Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 5: *Development & Demonstration (SDD)*				R-1 ITEM NOMENCLATURE PE 0604311N: *LPD-17 Class Systems Integration*							
COST ($ in Millions)	**FY 2011**	**FY 2012**	**FY 2013 Base**	**FY 2013 OCO**	**FY 2013 Total**	**FY 2014**	**FY 2015**	**FY 2016**	**FY 2017**	**Cost To Complete**	**Total Cost**
Total Program Element	1.636	0.884	0.824	-	0.824	0.840	0.856	0.881	0.897	Continuing	Continuing
2283: *LPD-17 Class System Integration*	1.636	0.884	0.824	-	0.824	0.840	0.856	0.881	0.897	Continuing	Continuing

A. Mission Description and Budget Item Justification

The LPD 17 Class ships are functional replacements for 41 ships of four classes of amphibious ships. These new ships embark, transport, and land elements of Marine landing forces in an amphibious assault by helicopters, landing craft, and amphibious vehicles. Tactics, techniques, and tools for naval expeditionary warfare continue to evolve. The LPD 17 Class configuration must continue to adapt to this evolutionary process as theses ships are expected to be in service until almost 2050. The LPD 17 design includes system configurations that reduce operating and support costs and facilitate operational performance improvements. The RDT&E,N funding will be used for system engineering and integration efforts to resolve obsolescence issues facing the LPD 17 class components, as well as develop further reductions in life cycle costs, and will integrate performance upgrades in a rapid, affordable manner. These efforts will result in well-defined specifications and drawings in system integration design packages that provide technical baselines for follow-on ship procurements. This program is funded under Engineering and Manufacturing Development because it encompasses engineering and manufacturing development of new end-items prior to production approval decision. LSD(X) moved to RDTEN PE 0603564N Project 2474 starting in FY12 and out.

B. Program Change Summary ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.373	0.884	0.897	-	0.897
Current President's Budget	1.636	0.884	0.824	-	0.824
Total Adjustments	0.263	-	-0.073	-	-0.073
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.273	-			
• SBIR/STTR Transfer	-0.003	-			
• Program Adjustments	-	-	-0.073	-	-0.073
• Congressional General Reductions Adjustments	-0.007	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604311N: *LPD-17 Class Systems Integration*

Schedule: Not applicable.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604311N: *LPD-17 Class Systems Integration*	PROJECT 2283: *LPD-17 Class System Integration*	

COST ($ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2283: *LPD-17 Class System Integration*	1.636	0.884	0.824	-	0.824	0.840	0.856	0.881	0.897	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The LPD 17 Class ships are functional replacements for 41 ships of four classes of amphibious ships. These new ships embark, transport, and land elements of Marine landing forces in an amphibious assault by helicopters, landing craft, and amphibious vehicles. Tactics, techniques, and tools for naval expeditionary warfare continue to evolve. The LPD 17 Class configuration must continue to adapt to this evolutionary process, because these ships are expected to be in service until almost 2050. The LPD 17 design includes system configurations that reduce operating and support costs and facilitate operational performance improvements. System engineering and integration efforts that began in FY 1997 will develop further reductions in life cycle costs and will integrate performance upgrades in a rapid, affordable manner. Possible improvements include advanced sensors, advanced computers, advanced command and control software, advanced information systems technologies, and ship based logistics concepts. Cost reduction and improved performance will be accomplished through sustained modeling and simulation efforts, continued personnel reductions efforts, system performance tradeoff evaluation, and naval expeditionary warfare systems engineering. Feedback from the operational forces for integrating system configurations will be accomplished through the Naval Expeditionary Warfare Centers in Quantico, Dahlgren, China Lake, Naval Research Lab, and Little Creek, Virginia. These efforts will result in well-defined specifications and drawings in system integration design packages that provide technical baselines for follow-on ship procurements. LSD(X) moved to RDTEN PE 0603564N Project 2474 starting in FY2012 and out years.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: LSD(X) Systems Integration	0.694	-	-
Articles:	0		
Description: LSD(X) Systems Integration. LSD(X) is a replacement for the retiring LSD 41 and LSD 49 Classes (that may be based in the LPD 17 hull form). RDTEN profile supports necessary preliminary efforts.			
FY 2011 Accomplishments: Continued development of documentation for Gate Process and Defense Acquisition Board (DAB).			
Title: Systems Engineering/Integration	0.942	0.884	0.824
Articles:	0	0	0
Description: Continuing Naval Expeditionary Warfare Systems Engineering efforts and integration efforts for unique LPD 17 Class systems, including efforts to resolve obsolescence issues impacting the class.			
FY 2011 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604311N: *LPD-17 Class Systems Integration*	PROJECT 2283: *LPD-17 Class System Integration*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continued conducting the Bipolar Power Amplifier Unit (BPAU) Degaussing Controller Unit Reliability Study, SMART/SAN Antonio Study, Probability of Raid Annihilation (PRA) Testbed Development, and Ship Control System (SCS) Electronic Data Recorder (EDR) Analysis. Continued the training system process and GAP Analysis to identify and validate manpower and training, Operational Test Plan Development, Demonstration and Procedures Plan (DPP) Support, USMC Communication Exercise Support, LPD 17 Joint Interoperability Test Command (JITC) Certification/OPEVAL Support, Follow-on Operational Test and Evaluation (FOT&E) MARCORSYSCOM Support, Advanced Enclosed Mast/Sensor (AEM/S) Access Study, and Radar Cross-Section Reduction (RCSR) Testing of Motor Gasoline (MOGAS) Rack. ***FY 2012 Plans:*** Continue the BPAU Degaussing Controller Unit Reliability Study, SMART/San Antonio Study, Probability of Raid Annihilation (PRA) Testbed Development, and SCS EDR Analysis. Continue the training system process and GAP Analysis to identify and validate manpower and training, USMC Communication Exercise Support, LPD 17 JITC Certification/OPEVAL Support, FOT&E MARCORSYSCOM Support, AEM/S Access Study, and RCSR Testing of MOGAS Rack. ***FY 2013 Plans:*** Continue the Reliability and Obsolescence studies for shipboard network/electronics/machinery systems, and Environmental Qualification Testing for obsolescence replacements. Start the Windows 7/ Operating System Migration feasibility study, and MK 46 Gun Weapon System (GWS) Reliability and Interoperability study.			
Accomplishments/Planned Programs Subtotals	1.636	0.884	0.824

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• SCN/3036: *LPD 17*	0.000	1,837.444	0.000	0.000	0.000	53.685	37.705	24.442	0.000	0.000	12,566.376
• SCN/5300: *Completion of Prior Year Shipbuilding Programs*	0.000	73.992	80.888	0.000	80.888	0.000	0.000	0.000	0.000	0.000	1,890.680

D. Acquisition Strategy

FY12 and out: continue developmental sole source efforts

E. Performance Metrics

LPD17 Class ships will conduct Follow On Test and Evaluation as outlined in the test and evaluation Master Plan. LSD(X) Systems Integration efforts begin the preparation of documentation for Analysis of Alternative and Milestone (MS) A documentation.

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 5: *Development & Demonstration (SDD)*	R-1 ITEM NOMENCLATURE PE 0604311N: *LPD-17 Class Systems Integration*	PROJECT 2283: *LPD-17 Class System Integration*

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 5: *Development & Demonstration (SDD)*	**R-1 ITEM NOMENCLATURE** PE 0604311N: *LPD-17 Class Systems Integration*	**PROJECT** 2283: *LPD-17 Class System Integration*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2283				
Delivery (LPD 22)	1	2012	1	2012
Delivery (LPD 23)	3	2012	3	2012
Delivery (LPD 24)	4	2012	4	2012
Delivery (LPD 25)	3	2013	3	2013
Delivery (LPD 26)	1	2016	1	2016
Follow-On Operational Test and Evaluation (FOT&E) Completion	1	2011	4	2012
Rel. Obsolescence Studies: Int. Shipboard Elec. & EQT	1	2011	4	2013
Rel. Obsolescence Studies: Windows & MK 46 Studies	1	2013	2	2014
Rel. Obsolescence Studies: Future Obsol. Issue Resolution	1	2014	4	2017