Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy										DATE: February 2011	
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*				R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*							
COST ($ in Millions)	**FY 2010**	**FY 2011**	**FY 2012 Base**	**FY 2012 OCO**	**FY 2012 Total**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**	**Cost To Complete**	**Total Cost**
Total Program Element	57.922	57.796	118.764	-	118.764	83.739	20.727	52.210	51.804	Continuing	Continuing
0225: *Surface Ship Torpedo Defense (SSTD)*	47.964	57.796	118.764	-	118.764	83.739	20.727	52.210	51.804	Continuing	Continuing
9999: *Congressional Adds*	9.958	-	-	-	-	-	-	-	-	0.000	9.958

A. Mission Description and Budget Item Justification

The Surface Ship Torpedo Defense (SSTD), Project 0225, has changed as presented in the President's Budget FY 2011 submit. The previous program developed the Anti-Torpedo Torpedo Defensive System (ATTDS) for Cruisers and Destroyers. This program had a planned Initial Operating Capability (IOC) in 2015. The program will now focus on first providing torpedo defense capability to High Value Units (HVU).

The project now uses technologies developed under the previous ATTDS program to provide a detect-to-engage hardkill torpedo defense capability through two new development programs. The Countermeasure Anti-Torpedo (CAT) program develops a canisterized Anti-Torpedo Torpedo (ATT) as an ACAT II program. The Torpedo Warning System (TWS) develops the required ship systems as an ACAT III program. Like the previous ATTDS system, the new TWS system will require fielding of the AN/SLQ-25D (NIXIE) system as a tow point for the TWS towed sensors. This will require interfacing NIXIE power and data transfer with TWS.

The first increment of the TWS system will be installed on one CVN and one Combat Logistics Force (CLF) ship (both HVUs) with an IOC in FY 2017. The first increment of the CAT will be installed on HVUs in FY 2021.

Additionally, the program will develop and field two surface ship torpedo defense prototype systems (TWS/CAT) on two CVNs. To accomplish this effort, the department intends to request a FY 2011 prior approval reprogramming for approximately $38 million. The effort will complete 33 months after funds are received.

At-sea demonstrations of the Torpedo Detection Classification and Localization (TDCL) systems conducted in FY06 through FY09 led to a CRUDES TDCL draft system specification in FY09 which is being modified to accommodate installation of a system for HVUs. Additionally, in 2nd Qtr FY10, prototype TDCL systems were tested at sea to collect data to characterize the ability of towed active and passive sonar arrays to detect and track threat targets both actively and passively in adverse conditions. System manufacturing readiness levels indicate FY17 as most acceptable risk for delivery.

At-sea testing of the Engineering Development Model (EDM-1) design of the anti-torpedo torpedo capability in FY06 through FY09 facilitates completion of the EDM-2 design in late FY11. Development and testing conducted by the Office of Naval Research (ONR) provided the required Technology Readiness level required for the CAT program to achieve a Milestone B.

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603506N: *Surface Ship Torpedo Defense*

A Performance specification for the AN/SLQ-25D system suitable for the HVU application was completed in FY10. Since the HVU does not use the Surface Vessel Torpedo Tubes (SVTT), the previous ATTDS efforts conducted to modify this system to accept the CAT have been terminated, and efforts have commenced with the planning yards for CVNs to establish locations and requirements for launcher systems appropriate to these ships.

FY10 Congressional Add-Project 10C096, AN/SLQ-25D Interface: Funding provides interoperability of the AN/SLQ-25D countermeasure system with the TWS. This interoperability requires development of interfaces with Fire Control systems, as well as interfaces with new towed sensors. This task has increased in scope as the HVU application increases the requirements placed on the towed sensors. This increase resulted in the program office's decision to compete the development of this capability. Award of the new competitive contract is expected in June 2011.

FY10 Congressional Add-Project 10C097, Continuous Active Sonar for Torpedo DCL Systems: Adapt Continuous Active Sonar (CAS) and other active and passive sonar technologies that have proved very effective for active Anti-Submarine Warfare (ASW) applications, to improve TDCL capabilities to extend coverage against most stressing emergent threats. The products of this Congressional Add could result in potential future increased capabilities for the CVN application.

B. Program Change Summary ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	67.257	57.796	60.842	-	60.842
Current President's Budget	57.922	57.796	118.764	-	118.764
Total Adjustments	-9.335	-	57.922	-	57.922
• Congressional General Reductions		-			
• Congressional Directed Reductions		-			
• Congressional Rescissions	-	-			
• Congressional Adds		-			
• Congressional Directed Transfers		-			
• Reprogrammings	-7.790	-			
• SBIR/STTR Transfer	-1.365	-			
• Program Adjustments	-	-	59.023	-	59.023
• Section 219 Reprogramming	-0.179	-	-	-	-
• Rate/Misc Adjustments	-	-	-1.101	-	-1.101
• Congressional General Reductions Adjustments	-0.001	-	-	-	-

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Project: 9999: *Congressional Adds*		
Congressional Add: *AN/SLQ-25D Integration*	6.373	-
Congressional Add: *Continuous Active Sonar for Torpedo DCL Systems*	3.585	-
	9.958	-

Exhibit R-2, RDT&E Budget Item Justification: PB 2012 Navy	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603506N: *Surface Ship Torpedo Defense*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2010	FY 2011
Congressional Add Subtotals for Project: 9999		
Congressional Add Totals for all Projects	9.958	-

Change Summary Explanation

Technical and Schedule: Changed focus of program to HVU and added accelerated prototype SSTD effort for development and installation of (2) deployable TWS/CAT prototype systems for delivery in FY13.

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*	PROJECT 0225: *Surface Ship Torpedo Defense (SSTD)*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
0225: *Surface Ship Torpedo Defense (SSTD)*	47.964	57.796	118.764	-	118.764	83.739	20.727	52.210	51.804	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	2	0	0	0		

A. Mission Description and Budget Item Justification

The project uses technologies developed under the previous ATTDS program to provide a detect-to-engage hardkill torpedo defense capability. The Countermeasure Anti-Torpedo (CAT) program develops a canisterized Anti-Torpedo Torpedo (ATT) as an ACAT II program. The Torpedo Warning System (TWS) develops the required ship systems as an ACAT III program. Like the previous ATTDS system, the new TWS system will require fielding of the AN/SLQ-25D (NIXIE) system as a tow point for the TWS towed sensors. This will require interfacing NIXIE power and data transfer with TWS.

The first increment of the TWS system will be installed on one CVN and one Combat Logistics Force (CLF) ship (both HVUs) with an IOC of FY 2017. The first increment of the CAT will be installed on HVUs in FY 2021.

Additionally, the program will develop and field two surface ship torpedo defense prototype systems (TWS/CAT) on two CVNs.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Title: Countermeasure Anti-Torpedo (CAT) (previously (ATT)):	30.714	35.996	73.664
Articles:	0	0	0
FY 2010 Accomplishments: Continued ATT EDM-2 detailed design and sub-system testing. Included procurement of long-lead materials and fabrication of EDM-1 components unaffected by the EDM-2 design. Conducted launch testing of Electric CAT vehicles (ECAT) to validate water entry performance across all ship speeds and launcher heights. ***FY 2011 Plans:*** Continue EDM-2 detailed design and subsystem testing. EDM-2 fabrication continues in support of subsystem land-based testing. Subsystem testing will support delivery of first technical data package. Procure All Up Round Equipment (AURE) and ATT warheads and Safe and Arm devices to support Insensitive Munitions testing. Conduct Weapons System Explosive Safety Review Board (WSESRB) review of the CAT program. ***FY 2012 Plans:*** Begin preparation of the CAT technical data package. Continue land based testing of EDM-2. Procure materials for prototype delivery in 33 months to include AURE and warhead. Begin fabrication of subsystems for EDM-2 prototype CATs in support of 33-month prototype delivery.			
Title: Torpedo Warning System (TWS) (previously SHIP SYSTEMS):	14.500	18.800	44.600

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*	PROJECT 0225: *Surface Ship Torpedo Defense (SSTD)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2010	FY 2011	FY 2012
Articles:	0	0	0
FY 2010 Accomplishments: Conducted prototype Torpedo Detection Classification and Localization (TDCL) Array sea testing to determine the performance of the towed systems in the presence of other acoustic sources and during ship maneuvers. Collected data on hull mounted active sonar that will assist in developing a future hull mounted sonar for HVUs. Began development of a towed sensor specification for HVU application. ***FY 2011 Plans:*** Complete design and build of towed sensor EDM and conduct lake testing for performance evaluation. Continue development of Torpedo Detection Classification and Localization (TDCL) algorithms. Commence design of fire control and CAT ready-stowage racks for the HVU application. ***FY 2012 Plans:*** Continue fire control and CAT ready-stowage racks design and testing. Conduct sea test on sensors and algorithms developed in FY11. Begin fabrication of EDM prototype systems in support of 33-month prototype delivery.			
Title: AN/SLQ-25D	2.750	3.000	0.500
Articles:	0	0	0
FY 2010 Accomplishments: Completed AN/SLQ-25D performance specification. Developed combined Acquisition Strategy and Acquisition Plan in support of issuing an RFP for AN/SLQ-25D procurement. ***FY 2011 Plans:*** Issue competitive contract for development and procurement of two AN/SLQ-25D systems to support FY14 testing of TWS systems. ***FY 2012 Plans:*** Complete development of AN/SLQ-25D and Capability Design Review.			
Accomplishments/Planned Programs Subtotals	47.964	57.796	118.764

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*	PROJECT 0225: *Surface Ship Torpedo Defense (SSTD)*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
• OPN/221300: *Surface Ship Torpedo Defense*	10.153	2.206	2.257	0.000	2.257	10.742	19.763	23.964	24.596	0.000	211.881

D. Acquisition Strategy

CAT Program: Under the ATTDS program In FY09 and FY10, the CAT project completed a Systems Requirements Review (SRR) and Preliminary Design Review (PDR) on the second Engineering Development Model (EDM-2) design. The Applied Research Laboratory (ARL) is now preparing the detailed EDM-2 design. ARL will complete the EDM-2 design in FY11. A Critical Design Review (CDR) will be held after the design is complete. ARL will fabricate test articles and 20 additional EDM-2 CATS in support of the 33-month prototype fielding. Testing will begin in FY13 and continue through delivery of the prototype CATs. A complete Technical Data Package (TDP) will be prepared. With the shift in IOC to FY21, Milestone B is planned in FY14 with a Milestone C decision in late FY17. In late FY17 a competitive fixed price contract will be awarded to build Low Rate Initial Production (LRIP) units. These will support Operational Testing beginning in FY20 for an FY21 IOC.

TWS Program: In FY09 and FY10, a towed sensor system specification was developed and 2 sea tests were conducted on Navy destroyers that demonstrated the ability of three different passive sonar ranging techniques and demonstrated the benefit of new torpedo detection sonar waveforms. Data from these tests is being applied to the HVU application, and the sensor specification is being modified to meet the increased capability required for HVU ships. Development and production of the new sensors is being conducted by 3 Phoenix and Ultra Ocean Systems. A complete sensor set is planned for delivery in 1st QTR FY12 to support an at sea test in the 2nd or 3rd QTR FY12. At the same time, a ready-stowage rack, and fire control systems are being developed by NUWC and NSWC. All of these components will be brought together for integration in FY13. This integration will support fabrication and fielding of the 33-month prototype systems. Integration with the AN/SLQ-25D system is planned in FY14. This testing will inform a Milestone C decision in late FY14. In late FY14, a single competitive contract will be awarded for TWS LRIP systems to support Operational Testing on a CVN in FY17 and a FY17 IOC.

AN/SLQ-25D System: The AN/SLQ-25D system specification (cabinet, winch, tow cable, towed body) for integration with the previous ATTDS program was completed in 2nd QTR FY10. This specification was modified for integration with the TWS system for use on HVU ships. This specification will be used for a competitive contract award in FY11 to develop and build two AN/SLQ-25D systems. This contract will use FY11 RDT&E funding to accomplish the engineering development and FY10 OPN to build the systems. The first system will deliver in 4th QTR FY13 and will be installed on a CVN ship to support TWS testing. An option to the production contract will be awarded in FY14 to build additional AN/SLQ-25D systems to support future TWS installations.

E. Performance Metrics

Torpedo Effectiveness for the CAT
Torpedo Detection Classification and Localization (TDCL) False Alert Rate
TDCL probability of correct classification
TWS System Availability

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*	PROJECT 0225: *Surface Ship Torpedo Defense (SSTD)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	WR	NUWC:Newport, RI	23.811	3.800	Jan 2011	4.500	Nov 2011	-		4.500	Continuing	Continuing	Continuing
Systems Engineering ATT Dev.	C/CPFF	PSU/ARL:State College, PA	98.299	23.100	Nov 2010	48.800	Nov 2011	-		48.800	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	JHU/APL:Baltimore , MD	1.570	0.400	Feb 2011	0.400	Feb 2012	-		0.400	Continuing	Continuing	Continuing
Systems Engineering Warhead Dev.	WR	NSWC:Indian Head, MD	27.416	5.500	Nov 2010	12.100	Nov 2011	-		12.100	Continuing	Continuing	Continuing
Systems Engineering	WR	NUWC:Keyport,WA	12.580	2.800	Nov 2010	8.000	Nov 2011	-		8.000	Continuing	Continuing	Continuing
Systems Engineering TDCL	C/CPFF	Ultra:Braintree, MA	10.640	1.000	Feb 2011	5.000	Feb 2012	-		5.000	0.000	16.640	Continuing
Systems Engineering ATT	WR	ONR:Not Specified	1.305	-	Jan 2011	0.100	Jan 2012	-		0.100	Continuing	Continuing	Continuing
Systems Engineering TDCL	C/CPFF	AAC:Hauppage, NY	3.830	-		-		-		-	0.000	3.830	Continuing
Systems Engineering	WR	OPTEVFOR:Norfolk, VA	0.593	0.150	Feb 2011	0.150	Feb 2012	-		0.150	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	ArgonST:Manassas, VA	0.800	-		-		-		-	0.000	0.800	Continuing
Systems Engineering TDCL	WR	NSWC:Dahlgren, VA	4.222	1.100	Dec 2010	2.000	Nov 2011	-		2.000	0.000	7.322	Continuing
Systems Engineering TDCL	WR	SPAWAR:San Diego, CA	0.300	1.000	Dec 2010	1.000	Dec 2011	-		1.000	0.000	2.300	Continuing
Systems Engineering	C/CPFF	UT/ARL:Not Specified	0.500	0.200	Feb 2011	0.250	Feb 2012	-		0.250	0.000	0.950	Continuing
Systems Engineering	C/CPFF	Alion:Bridgeport, CT	-	3.000	Jan 2011	3.784	Dec 2011	-		3.784	0.000	6.784	Continuing
Systems Engineering	WR	NUWC DET:Norfolk, VA	1.325	1.200	Jan 2011	2.300	Nov 2011	-		2.300	0.000	4.825	
Systems Development	C/CPFF	3 Phoenix:Fairfax, VA	3.160	8.100	Dec 2010	26.780	Dec 2011	-		26.780	0.000	38.040	Continuing
Integrated Logistic Spt	WR	NSWC Crane:Crane, IN	0.284	0.350	Feb 2011	0.350	Dec 2011	-		0.350	0.000	0.984	Continuing
Prototype Development	C/FFP	TBD:TBD	-	3.000	Sep 2011	0.500	Dec 2011	-		0.500	0.000	3.500	
		Subtotal	190.635	54.700		116.014		-		116.014			

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Earned Value Mgmt Spt	C/CPAF	Pioneer:Virigina	-	0.550	Jan 2011	0.250	Dec 2011	-		0.250	0.000	0.800	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*	PROJECT 0225: *Surface Ship Torpedo Defense (SSTD)*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2011 Cost	FY 2011 Award Date	FY 2012 Base Cost	FY 2012 Base Award Date	FY 2012 OCO Cost	FY 2012 OCO Award Date	FY 2012 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C/FFP	EG&G:Gaithersburg, Md.	2.846	-		-		-		-	0.000	2.846	Continuing
DAWDF	Various	Not Specified:Not Specified	0.237	-		-		-		-	0.000	0.237	Continuing
Program Management Support	C/CPAF	Tech-Marine:Burke, VA	3.880	2.166	Jan 2011	2.200	Jan 2012	-		2.200	0.000	8.246	Continuing
Travel	Various	PMS 415:Not Specified	0.410	0.180	Nov 2010	0.100	Nov 2011	-		0.100	0.000	0.690	Continuing
Program Management Support	C/CPFF	SPA:Alexandria, VA	0.187	0.200	Mar 2011	0.200	Mar 2012	-		0.200	0.000	0.587	Continuing
		Subtotal	7.560	3.096		2.750		-		2.750	0.000	13.406	

	Total Prior Years Cost	FY 2011		FY 2012 Base		FY 2012 OCO		FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	198.195	57.796		118.764		-		118.764			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603506N: *Surface Ship Torpedo Defense*	**PROJECT** 0225: *Surface Ship Torpedo Defense (SSTD)*

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603506N: *Surface Ship Torpedo Defense*	**PROJECT** 0225: *Surface Ship Torpedo Defense (SSTD)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 0225				
AN/SLQ-25D (NIXIE) - DEVELOPMENT	1	2010	3	2012
AN/SLQ-25D - RFP	1	2011	1	2011
AN/SLQ-25D - CONTRACT AWARD	1	2012	1	2012
AN/SLQ-25D - CAPABILITY DESIGN REVIEW (CDR)	3	2012	3	2012
AN/SLQ-25D - PRODUCTION UNITS 1 & 2	3	2012	1	2014
AN/SLQ-25D - PRODUCTION OPTION AWARD	2	2014	2	2014
AN/SLQ-25D - PRODUCTION	3	2014	3	2016
TWS - TDCL ARRAY	2	2010	4	2011
TWS - TDCL PROCESSING	2	2010	1	2012
TWS - TDCL Sea Test 1	3	2010	3	2010
TWS - DESIGN & TEST FIRE CONTROL & LAUNCHER	1	2011	2	2013
TWS - MILESTONE B	4	2011	4	2011
TWS - LAKE TEST	4	2011	4	2011
TWS - CAS Developmental Test (DT)	1	2012	1	2012
TWS - TDCL SEA TEST 2	2	2012	2	2012
TWS - Prototype Delivery	4	2013	4	2013
TWS - RFP	1	2014	1	2014
TWS - EDM Demo	3	2014	3	2014
TWS - MILESTONE C	4	2014	4	2014
TWS - Contract Award	4	2014	4	2014
TWS - DT EDM	1	2015	1	2016

Exhibit R-4A, RDT&E Schedule Details: PB 2012 Navy		DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0603506N: *Surface Ship Torpedo Defense*	**PROJECT** 0225: *Surface Ship Torpedo Defense (SSTD)*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
TWS - LRIP	1	2015	4	2016
TWS - OPERATIONAL TEST READINESS REVIEW (OTRR)	4	2016	4	2016
CAT - EDM-2 Design	1	2010	4	2011
CAT AURE Design	3	2010	4	2011
CAT - LAND BASED SYSTEM TEST	4	2011	4	2012
CAT - FABRICATE EDM-2 HARDWARE	1	2012	4	2012
CAT AURE FABRICATION	1	2012	4	2012
CAT - IN WATER TESTING	4	2012	2	2014
CAT - EDM Demo	3	2013	3	2013
CAT - Prototype Delivery	4	2013	4	2013
CAT Sustainment	3	2014	4	2016
CAT - MILESTONE B	3	2014	3	2014
CAT - RFP	3	2016	3	2016
CAT - Contractor Testing (CT) 2 In-Water Test	3	2016	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2012 Navy			DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY 1319: *Research, Development, Test & Evaluation, Navy* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0603506N: *Surface Ship Torpedo Defense*	PROJECT 9999: *Congressional Adds*	

COST ($ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
9999: *Congressional Adds*	9.958	-	-	-	-	-	-	-	-	0.000	9.958
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Congressional Adds

B. Accomplishments/Planned Programs ($ in Millions)	FY 2010	FY 2011
Congressional Add: AN/SLQ-25D Integration ***FY 2010 Accomplishments:*** Provide integration of the SLQ-25D countermeasure system with the Anti-Torpedo Torpedo Defense System. This integration includes development of interfaces with Ship's Sonar and Fire Control systems, as well as integration with new towed sensors and integration with the ship itself.	6.373	-
Congressional Add: Continuous Active Sonar for Torpedo DCL Systems ***FY 2010 Accomplishments:*** Adapt Continuous Active Sonar (CAS) and other active and passive sonar technologies that have proved very effective for active ASW applications, to improve Torpedo Detection, Classification, and Localization capabilities and extend ATTDS coverage against most stressing emergent threats.	3.585	-
Congressional Adds Subtotals	9.958	-

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Congressional Adds