Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2016

Prepared by:

Office of the Chief of Naval Operations

Deputy Chief of Naval Operations (Integration of Capabilities and Resources) (N8)

2000 Navy Pentagon

Washington, DC 20350-2000

March 2015

The estimated cost of this report or study for the Department of Defense is approximately $376,000 in Fiscal Years 2014 - 2015. This includes $315,000 in expenses and $61,000 in DoD labor.
Generated on 2015Jan20 RefID: F-D5F9871

Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2016

Table of Contents

Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2016

Reference (a): Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year (FY) 2015

I. Reporting Requirement

The Title 10, United States Code reporting requirement for this report remains unchanged from reference (a).

II. Submission of the Report

This report describes the Department of the Navy (DON) five-year shipbuilding plan for FY2016-FY2020. The FY2016 President's Budget (PB2016) provides a sufficient level of funding to procure the naval vessels specified in this plan in FY2016 and over the FY2016-FY2020 Future-Years Defense Program (FYDP). The FY2016 shipbuilding plan builds upon the FY2015 plan as submitted in reference (a), and accounts for the ship counting rules specified in the 2015 National Defense Authorization Act (NDAA).

As a result of FY2015 NDAA language, the Navy has changed its ship counting procedures to remain in compliance with the law. However, the Navy's position with respect to ship counting procedures remains unchanged. Specifically the Navy does not agree with the current NDAA language that excludes the counting of PC ship class. The FY2015 NDAA classifies a "combatant and support vessel" as any commissioned ship built or armed for naval combat or any naval ship designed to provide support to combatant ships and other naval operations. The CYCLONE class PC ships are commissioned United States ships that have specific Combatant Commander warfighting requirements, to include armed naval combat and are employed as such. In point of fact, the majority of these ships are, and have been for some time, stationed forward in the Arabian Gulf. They are fulfilling long standing and validated naval missions, functions and tasks, protecting U.S. National interests while providing stabilizing assurance to our allies and partners in a volatile region of the world. The Navy's view remains that the prohibition of counting these ships as part of the Navy's Battle Force is a contradiction to the 2015 NDAA language that defines a combatant vessel.

Since this report is an update to last year's report, it will only identify specific changes to reference (a) and what the impact is or reasoning behind those changes. In the case where there are no changes, this report provides a summary of the FY2015 submission, as required for amplification.

III. Force Structure Assessment and Related Battle Force Count

Consistent with reference (a), this report continues to be based on the 2012 Force Structure Assessment (FSA) to meet strategy and presence requirements and maintain a healthy industrial base. However, based on direction contained in the FY2015 NDAA, the DON has returned to the FY2014 ship counting methodology, which removes PCs and T-AHs from the battle force, and makes minor changes to deployed ship counts consistent with the FY14 ship counting rules.

For consistency, comparisons between the FY2015 ship counting tables and those reflected in this report will be base lined to the counting methodology specified by the FY2015 NDAA.

The 2012 FSA, a comprehensive and rigorous analytical assessment, determined a post-2020 requirement for 306 ships in the battle force and emphasized forward presence while re-examining resourcing requirements for operational plans and defense planning scenarios. Between the time that the 2012 FSA was completed and today, there have been some minor adjustments in the Navy's forward deployed posture, warfighting prioritization, and structure.

The 2012 FSA objective for 306 ships has increased to 308 as a result of these changes, which include:

	2012 FSA	**2012 FSA Interim Update (FY2014)**
Fleet ballistic missile submarines[1]	12	12
Nuclear-powered aircraft carriers	11	11
Nuclear-powered attack submarines	48	48
Nuclear-powered cruise missile submarines[2]	0	0
Large, multi-mission, surface combatants	88	88
Small, multi-role, surface combatants	52	52
Amphibious Warfare ships[3]	33	**34**
Combat logistics force ships	29	29
Support vessels	33	**34**

The changes reflected in the 2012 FSA Interim update (2014) (listed in bold) were made to account for evolving force structure decisions that accommodate real-world changes to the assumptions that were made while building the 2012 FSA. Specifically, the intrinsic value of the Afloat Forward Staging Base (AFSB) force to support the existing mission needs associated with the myriad Special Operations Forces (SOF), and Special Purpose Marine Air-Ground Task Force - as well as the operational impact on existing Amphibious forces, that routinely calls for

[1] DOD plans to replace the 14 OHIO Class SSBNs with 12 new OHIO Replacement (OR) SSBNs starting in the late 2020s.

[2] The 4 SSGNs now in service will retire in the mid-2020s. DON is inserting VIRGINIA Payload Modules, a hull section with four large diameter payload tubes, in Block V VIRGINIA Class attack submarines, beginning in FY2019, to offset the impact of retiring the existing SSGN force without replacement.

[3] Reflects an anticipated increase in the Amphibious Warfare ship requirement that will be reviewed during the next FSA. The strategic review focused primarily on sustaining Amphibious Ready Groups/Marine Expeditionary Units forward in the Western Pacific and Persian Gulf in a crisis response role. It took risk in generating the 30 operationally available ships necessary to conduct a 2.0 Marine Expeditionary Brigade (MEB) assault echelon forcible entry operation. To lower risk, this plan maintains an active inventory of 34 active amphibious ships – this permits the Navy to maintain a 4-ship Amphibious Ready Group (ARG) in the Forward Deployed Naval Force (FDNF) without disrupting the deployment cycles of the remaining non-FDNF ARGs. The added presence provides flexibility in the Pacific Theater of Operations and accommodates disaggregated or split ARG operations to increase the commander's area of influence.

dispersed and disaggregated Amphibious Forces - have resulted in the need to augment the FY2012 FSA with a 3rd AFSB and a 12th LPD 17 class vessel. Overall, the 306 ship force reflected in the 2012 FSA is adjusted to a total of 308 ships (inventory totals reflect ship count and class mix needed in FY2020).

This report outlines the Long-Range Naval Vessel Construction Plan necessary to build and maintain the battle force inventory outlined above and describes the resources necessary to implement this plan. These profiles represent the most efficient purchasing profiles we are able to execute, keeping in mind relative affordability and work-force capacity in the building yards. These profiles are 'smoothed' to prevent yard capacity from having to cycle from year-to-year during the building programs. As a result, this building plan is the optimum profile the Navy can reasonably execute to achieve the requirements stipulated in the FSA force construct. As long as the Navy is able to procure the ships reflected in the plan, we will have a battle force that meets strategic requirements of the Defense Strategic Guidance (DSG), as informed by the 2014 Quadrennial Defense Review (QDR), that will adequately sustain the national shipbuilding and naval combat systems design industrial bases.

IV. Planning Assumptions

This shipbuilding plan is based on two key assumptions:

- *A Battle force inventory as defined in the "2012 Interim FSA Update (2014)"*

- *All Battle force ship operations and sustainment costs will be resourced as necessary to ensure these ships are able to serve to the end of their respective service lives*

As reported in sections VI and VII of reference (a), the implications and resources required to finance the shipbuilding requirements remain germane. Section VI of this report discusses the consequences of the DON not being provided the additional funding necessary to support procurement of the OHIO Replacement (OR) SSBN Program. Fundamentally, if the Navy is not provided additional funding for OR SSBN procurement, the battle force inventory will fall short of the FSA force required, and the shipbuilding industrial base will be severely degraded.

In addition, this report assumes the Navy's funding is stable throughout the 30-year period and that the topline grows at a rate sufficient to support the inflation growth in the shipbuilding sector, which consistently exceeds that of the Gross Domestic Product inflators. These inflation projections reflect realistic shipbuilding-specific inflationary assumptions, rather than general inflation projections and are based on annual percent change in shipbuilding-specific labor (direct & indirect) and material costs. Without adequate resource growth, consistent with industry specific inflation, and otherwise as required to support an increasingly capable battle force, the profiles below should be assessed as forecasts of the "best case" options. These forecasts will be adjusted to actual affordability limits as we transition beyond the current FYDP.

V. Long-Range Naval Vessel Construction Plan

Table 1 depicts a Long-Range Vessel Construction Plan designed to pursue the inventory objectives of the FSA. This battle force procurement profile mirrors the construction plan contained in section V of reference (a) with only minor differences. Those differences are discussed in Appendix 1 of this report.

Table 1. Long-Range Naval Battle Force Construction Plan

Fiscal Year	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Aircraft Carrier			1					1					1					1					1					1		
Large Surface Combatant	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	3	2	3	2
Small Surface Combatant	3	3	3	2	3	3	3	3	3	3					1		1	1	1	2	2	2	3	4	4	4	4	4	2	3
Attack Submarines	2	2	2	2	2	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	2	1	2	1	2
Ballistic Missile Submarines						1			1		1	1	1	1	1	1	1	1	1	1										
Amphibious Warfare Ships	1	1			1		1	1	2	1	1	1	2	1	1	1	1				1				2		1		2	1
Combat Logistics Force	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										1		2
Support Vessels		2	1	2	1	1	2	3	2	1			1	1	2	2	2	2	1											
Total New Construction Plan	9	10	10	9	10	9	11	13	12	10	6	6	9	7	9	8	9	9	6	6	7	6	9	9	10	8	9	10	8	10

The 30-year shipbuilding construction plan of Table 1 results in the annual naval battle force inventory shown in Table 2, which depicts the projected number of ships in service on the last day of each fiscal year.

Table 2. Naval Battle Force Inventory

Fiscal Year	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Aircraft Carrier	11	11	11	11	11	11	12	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	10	10	10	10
Large Surface Combatant	87	90	91	94	95	96	97	98	98	98	97	99	100	98	95	91	89	88	86	88	86	85	84	85	85	85	83	83	82	82
Small Surface Combatant	22	26	30	33	33	34	37	36	40	43	46	49	52	52	52	52	52	52	52	52	53	53	54	56	56	54	54	54	54	57
Attack Submarines	53	50	52	50	51	51	48	49	48	47	45	44	42	41	42	43	43	44	45	46	47	48	47	47	47	47	49	49	50	50
Cruise Missile Submarines	4	4	4	4	4	4	4	4	4	4	2	1																		
Ballistic Missile Submarines	14	14	14	14	14	14	14	14	14	14	14	13	13	12	11	11	10	10	10	10	10	10	10	10	10	11	12	12	12	12
Amphibious Warfare Ships	31	32	33	33	33	33	34	34	35	35	37	37	38	37	36	36	36	37	37	36	35	35	34	34	33	34	33	32	32	33
Combat Logistics Force	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Support Vessels	31	28	30	32	34	34	34	34	35	36	36	36	36	36	36	35	36	36	36	37	37	36	35	32	32	32	32	32	32	32
Total Naval Force Inventory	282	284	294	300	304	306	309	310	315	317	317	319	321	316	312	308	306	307	306	309	308	307	304	304	302	302	302	301	301	305

While the force structure presented in Table 2 which includes OR SSBN describes a battle force that meets the requirements of the DSG, it requires funding that exceeds levels the Navy has historically been able to commit to new ship construction. In that sense, these tables are a best case scenario. Although the Secretary of the Navy has made it clear he intends to protect shipbuilding to the maximum extent possible, if adequate funding is not provided to procure the required ships, the Navy may be required to assume additional risk in response to contingencies, force availability and industrial base support. Quantifying this risk would be directly associated with the funding available and the number of ships that able to be procured, which are dependent of external actions.

VI. Battle Force Impact of the OHIO Replacement (OR) SSBN Program

As a cornerstone of the country's strategic deterrence triad, the OR SSBN Program is the Navy's highest shipbuilding priority. The strict requirement to replace SSBNs of the OHIO class on a one-for-one basis as they retire, commencing with SSBN 730, dictates that the Navy procure the lead OR SSBN ship in FY2021, the second ship of the class in FY2024, followed by funding one OR SSBN each year between FY2026 and FY2035. Although the Secretary of the Navy has

made it clear he intends to protect shipbuilding to the maximum extent possible, if additional funding is not available to support the shipbuilding procurement plan throughout this period, knowing that the OR SSBN will be built, the balance of the shipbuilding plan will be significantly impacted.

Within the Navy's traditional Total Obligation Authority (TOA), and assuming that historic shipbuilding resources continue to be available, the OR SSBN would consume about half of the shipbuilding funding available in a given year – and would do so for a period of over a decade. The significant drain on available shipbuilding resources would manifest in reduced procurement quantities in the remaining capital ship programs. Therefore, additional resources for shipbuilding will likely be required during this period.

Since the CVN funding requirements are driven by the statutory requirement to maintain eleven CVNs, and accounting for one OR SSBN per year (starting in FY2026), there would only be about half of the resources normally available to procure the Navy's remaining capital ships. At these projected funding levels, Navy would be limited to on average, as few as two other capital ships (SSN, DDG, CG, LPD, LHA, etc.) per year throughout this decade.

Such low shipbuilding rates for an extended period of time would result in a battle force inadequately sized to meet our naval requirements in support of the DSG. Further, there is significant risk to the industrial base in this case since low production rates outside of the SSBN and CVN production lines may not provide adequate work to keep shipyards operating at minimum sustaining levels and could result in shipyard closures. Navy's ability to recover Fast Attack Submarine, Large Surface Combatant, Small Surface Combatant and Amphibious Force inventories lost during the decade and a half in which the SSBNs were being procured would be challenging, particularly in those parts of the industrial base permitted to atrophy during this period.

VII. Long Term Navy Impact of Budget Control Act (BCA) Resource Level

The BCA is essentially a ten-percent reduction to DOD's TOA. With the CVN and OR SSBN programs protected from this cut, as described above, there would be a compounding effect on the remainder of the Navy's programs. The shortage of funding could potentially reverse the Navy's progress towards recapitalizing a 308 ship battle force and could damage an already fragile shipbuilding industry. There are many ways to balance between force structure, readiness, capability, and manpower, but none that Navy has calculated that enable us to confidently execute the current defense strategy within BCA level funding.

If the BCA is not rescinded, it may impact Navy's ability to procure those ships we intend to procure between now and FY2020. Although Navy would look elsewhere to absorb sequestration shortfalls because of the irreversibility of force structure cuts, a result might be that a number of the ships reflected in the current FYDP may be delayed to the future. The unintended consequence of these potential delays would be the increased costs of restoring these ships on top of an already stretched shipbuilding account that is trying to deal with the post FY2021 OR SSBN costs.

As previously articulated, barring changes to the Fleet's operational requirements, the annual

impact of sequestration level funding may require Navy to balance resources to fund readiness accounts to keep what we have operating, manned, and trained. The net result of these actions could potentially create a smaller Navy that is limited in its ability to project power around the world and simply unable to execute the nation's defense strategy. A decline would not be immediate due to the ongoing shipbuilding projects already procured but would impact the future fleet size. Disruptions in naval ship design and construction plans are significant because of the long-lead time, specialized skills, and integration needed to build military ships. The extent of these impacts would be directly related to the length of time we are under a BCA and the TOA reductions that are apportioned to the Navy.

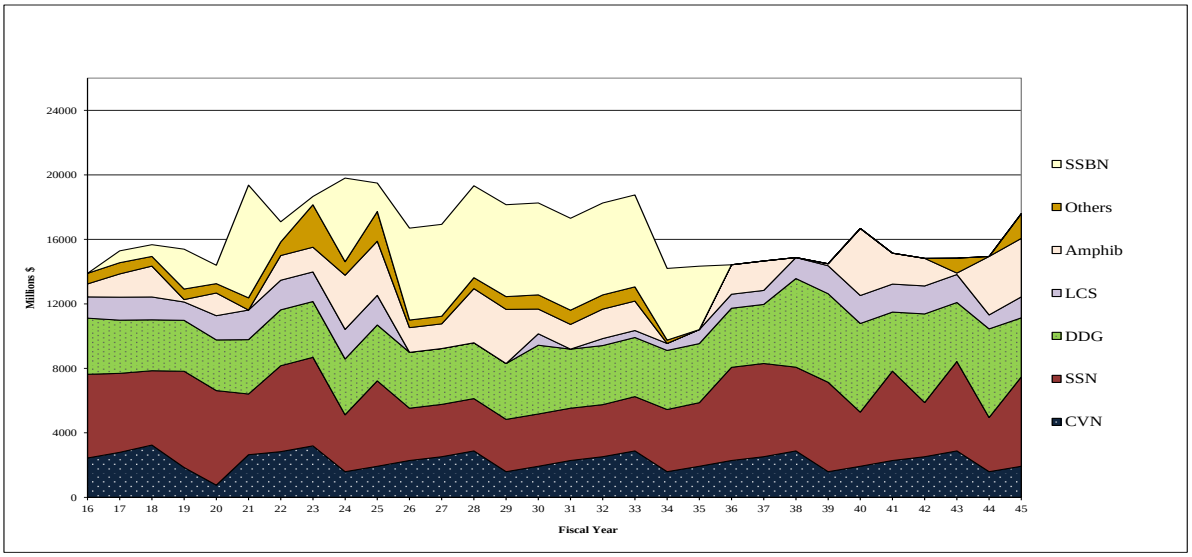
VIII. Planning and Resource Challenges

There are two significant challenges to resourcing the DON shipbuilding program. The first will be funding and delivering the OR SSBN and absorbing the block retirements of the ships built in the 1980s as they reach the end of their service lives. As expressed in section IV of reference (a), the DON views that the only way to effectively overcome these challenges while supporting the defense strategy is with increases in DON top-line commensurate with the funding required to procure the OR SSBN. In addition, we must assume the Navy is not sequestered or required to program in the future at the BCA funding level.

IX. Estimated Levels of Annual Funding Required for the Long-Range Shipbuilding Program

The resources displayed in this report are inflation-adjusted to constant year FY2015 dollars using a three percent ship composite inflation rate (SCIR).[4] For a more detailed description of the derivation of this inflation rate refer to section VII of reference (a). Figure 1 below depicts the estimated funding required to procure the ships in Table 1.

Figure 1. Annual Funding Required for Navy Long-Range Shipbuilding Plan (FY2016-2045) (FY2015$)



[4] The ship composite inflation rate is a weighted average of shipbuilding costs across the shipbuilding industrial base. This inflation rate is developed using historic shipbuilding costs and projected future pricing for each shipyard. While historically it has been 1.5-1.8 percent higher than the general market inflation rate, this gap is projected to narrow to 1.0 percent in future years.

As a summary, the profile contained in Figure (1) reflects the updated funding to include pricing changes, profile changes, and the year-to-year funding required. Appendix 1 addresses the specific changes between this plan as compared to the same appendix in reference (a). The estimated total cost of construction for each vessel used to determine the estimated levels of annual funding contains proprietary information and is business sensitive. It is contained in a separate, limited distribution version of this report as Appendix 3.

X. Program Major Risks

The FY2016 President's Budget and the FYDP through FY2020 fully fund the construction of naval vessels in the plan presented in Table 1. For the last three years, Navy has been operating under reduced top-lines and significant shortfalls; for a cumulative shortfall of $25 billion less than the President's request for FY2013, FY2014, and FY2015. Reverting to reduced funding levels such as the BCA cap or BBA level funding would further decrement the Navy's budget. Without the adequate funding as requested in the FY2016 PB request, Navy options to balance will be significantly constrained.

XI. Summary

Beginning in FY2020, the shipbuilding plan described in this report builds and maintains a battle force inventory above 300 ships, and ultimately achieves the shipbuilding plan objective of 308 battle force ships between FY2022 and FY2034. The rate of large surface combatant retirements beyond FY2034 exceeds the ability of the Navy to finance a build rate that sustains the 308 ship force structure until after completion of the OR SSBN program. As a result, Navy structure remains in the vicinity of 300 ships until the mid-2040 timeframe – increasing again as post OR SSBN deliveries begin to accumulate in our overall force inventory.

The mix of ships, by quantity and type, contained in this report, possesses the requisite capability and capacity to carry out the DSG mission. They enable the COCOMs to meet mission demands to Maintain a Safe, Secure, and Effective Nuclear Deterrent; Deter and Defeat Aggression, Project Power Despite Anti-access/Area Denial Challenges; Counter Terrorism and Irregular Warfare; Provide a Stabilizing Presence; Conduct Stability/Counterinsurgency Operations; and Operate Effectively in Cyberspace/Space. We achieve the desired mix of ships if this shipbuilding plan receives stable and sufficient funding over the long haul.

Appendix 1

Detailed Summary of Changes to Shipbuilding Costs and Requirements

I. Introduction

To summarize the resources necessary to build a 308-ship battle force, this report reflects the same split of the plan's 30-year planning horizon into three 10-year planning periods as in reference (a). Doing so is also helpful because the precision of the plans and projections inevitably declines over time. These three periods are:

- Near-term planning period: Fiscal Year (FY) 2016 to FY2025.
- Mid-term planning period: FY2026 to FY2035.
- Far-term planning period: FY2036 to FY2045.

Using this organizational framework, the following sections describe the 30-Year Shipbuilding Plan in more detail, and highlight the planning and resource challenges associated with each planning period. While the profiles reflected in this report (from the end of the current Future Years Defense Plan (FYDP) through the end of the 30-year period) include procurement profiles that are the most efficient way to procure the ships listed in the report, they are also profiles that will be challenged by the resources available to procure ships during the OHIO Replacement (OR) SSBN procurement timeframe – assuming the Navy top-line is not changed to accommodate procurement of the OR SSBN. Given the challenges we are facing during that period, as will be the case in all ship classes in the 30-year plan, affordability may require us to adjust these profiles to accommodate the actual resources available for the individual ships classes represented here.

A. Near-Term Planning Period (FY2016-FY2025)

Table A1-1 displays the Department of the Navy's (DON) President Budget (PB)2016 (FYDP) shipbuilding plan.[1]

Table A1-1. FY2016-2020 New Construction Shipbuilding Procurement and Funding Plan (Then Year (TY$M))

	FY 2016		FY 2017		FY 2018		FY 2019		FY 2020		Total	
Ship Type ($M)	**$**	**Qty**	**$**	**Qty**	**$**	**Qty**	**$**	**Qty**	**$**	**Qty**	**$**	**Qty**
CVN 78[1]	2,509		2,955		3,531	1	2,076		873		11,944	1
DDG 51	3,150	2	3,354	2	3,440	2	3,544	2	3,634	2	17,121	10
DDG 1000	433		139								573	
LCS[2]	1,357	3	1,510	3	1,544	3					4,411	9
Modified LCS (Frigate)							1,273	2	1,734	3	3,007	5
SSN 774[3]	5,340	2	5,184	2	5,024	2	6,692	2	6,768	2	29,008	10
SSBN(X)			778		792		2,771		1,316		5,657	
LPD 17	550	1									550	1
LX(R)							171		1,624	1	1,795	1
LHA(R)	278		1,526	1	2,085						3,889	1
T-AO(X)	674	1			577	1	579	1	591	1	2,421	4
MLP/AFSB			661	1							661	1
T-ATS(X)			75	1	77	1	153	2	80	1	385	5
Total New Construction	**14,291**	**9**	**16,183**	**10**	**17,069**	**10**	**17,259**	**9**	**16,620**	**10**	**81,423**	**48**

[1] In this report, new ships planned for future procurement or for replacement of legacy ships are annotated with (X) after their ship type until their class has been named, such as T-AO(X) in the Table A1-1.

Notes:
1. Funding for the CVN 78-class program reflects six year incremental funding authorized in the FY2013 NDAA. Advance procurement and advance construction have been previously appropriated.
2. Funding does not include LCS mission modules, which are funded in Other Procurement, Navy (OPN).
3. Advanced Procurement funding previously appropriated.

The first FYDP of the near-term planning period reflects PB2016 and the following changes from A1-I-A of reference (a).

- Beginning in 2018, the DON intends to pursue a ten-ship multi-year procurement (MYP) of DDG 51 Flight III ships. Additionally, the Navy has developed a phased modernization plan to keep a minimum of 11 guided missile cruisers in fleet service at any given time, one for each aircraft carrier. However, in accordance with the FY2015 NDAA, Navy will initially place just two cruisers per year in phased modernization, the ships will have no more than four year maintenance and modernization availabilities, and no more than six ships will be in this status during any given year, leaving 16 cruisers in fleet service. Using this so-called 2/4/6 plan, the final cruiser retirements will occur between 2036 and 2039. In the meantime, the Navy will face far higher fleet operations and maintenance and personnel costs than anticipated. Under the Navy's original PB2015 plan, the final CG retirement would have occurred in 2045, at a significantly reduced cost to the Navy, and would have relieved pressure on a shipbuilding account largely consumed in the 2030s with building Ohio Replacement SSBNs and aircraft carriers. This is a more cost efficient plan. Accordingly, the Department of Defense will continue to work with Congress to implement the Navy's cruiser modernization plan submitted with the PB2015 budget.

- The DON has completed a review of the LCS program as directed by the Secretary of Defense (SECDEF). For FY2019 and beyond, the ships will be modified versions of the current LCS providing greater lethality and survivability. These ships will be redesignated as frigates.

- Beginning in FY2019, the DON intends to include the Virginia Payload Module (VPM) in at least one SSN hull in each year. In addition, during those years where the Navy procures an SSBN, the SSN procurement profile will be reduced to only one ship per year, as well. Navy intends to pursue a nine ship MYP for the Block V Virginia-class SSNs procured in the FY2019-2023 timeframe. This plan accelerates the start of the VPM installation from FY2021 to FY2019.

- Other support ships. Due to budget constraints, one of the two T-ATS platforms, which will replace the T-ATFs and T-ARSs, was delayed from FY2017 to FY2019. Additionally, the lead T-AGOS ship replacement has been delayed from FY2020 to FY2021, while the DON conducts an engineering review to evaluate if the expected service lives of these ships can be extended. The department has an in-progress engineering analysis to determine if expected service lives for the fleet of five T-AGOS ships can be extended beyond 30 years.

- Additionally, the battle force inventory reflected in Table 2 reflects the inclusion of an FY2015 JHSV (added in the 2015 Appropriations Act) and an FY2016 LPD (FY2015 funding was also appropriated).

The second FYDP of the near-term planning period covers FY2021-FY2025

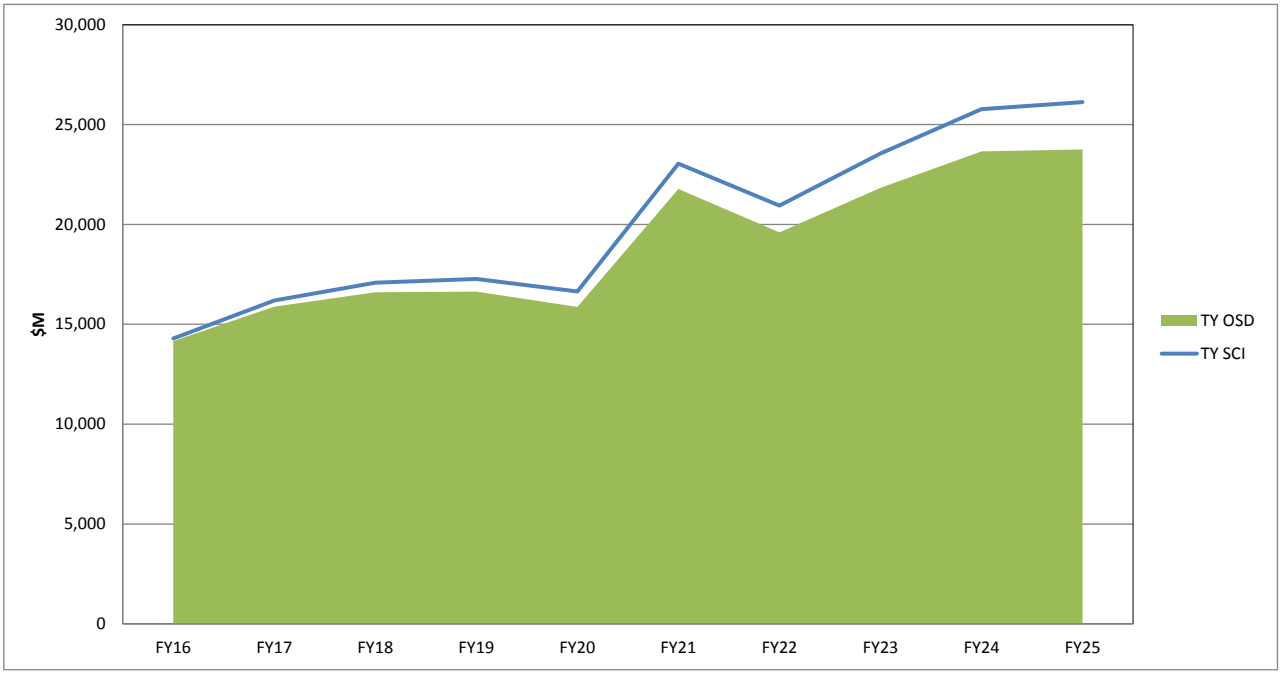
- In this report, the DON remains committed to beginning the replacement of the LSDs with LX(R) starting in FY2020 and has adjusted to a more efficient procurement profile to begin serial production in FY2022.

- The DON will procure the remainder of the required 52 Small Surface Combatants (SSC) which will be modified LCS hulls (frigates).

- In the near-term period's second FYDP and as stated above, the first four of five planned replacements for current T-AGOS have been postponed one year to a FY2021 program start.

- Figure A1-1 shows the actual estimated cost to procure the battle force out to FY2025. The green area of the chart highlights the projected funding required to achieve the Navy's long-range shipbuilding plan as outlined in this report based on OSD inflation assumptions. The blue line demonstrates the potential range of funds required if inflation assumptions are at the higher historical levels. These boundaries represent the expected cost of the total shipbuilding plan based on the actual inflation index.

Figure A1-1. Annual Funding Required for Navy Long-Range Shipbuilding Plan (FY2016-2025) (Then Year $)



B. Mid-Term Planning Period (FY2026-FY2035)

- The DON will continue building Ford-Class CVNs throughout the mid-term planning period, with cost centers in FY2028 and FY2033, procure up to 27 of the Air and Missile Defense Radar (AMDR)-equipped Flight III DDG 51s, and the last ten Virginia-Class SSNs with a plan to support a follow-on submarine class in FY2034.

- Additionally, the OR SSBN moves into serial production throughout the mid-term period, procuring the remaining ten ships starting in FY2026. The Navy intends to pursue an incremental funding approach for the lead and first follow-on OR SSBNs at a minimum. The Navy will seek required approval for this approach in the future, consistent with applicable full funding policies. Continued procurement of Flight I LHA 6 amphibious assault ships, one each in FY2028 and FY2032, the remaining six planned LX(R)s (for a total of 11 ships) and the remaining eight planned double-hulled T-AOs (for a total of 17 ships) are also executed as discussed in section A1-I-B of reference (a).

- Section A1-I-B of reference (a) included plans to recapitalize the two LCCs in FY2032 and FY2034. In this report, DON has not included funding for the recapitalization of these ships. Instead, the DON will look at alternative means to meet the requirements fulfilled by these ships, such as modular systems that can be temporarily installed on an existing ship.

C. Far-Term Planning Period (FY2036-FY2045)

- By the early years of the far-term planning period, the LX(R) is no longer in production, and replacements for Virginia-Class SSNs, and both Large Surface Combatants (LSC) and SSCs are continuing production. CVNs continue their five-year center build rate with ships being procured in FY2038 and FY2043. Also, three more LHAs are procured. As reported in section A1-I-C of reference (a), the only new projected starts during this period are the replacements for the SAN ANTONIO Class LPDs and the LEWIS AND CLARK Class T-AKEs.

- The DON remains concerned during the far-term period due to the reduction of the LSC force. Procuring up to 27 Flight III DDG 51s[2] between FY2016 and FY2029, executing CG phased modernization, and designing and starting procurement of a mid-sized future surface combatant reduces the battle force impact of the retiring Flight I and II DDGs, the eventual retirement of the remaining CG 47 Class Guided Missile Cruisers, and the initial flight IIA DDG retirement. These near and mid-term procurements and the phased modernization strategy will maintain the LSCs inventory near the required 88 while the fleet transitions to future flexible, modular ships.

II. Funding Battle Force Requirements

Battle force funding requirements and the stress that OR SSBN will cause on the shipbuilding accounts remain as articulated in section A1-II of reference (a). The cost of the OR SSBN is significant relative to the resources available to DON in any given year. At the same time, the DON will have to address the block retirement of ships procured in large numbers during the 1980s, which are reaching the end of their service lives. The convergence of these events prevents DON from being able to shift resources within the shipbuilding account to accommodate the cost of the OR SSBN.

[2] Although the AMDR Acquisition Program Baseline (APB) reflects procuring 22 Flight III DDG 51s, to meet the required number of large surface combatants, the DON may continue to procure Flight III DDGs until a follow-on ship has been identified.

If DON funds the OR SSBN from within its own resources, OR SSBN construction will divert funding from construction of other ships in the battle force such as attack submarines, destroyers, aircraft carriers and amphibious warfare ships. The resulting battle force will not meet the requirements of the Force Structure Assessment (FSA), National Security Strategy, or the Quadrennial Defense Review (QDR). Additionally, there will be significant impact to the shipbuilding industrial base.

Appendix 2

Planned Ship Decommissionings, Dismantlings, and Disposals during FY2016-FY2020 Future-Years Defense Program

I. Introduction

This addendum report is in compliance with the Senate Armed Services Committee request for additional information regarding decommissioning and disposal of naval vessels.

II. Ships Planned for Decommissioning or Deactivation during the Future-Years Defense Plan (FYDP)

Table A2-1 lists, by year, the Navy battle force ships to be decommissioned or deactivated within the FYDP. The table identifies the planned disposition for each ship. There are no potential gaps in war-fighting capability that will result from the projected ships being removed from service.

Table A2-1. Ships Planned for Decommissioning or Deactivation during the FYDP

Inactivation Year (FY)	Ship Name	Disposition
2016	USS ALBUQUERQUE (SSN 706)	Dismantle
3 ships	USS HOUSTON (SSN 713)	Dismantle
	USS CITY OF CORPUS CHRISTI (SSN 705)	Dismantle
2017	USS DALLAS (SSN 700)	Dismantle
	USS BREMERTON (SSN 698)	Dismantle
	USS JACKSONVILLE (SSN 699)	Dismantle
10 ships	USS SAN FRANCISCO (SSN 711)	MTS Conversion[2]
	USS BUFFALO (SSN 715)	Dismantle
	USS PONCE (AFSB (I) 15)	OCIR[3]
	USNS SAFEGUARD (T-ARS 50)	OSIR[4]
	USNS GRASP (T-ARS 51)	OSIR
	USNS CATAWBA (T-ATF 168)	OSIR
	USNS NAVAJO (T-ATF 169)	OSIR
2018		
0 ships		
2019	USS LOUISVILLE (SSN 724)	Dismantle
	USS PROVIDENCE (SSN 719)	Dismantle
4 ships	USS PITTSBURGH (SSN 720)	Dismantle
	USS SENTRY (MCM 3)	Dismantle
2020	USS HENRY J KAISER (T-AO 187)	OSIR
	USS DEVASTATOR (MCM 6)	Dismantle
	USS MOBILE BAY (CG 53)	OCIR
6 ships	USS OLYMPIA (SSN 717)	Dismantle
	USS HELENA (SSN 725)	Dismantle
	USS BUNKER HILL (CG 52)	OCIR

Notes:
1. For the purposes of the report, US Navy vessels are commissioned ships that are decommissioned and removed from active status. USNS vessels are non-commissioned vessels that are deactivated and placed out of service.
2. MTS – Moored Training Ship
3. OCIR – Out of Commission, In Reserve
4. OSIR – Out of Service, In Reserve

III. Ships Planned for Dismantling and Disposal during the Future-Years Defense Plan

The Navy recognizes environmental and safety risks increase as inactive ships deteriorate and their disposal is delayed. The longer retired ships sit in the inactive ship inventory, the higher the environmental risks and disposal costs. As a result, the Department of the Navy (DON) has worked hard to reduce its inventory of inactive ships from the most recent high of 195 ships in 1997 to 49 ships today[1].

The Navy establishes its ship disposition plans based on the methods available that are most advantageous to the government. As indicated earlier, ships not identified for disposal are retained for possible future mobilization requirements. When it is determined there is little likelihood of disposal by transfer to other government organizations, Foreign Military Sales (FMS), or donation use as a museum/memorial in a public display, and when no requirements exist to support fleet training use or weapons effectiveness testing, the ship will be disposed of by dismantling. Ships designated for foreign military transfer will be retained in an FMS hold status for no more than two years. If at that time, the ships are not part of an active FMS case, the DON will review their status. Depending on the outcome of this review, the ships may remain as an FMS asset, be designated as a logistic support asset, or be dismantled.

The process for dismantling nuclear-powered ships is more complex than conventionally-powered ships and requires special care. The DON dismantles these complex ships through a special recycling process and disposal of nuclear propulsion plant components.

The removal of conventionally-powered ships by sinking is sometimes conducted as part of an approved training exercise or to support weapons testing requirements. These types of activities are generally known as sinking exercises (SINKEX). Inactive ships contribute significantly to the Navy in this role, as these exercises often result in cost savings for developmental programs requiring live-fire testing, provide key learning necessary to improve fleet tactics and weapons design, and provide on-going statistical data to assess weapons performance. Another alternative for sinking may be to provide an ocean bottom artifact to support fish and marine growth as an artificial reef. In both cases the Navy complies strictly with Environmental Protection Agency directives.

The Navy intends to dismantle the ships listed in Table A2-2 within the FYDP. Specific dates have not been determined as several factors dictate when the ships will be put under contract for their scrapping or, in the case of nuclear-powered ships, for their recycling. The actual date of dismantlement depends on such factors as the timing of decommissioning or deactivation; the location of the ship and attendant requirements for hull cleaning and transfer to the dismantlement facility; time available to strip the ship of any salvageable Navy components; any special holds placed on ships while reconsidering dismantlement; and availability of disposal funds.

[1]As of December 17, 2014

The Department of the Navy intends to strike five LKAs from the Naval Vessel Register and dispose of them by dismantlement. These LKAs have been in a retained status in the inactive fleet since their decommissioning in the early 1990s to support the Amphibious Lift Enhancement Program (ALEP). It has been determined that the material condition of these ships has degraded substantially over the past 20 years and that retention of these ships in the Navy's inactive fleet provides little value for the DON.

Table A2-2. Ships Planned for Disposal by Dismantling

Ex-TICONDEROGA (CG 47)	Ex-HAYES (AG 195)
Ex-INDEPENDENCE (CV 62)	Ex-YORKTOWN (CG 48)
Ex-UNDERWOOD (FFG 36)	Ex-CANON (PG 90)
Ex-NICHOLAS (FFG 47)	Ex-KITTY HAWK (CV 63)
USS SAMUEL B ROBERTS (FFG 58)	USS SENTRY (MCM 3)
Ex-INGRAHAM (FFG 61)	USS DEVASTATOR (MCM 6)
Ex-FORD (FFG 54)	Ex-DURHAM (LKA 114)
Ex-MOBILE (LKA 115)	Ex-EL PASO (LKA 117)
Ex-ST LOUIS (LKA 116)	Ex-CHARLESTON (LKA 113)

Table A2-3 lists the ships that the Navy plans to dispose of by way of fleet SINKEXs during the upcoming FYDP. As mentioned previously, although SINKEXs contribute to inactive ship inventory reduction, the primary purpose of a SINKEX is to conduct weapons effectiveness testing or Fleet training. In addition to the Title 10 requirements, SINKEX events provide essential validation of modeling and simulation that reduces overall live testing requirements or meets the limited need for a target that cannot be practically provided by purpose-built targets. The Chief of Naval Operations (CNO) guidelines for the conduct of SINKEXs authorize such exercises only if they meet one of the following criteria: (1) the event is required to satisfy Title 10 requirements for ship survivability or weapons lethality evaluation; or (2) the event supports major joint or multi-national exercises or evaluation of significant new multi-unit tactics or tactics and weapons combinations. In addition, the CNO approves all SINKEX events. In order to save the expense of maintaining inactive ships, if there are no near-term requirements for SINKEX assets, the CNO will review the status of any vessels designated for disposal by sinking, to determine if the ships should be dismantled.

Table A2-3. Ships Planned for Disposal by Sinking

Ex-REUBEN JAMES (FFG 57)	Ex-CROMMELIN (FFG 37)
Ex-CURTS (FFG 38)	Ex-THACH (FFG 43)
Ex-RENTZ (FFG 46)	

IV. Summary

This report outlines the Navy's plans for retired or retiring ships developed as a result of an annual Ship Disposition Review conducted on January 12, 2015. As a result of this review, the Navy plans to retire 23 battle force ships during the FYDP, with dispositions for retention in the inactive inventory, FMS, conversions, or dismantling. The Navy currently plans to dispose of 23 inactive ships for which it has no further use, 18 by dismantlement and five during SINKEXs.

Appendix 3

Estimated Total Cost of Construction for Each Vessel Contained in the Annual Long-Range Plan for Construction of Naval Vessels for FY2016

Limited Distribution Appendix
This Page intentionally left blank due to sensitive proprietary business information.