* class submarines and advanced procurement for the FY 2017 and FY 2018 vessels. The *Virginia* class submarine program has delivered the last seven ships on budget and ahead of schedule. The last ship delivered, USS *North Dakota* (SSN 784), included a completely redesigned bow section as part of the Design for Affordability efforts, an approximate 20 percent design change. Additionally, USS *North Dakota* delivered with the highest quality of any *Virginia* class submarine to date.

The Navy awarded the Block IV contract in April 2014 for ten ships. It continues the co-production of the *Virginia* class submarines between General Dynamics Electric Boat and Huntington Ingalls Industries - Newport News Shipbuilding through FY 2018. The savings realized with this multiyear procurement (MYP) contract was over \$2 billion, effectively giving the Navy ten ships for the price of nine.

In December 2012, the Navy awarded a research and development (R&D) contract for OR SSBN which focuses on meeting the program's performance requirements while reducing costs across design, production, and operations and sustainment. The lead ship recurring estimate was reduced to \$6.2 billion Constant Year (CY) (\$8.8B Then Year (TY)) dollars from \$6.8 billion CY (\$10.0B TY) dollars. The average follow-on ship recurring cost estimate was reduced to \$5.2 billion CY (\$9.8B TY) dollars from \$5.4 billion CY (\$10.5B TY) dollars. The non-recurring cost estimate is \$17.1 billion CY (\$22.4B TY). Cost reduction efforts continue and bring the Navy closer to its cost goals. The cost reduction efforts will continue throughout the design and construction phases.

The FY 2016 President's Budget requests funding to continue development of the OR SSBN and ensures Common Missile Compartment efforts remain on track to support the United Kingdom's SUCCESSOR Program's schedule. Given the need to recapitalize this strategic

asset, coupled with the ongoing need to support Navy force structure, the Navy continues to pursue the means to resource construction of the OR SSBN in accordance with the schedule to fulfill U.S. Strategic Command requirements. The first-of-class is to be procured in 2021, with Shipbuilding and Conversion, Navy (SCN) advanced procurement in 2019 and 2020. The Navy continues to need significant increases in our topline beyond the FYDP, not unlike that during the period of *Ohio* construction, in order to afford the OR SSBN procurement costs. Absent a significant increase to the SCN appropriation, OR SSBN construction will seriously impair construction of virtually all other ships in the battle force: attack submarines, destroyers, and amphibious warfare ships. The shipbuilding industrial base will be commensurately impacted and shipbuilding costs would spiral unfavorably. The resulting battle force would fall markedly short of the FSA, unable to meet fleet inventory requirements. The National Sea-Based Deterrence Fund is a good first step in that it acknowledges the significant challenge of resourcing the OR SSBN, but the fund is unresourced.

In addition to the Department of the Navy's budget request, the continued support of Congress for Naval Reactors' Department of Energy (DoE) funding is vital to the Navy mission and ensuring the safe, reliable and enduring operations of the nuclear-powered Fleet. The President's FY 2016 DoE budget fully funds Naval Reactors' request for the OR SSBN. This funding is critical to maintain the reactor design and development in synch with the Navy shipbuilding schedule to support lead ship procurement in 2021. The DoE budget submission also provides full funding for refueling the Land-based Prototype. This effort not only supports development of the OR SSBN life-of-the-ship core, but also ensures Naval Reactors continues to train about 1,000 nuclear-qualified sailors per year for the next twenty years. Naval Reactors' DoE budget also includes the second year of funding for the Spent Fuel Handling Project. Recapitalizing this facility is critical to the Navy's tight refueling and defueling schedule of nuclear-powered aircraft carriers and submarines.

The Navy's four SSGNs provide significant warfighting capability, but will be retired in 2026-2028 after 42 years of combined SSBN/SSGN service. To mitigate the 60 percent reduction in undersea strike capacity when they retire, the Navy is investing in *Virginia* Payload Module (VPM) that will include a hull insert amidships of a *Virginia* class submarine that will contain four 87-inch diameter missile tubes each capable of launching seven TOMAHAWK cruise missiles. The FY 2016 President's Budget continues VPM R&D and starts SCN funding

in FY 2017 for detail design efforts to enable integrating VPM into Block V *Virginia* class SSNs, one per year starting in FY 2019.

### **Large Surface Combatants**

Guided missile cruisers (CGs) and guided missile destroyers (DDGs) comprise our large surface combatant Fleet. When viewed as a whole, these ships fulfill broad mission requirements both independently and in conjunction with a strike group. The demands for increased capability and capacity in Ballistic Missile Defense (BMD) and Integrated Air and Missile Defense (IAMD) continue to be a focal point. In order to meet the increased demand for BMD, in FY 2014, the Navy forward deployed two BMD capable DDGs, USS *Donald Cook* (DDG 75) and USS *Ross* (DDG 71) to Rota, Spain. USS *Carney* (DDG 64) and USS *Porter* (DDG 78) will arrive in FY 2015. Two additional BMD ships will homeport shift to Yokosuka, Japan in 2015 and 2016, USS *Benfold* (DDG 65) and USS *Barry* (DDG 52). The Anti-Submarine Warfare (ASW) combat systems on DDGs and CGs are also being upgraded, bringing significant improvements over legacy systems.

The *Arleigh Burke* class (DDG 51) program remains one of the Navy's most successful shipbuilding programs – 62 ships are currently operating in the Fleet. The FY 2016 President's Budget includes funding for two destroyers to execute the fourth year of the current MYP. One of these ships will incorporate IAMD and provide additional BMD capacity, and the other ship will introduce the next flight upgrade known as Flight III, which incorporates the Air and Missile Defense Radar (AMDR), with both ships bringing additional capability to the Fleet when they deliver in the early FY 2020s. AMDR and Flight III are essential for future sea-based BMD. The FY 2016 President's Budget also includes funding to complete the construction of *Thomas Hudner* (DDG 116) to restore program funding removed by the FY 2013 sequestration.

AMDR is the future multi-mission radar of the Navy's surface combatant fleet, which will meet the growing ballistic missile threat by improving radar sensitivity and enabling longer range detection for engagement of increasingly complex threats. In October 2013, the Navy awarded the contract for development of the AMDR, with options for up to nine low rate initial production (LRIP) units. The AMDR radar suite will be capable of providing simultaneous surveillance and engagement support for long range BMD and area defense. The program continues to demonstrate maturity in the design development as shown in successful completion of the AMDR hardware critical design review (CDR) in December 2014 and is on track for the

system CDR in April 2015. Engineering Change Proposal (ECP) detail design efforts for the DDG Flight III design will continue in FY 2016, ultimately leading to over 90 percent detail design completion prior to construction on the first Flight III ship.

The DDG 1000 Zumwalt class guided missile destroyer will be an optimally crewed, multi-mission, surface combatant designed to provide long-range, precision, naval surface fire support to Marines conducting littoral maneuver and subsequent operations ashore. In addition to the ship's two 155mm Advanced Gun Systems capable of engaging targets with the Long Range Land Attack Projectiles (LRLAP), the ship will be capable of conducting ASW, land attack, and will provide valuable advancements in technology such as signature reduction (both acoustic and radar cross-section), active and passive self-defense systems, enhanced survivability features, and shipboard automation (in support of reduced manning). The DDG 1000 program accomplished several construction milestones in 2014 with significant test and activation efforts continuing for the ship's propulsion and power plants. DDG 1000 sea trials will be conducted this year in preparation to enter the Fleet in 2016. The FY 2016 budget requests funds to continue the DDG 1000 program.

#### **Small Surface Combatants**

The Littoral Combat Ship (LCS) enables the Navy to implement the DSG imperative to develop innovative, low-cost, and small-footprint approaches to achieve our security objectives. The modular, open systems architecture inherent in LCS allows for rapid integration of technological solutions that increase capability at reduced cost. The LCS complements our inherent blue water capability and fills war fighting gaps in the littorals and strategic choke points around the world. LCS design characteristics (speed, agility, shallow draft, payload capacity, reconfigurable mission spaces, air/water craft capabilities) combined with its core command, control, communications, computers and intelligence; sensors; and weapons systems, allow LCS to bring unique strengths and capabilities to the mission.

In February 2014, Secretary Hagel capped LCS at 32 ships, pending an evaluation of the alternatives to increase the lethality and survivability of future small surface combatants. In December 2014, Secretary Hagel approved the Navy's proposal to procure a small surface combatant based on an upgraded LCS. The upgraded LCS will provide multi-mission ASuW and ASW, as well as continuous and effective air, surface and underwater self-defense. As these capabilities are generally consistent with those of a frigate, the Secretary of the Navy directed re-

designation of upgraded LCS to frigates (FF). The FY 2016 President's Budget requests funding for concept development and design for improved survivability and lethality performance in the Navy's future Frigate. The FY 2016 request also includes funding for three LCS class ships. The Navy plans to extend the FY 2010 - 2015 block buy contract to include the first ship in FY 2016, and use the competitive pricing from the block buy to obtain option prices for the remaining two FY 2016 ships. Furthermore, the FY 2016 request includes funding to complete construction on LCS 9 through LCS 12, which was deferred due to sequestration in FY 2013.

The LCS Mission Modules (MM) program continues its efforts to field capability incrementally as individual mission systems become available, rather than wait for all the mission systems needed for the end-state capability. The direction from Secretary Hagel does not affect the near term content and funding needs of the LCS MM program. The Navy still must continue to procure Mission Packages (MP) for fielding aboard LCS 1-32. In addition, the future frigates will retain specific mission module capabilities to augment the ships' organic ASuW and ASW, as directed by the Fleet Commanders. In November 2014, the program declared Initial Operational Capability (IOC) for the Surface Warfare (SUW) MP after successful testing onboard USS Fort Worth (LCS 3) in April 2014. The Mine Countermeasure (MCM) MP completed its final Increment 1 Developmental Test event in October 2014. The MCM MP is currently scheduled for Technical Evaluation and Initial Operational Test & Evaluation (IOT&E) in 2015. The ASW MP successfully completed its initial integration test onboard USS Freedom (LCS 1) in September 2014, with operational testing scheduled to begin in 2016. This early operational test event will reduce integration risk through real-world, at-sea testing of the Advanced Development Model (ADM). A subsequent early deployment of the ASW MP ADM aboard USS Freedom (LCS 1) in 2016 will further prove out the capabilities of the ASW MP. Operational testing will culminate in IOT&E in 2017. Significant developmental and operational testing has already been accomplished on both variants, with embarked ASW, MCM and SUW MPs. The LCS and ASW MP performed as predicted and marked the first time an LCS has tracked a submarine with variable depth sonar and a multi-function towed array. USS Freedom (LCS 1) also served as the test platform for the Surface Electronic Warfare Improvement Program Block Two-Lite engineering development model (EDM) installation and testing. The FY 2016 President's Budget requests funding for five MPs (two MCM, two SUW, and one EDM for ASW). The LCS, with a MP, provides capability that is equal to or exceeds the current capability of the ships that it is replacing.

With four LCS in-service, operational experience continues through at sea testing, operations and rotational deployments. USS *Fort Worth's* deployment marks the beginning of continuous LCS forward presence in Southeast Asia, and will validate the class 3:2:1 (three crews, two ships, one ship always forward-deployed) rotational manning and crewing concept and mark the first deployment of the Navy's MH-60R Seahawk helicopter along with the MQ-8B Fire Scout on an LCS.

## **Amphibious Ships**

Amphibious ships operate forward to support allies, respond to crises, deter potential adversaries, and provide the nation's best means of projecting sustainable power ashore; they also provide an excellent means for providing humanitarian assistance and disaster relief.

Amphibious forces comprised of Sailors, Marines, ships, aircraft and surface connectors provide the ability to rapidly and decisively respond to global crises without a permanent footprint ashore that would place unnecessary political or logistical burdens upon our allies or potential partners. There are two main drivers of the amphibious ship requirement: maintaining persistent forward presence, which enables both engagement and crisis response, and delivering the assault echelons of up to two Marine Expeditionary Brigades (MEB) for joint forcible entry operations.

The Chief of Naval Operations and Commandant of the Marine Corps have determined that the force structure for amphibious lift requirements is 38 amphibious ships, fiscally constrained to 33 ships. Balancing the total naval force structure requirements against fiscal projections imposes risk on meeting this requirement. Based on the footprint of a 2.0 MEB assault echelon force, a minimum of 30 operationally available ships are necessary to provide a force made up of ten Amphibious Assault Ships (LHD/LHA), ten Amphibious Transport Docks (LPD) and ten Dock Landing Ships (LSD). The FY 2016 shipbuilding plan will result in a projected amphibious ship force structure of at least 31 ships in the near-term and maintains at least 33 ships throughout the 2020s and 2030s. At the end of FY 2016, the Amphibious Force Structure will be 31 ships, which includes 9 LHD/LHAs, 10 LPDs, and 12 LSDs.

LHA(R) class ships are flexible, multi-mission platforms with capabilities that span the range of military operations -- from forward deployed crisis response to forcible entry operations. These ships will provide the modern replacements for the remaining LHA 1 *Tarawa* class ship and the aging LHD 1 *Wasp* class ships as they begin decommissioning in the late 2020s. USS *America* (LHA 6) and *Tripoli* (LHA 7) are optimized for aviation capability and do

not include a well deck. USS *America* delivered to the Navy in April 2014 and was commissioned in October 2014. LHA 7 is currently under construction and will deliver in 2018. LHA 8, the first Flight 1 ship, will have a well deck to increase operational flexibility and a smaller island that increases flight deck space to retain aviation capability. LHA 8 is funded in FY 2017 and FY 2018, and is planned for delivery in FY 2024. LHA 8 will be competed as part of an amphibious and auxiliary shipbuilding acquisition strategy to support stability and affordability for this sector of the industrial base. The Navy expanded the early industry involvement efforts for the LHA 8 design and initiated a phased approach to the design for affordability of amphibious ships. FY 2014 funding enabled affordability efforts that foster an interactive competition with industry partners in developing a more affordable, producible detail design and build strategy, and drive towards more affordable ships.

The San Antonio class (LPD 17) provides the ability to embark, transport control, insert, sustain, and extract elements of a MAGTF and supporting forces by helicopters, tilt rotor aircraft, landing craft, and amphibious vehicles. Two ships are under construction, John P. Murtha (LPD 26) and Portland (LPD 27), and will deliver in spring 2016 and summer 2017, respectively. The FY 2015 Consolidated and Further Continuing Appropriations Act provided \$1 billion of funding toward a twelfth ship of class, LPD 28. The FY 2016 President's Budget requests the balance of funding for LPD 28, and cost to complete funding for LPD 27. The program will include targeted cost reduction initiatives to improve affordability of the ship. Procurement of LPD 28 will assist in mitigating some impacts to shipbuilding and combat systems industrial bases. LPD 28 will possess all of the key fundamental capabilities and characteristics associated with LPDs 17 through 27, to include command and control, aviation operations and maintenance, well deck operations, and medical. There are fact of life changes due to obsolescence which need to be incorporated. LPD 28's design and construction features will, at the same time, exploit many of the ongoing LX(R) design innovations and cost reduction initiatives that are necessary for the program to achieve affordability goals while maintaining the high level capabilities of the LPD 17 class.

LX(R) is the replacement program for the landing ship dock, LSD 41 and LSD 49 classes, which will begin reaching their estimated service life in the mid-2020s. The Analysis of Alternatives Report was completed in April 2014. After thorough analysis, the Department has determined that using a derivative of the LPD 17 hull form is the preferred alternative to meet LX(R) operational requirements. This determination sustains the program's focus on

requirements, affordability and total ownership cost. Program focus during FY 2016 will be to finalize the requirements in the Capability Development Document and execute contract design efforts to meet acquisition milestones for procurement of the lead ship in FY 2020. The LX(R) contract design effort is part of the Navy's recent announcement of its acquisition strategy for the LHA 8, six T-AO(X) ships, and LX(R) contract design. Both General Dynamics NASSCO and Huntington Ingalls Industries, Ingalls Shipbuilding will participate in this limited competition.

LX(R) is envisioned to be a flexible, multi-mission warship with capabilities that support execution of the full range of military operations. The need to support disaggregated or split operations away from the Amphibious Readiness Group or to deploy independently is a key driver for the design of the ship class. The inherent flexibility of amphibious ships is demonstrated by their support to 7 of the 10 missions in the DSG. LX(R) will be a versatile, cost-effective amphibious ship — a success story in leveraging mature design while balancing cost and requirements to deliver key capabilities. The lead LX(R) will deliver in time for LSD 43's retirement in FY 2027.

The Navy plans to maintain 11 deployable LSDs in the active force until LX(R) delivers by rotating three LSDs to complete phased modernizations beginning in FY 2016. This will extend USS *Whidbey Island* (LSD 41), USS *Germantown* (LSD 42), and USS *Tortuga* (LSD 46) to a 44 year expected service life. This plan mitigates presence shortfalls and supports 2.0 MEB Assault Echelon shipping requirements.

### **Auxiliary Ships**

Support vessels such as the Mobile Landing Platform (MLP) and the Joint High Speed Vessel (JHSV) provide additional flexibility to the Combatant Commanders. The future USNS *Lewis B. Puller* (MLP 3), the first Afloat Forward Staging Base (AFSB) variant, was christened in February 2015, and will deliver in summer 2015. USNS *Montford Point* (MLP 1) completed its integrated testing and evaluation phase this past fall and the Navy continues to explore further use beyond Maritime Prepositioning Force to facilitate expeditionary operations. The Navy awarded MLP 4 AFSB in December 2014, and plans to request MLP 5 AFSB in FY 2017.

The JHSV provides a high-speed, shallow-draft alternative to moving personnel and materiel within and between the operating areas, and to supporting security cooperation and engagement missions. JHSV production continues with delivery of the fifth JHSV anticipated in April 2015. JHSVs 6-10 are also under contract. In FY 2015, Congress provided funding for an

eleventh JHSV. The Navy is exploring opportunities to further enhance JHSV's operational profile to support/enhance warfighter requirements such as Special Operations support, Maritime Interdiction Operations, submarine rescue, and ISR missions. Additional research is being applied to the stern ramp to increase its ability to conduct at sea delivery. The FY 2016 President's Budget requests cost to complete funding for the JHSV program in order to restore funding reduced by FY 2013 sequestration.

Combat Logistics Force ships fulfill the vital role of providing underway replenishment of fuel, food, repair parts, ammunition and equipment to forward deployed ships and embarked aircraft, to enable them to operate for extended periods of time at sea. Combat Logistic Force Ships consist of T-AOE fast support ships, T-AKE auxiliary dry cargo ships, and T-AO fleet replenishment oilers. The T-AO and T-AKE ships serve as shuttle ships between resupply ports and their customer ships, while the T-AOE ships serve as station ships, accompanying and staying on-station with a Carrier Strike Group to provide fuel as required to customer ships.

Navy continued its efforts to mature its concept for the replacement of the *Kaiser* class (T-AO 187) of Fleet Replenishment Oilers. The new replacement oilers, currently designated as T-AO(X), will be double-hulled and meet Oil Pollution Act 1990 and International Marine Pollution Regulations. The FY 2016 President's Budget request includes the lead ship in 2016 with serial production beginning in 2018. The total ship quantity is expected to be 17 ships. The Department recently announced an acquisition strategy for LHA 8, T-AO(X), and LX(R), and will limit this competition to NASSCO and HII Ingalls.

Beginning in 2017, the Navy plans to begin procuring replacement ships for the four T-ATF 166 class fleet tugs. T-ARS(X) is a recapitalization project to replace the capabilities provided by the four T-ARS 50 class salvage ships. As noted in the Long Range Shipbuilding Plan, the Navy is considering a common hull to replace both the T-ATF and T-ARS; acquisition of a common hull would follow the acquisition approach described for the T-ATF(X) and would preclude the need to acquire a separate T-ARS(X) class.

#### Affordability and the Shipbuilding Industrial Base

Stability and predictability are critical to the health and sustainment of the Nation's shipbuilding industrial capacity. A healthy design and production industrial base is critical to achieving Department priorities and fulfilling Navy needs. Today's shipbuilding industry, with its interdependent suppliers and vendors, is a complex system where decisions made today have

a cascading effect both in the near-term as well as years into the future. Perturbations in naval ship design and construction plans are significant because of the long-lead time, specialized skills, and extent of integration needed to build military ships. Each ship is a significant fraction of not only the Navy's shipbuilding budget, but also industry's workload and regional employment. Consequently, the timing of ship procurements is a critical matter to the health and sustainment of U.S. shipbuilding and combat system industries, and has economic impacts at the regional and local levels. It is important, therefore, for the Department to provide stability and predictability to the industrial base, including key suppliers and vendors, to maintain our ability to continue to build the future Fleet as outlined in the Long Range Shipbuilding Plan.

The Navy has taken specific key acquisition and procurement actions to contain costs and sustain the industrial base, including:

- Stabilizing procurements through block buys and MYPs;
- Increasing competition;
- Controlling costs through stable designs;
- Strictly limiting change orders;
- Conducting targeted reviews;
- Pursuing cross-program common equipment buys; and
- Focusing on affordability.

In addition, the Navy has made investments to support shipyard facility improvements, optimal build plans, conduct of affordability studies, lease for facilities improvement, design for affordability and modularity, combat system open architecture, and shipbuilding capability preservation agreements. These investments support affordability, minimize life-cycle costs, improve and ensure quality products, facilitate effective and efficient processes, and promote competition -- which all support Department priorities.

#### **Surface Ship Modernization**

The FY 2016 President's Budget implements the CG/LSD modernization plan as modified by the FY 2015 NDAA and Consolidated and Further Continuing Appropriations Act. This plan will provide the means to retain the best Air Defense Commander and Marine expeditionary lift capabilities through the 2030s. This plan paces the threat through the installation of the latest technological advances in combat systems and engineering in CGs 63-73 and LSDs 41, 42 and 46. As a result, these ships remain relevant and viable, extending the CGs

service life out to 40 years, enabling the Navy to sustain dominant force structure. To date, the Navy has modernized CGs 52-58 with the Advanced Capability Build (ACB) 08 Combat System as well as substantial Hull, Mechanical, and Electrical (HM&E) upgrades, and has nearly completed modernization on CGs 59, 60, and 62 with the improved ACB 12. These investments have allowed the first 11 ships of the *Ticonderoga* class to remain the world's premier Air Defense Commander platform, fully capable of integrating into the CSG construct or operating independently in support of Combatant Commander demands.

The Navy has developed an affordable framework to retain the remaining eleven cruisers (CGs 63-73) in the active Fleet, through induction into a phased modernization period. Within the guidelines of the FY 2015 Consolidated and Further Continuing Appropriations Act, the Navy will induct no more than two ships per year for no more than four years, and have no more than six ships in a modernization period at any given time. In FY 2015, the Navy is inducting the first two ships, the USS *Gettysburg* (CG 64) and USS *Cowpens* (CG 63) into modernization. The FY 2016 President's Budget request inducts the next two CGs, USS *Vicksburg* (CG 69) and USS *Chosin* (CG 65), into modernization in FY 2016.

The Navy will begin the modernization of these ships with material assessments, detailed availability planning, and material procurements. Subsequently, the Navy will perform HM&E upgrades, critical structural repairs, and extensive corrective and condition-based maintenance. These HM&E modernization and repair efforts will commence as soon as possible after entering this modernization period, and will include modernization industrial periods. The HM&Ecentric maintenance and modernization industrial periods will include modifications that are part of the Cruiser Modernization program of record, such as structural modifications and maintenance, including tanks and voids, and mission life extension alterations. Other preparatory work for the combat system modernization, such as equipment removal and space preparations may also be accomplished during these periods. These modernization industrial periods can be scheduled at times when there is a shortage of work in the various homeports, thereby leveling the work load and effectively utilizing industrial facilities. Without the pressure of meeting near term Fleet deployment schedules, the work can be planned in the most economical and efficient manner, including reducing the need for costly overtime rates and hiring subcontractors to supplement shipyard workforce. The final phase will include combat system installation, integration, and testing. This will occur concurrently with re-crewing the ship, immediately preceding re-introduction to the Fleet. With combat systems modernization

occurring immediately prior to restoration, these ships will have the latest combat systems upgrades, thus mitigating the risk and cost of technical obsolescence. The Navy intends to draw down the manpower for these CGs during their modernization, to reduce the cruiser costs during the period. The plan is to complete modernization of each cruiser on a schedule that sustains 11 deployable Air Defense Commander CGs (one per Carrier Strike Group) into the 2030s. Under the Navy's original phased modernization plan proposed in the FY 2015 President's Budget, the final CG retirement would have occurred in 2045, at a significantly reduced cost to the Navy, and would have relieved pressure on the shipbuilding account largely consumed in the 2030s with building OR SSBNs and aircraft carriers.

Similarly, the Navy plans to perform the final *Whidbey Island* class midlife modernization as well as to extend two LSDs through this plan. This plan completes the HM&E midlife and modernizes combat systems/command, control, communications, computers, collaboration, and intelligence on USS *Tortuga* (LSD 46) (thereby achieving 40 year expected service life), while providing for additional post-midlife modernization for USS *Whidbey Island* (LSD 41) and USS *Germantown* (LSD 42). LSD 41 and 42 will receive additional structural, engineering, and combat systems modernizations to extend their expected service life to 45 years. LSD 46 will be inducted into modernization in FY 2016.

The FY 2016 President's Budget also includes funding for the modernization of four destroyers. To counter emerging threats, this investment is critical to sustain combat effectiveness and to achieve the full expected service lives of the Aegis Fleet. The destroyer modernization program includes HM&E upgrades, as well as advances in warfighting capability and open architecture combat systems. This renovation reduces total ownership costs and expands mission capability for current and future combat capabilities. However, due to fiscal constraints, we were compelled to reduce the combat system modernization of one DDG Flight IIA per year starting in FY 2018.

#### **Connectors**

The Seabasing Joint Integrated Concept requires surface and vertical lift capability to transport personnel, supplies and equipment from within the sea base and maneuver them to objectives ashore. Surface and aviation connectors with enhanced speed and range will provide future expeditionary force commanders greater flexibility to operate in contested environments. While the aviation component of our connector capability has seen significant modernization

with the fielding of the MV-22 and continuation of the CH-53K program, our primary surface connectors, the landing craft air-cushion (LCAC) and the Landing Craft Utility (LCU) are reaching the end of their service life and require modern replacements.

The President's FY 2016 Budget includes the Ship to Shore Connector (SSC) aircushioned vehicles as the replacement for the aging LCAC while also continuing investment in the LCAC service life extension program (SLEP) of 72 active LCACs to mitigate the gap as the SSC is developed and fielded. A planned Surface Connector (X)-Recapitalization (SC(X)) program will recapitalize the aging LCU 1610 class.

These platforms are essential in connecting the combat power and logistical sustainment that the sea base provides, with the forces that are operating in the littorals and inland for all missions. The Department will continue to explore future connector options that will increase our ability to exploit the sea as maneuver space by increasing range, speed, and capacity.

#### Summary

The Department of the Navy continues to instill affordability, stability, and capacity into the shipbuilding, aviation, and combat vehicle plans to advance capabilities and meet the DSG and Fleet mission requirements. Our force is focused on global reach and access with investments to enable global presence, sea-control, mission flexibility, and when necessary, interdiction.

Continued Congressional support of the Navy's plans and budgets will help sustain a viable shipbuilding industrial base. The FY 2016 President's Budget request funds nine ships: two DDG 51 destroyers, three LCS, two *Virginia* class submarines, one LPD 17, and one T-AO(X). The request supports the right balance between requirements, affordability, and the industrial base.

The Department of the Navy stands ready to answer the call of the Nation. We thank you for your continued support of the Navy and Marine Corps and request your support of the FY 2016 President's Budget for the Department of the Navy.