

CLASSIFICATION:	UNCLASSIFIED
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EXHIBIT R-2, RDT&E BUDGET ITEM JUSTIFICATION	DATE May 2009
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APPROPRIATION/BUDGET ACTIVITY RDTEN/BA 6				R-1 ITEM NOMENCLATURE 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT				
COST (In Millions)	FY 2008	FY 2009	FY 2010					
Total PE Cost	178.651	194.034	193.353					
0568 / A/C FLT Hours	34.670	34.098	32.629					
0569 / A/C Support	41.913	45.234	35.850					
2924 / SDTS	8.815	9.448	9.114					
3186 / Air and Missile Defense Radar	93.253	0.000	0.000					
3206 / T&E Enterprise	0.000	105.254	115.760					

A. MISSION DESCRIPTION:

This continuing program provides support for ships and aircraft required to accommodate Research, Development, Test and Evaluation (RDT&E) of new systems. The RDT&E ship and aircraft inventory is required to adequately test new and improved weapon systems, stay current with threats, and increase warfighting capability of the fleet. The program provides integrated logistics support for aircraft at selected field activities; provides depot-level rework of aircraft, engines, and components for the Navy inventory of RDT&E aircraft; and provides support for ships and aircraft bailed to contractors for Navy RDT&E projects. Costs covered under this element include aircrew training and proficiency, fuel, supplies, equipment, repair, Aviation Depot Level Repairables (AVDLR), overhaul of ships and aircraft, as well as organizational, intermediate, and depot maintenance of ships and aircraft in the Navy RDT&E inventory.

B. PROGRAM CHANGE SUMMARY:

Funding:	FY 2008	FY 2009	FY 2010
FY09 President's Budget	178.651	195.017	201.110
FY10 President's Budget	178.651	194.034	193.353
Total Adjustments	0.000	-0.983	-7.757
(U) Summary of Adjustments			
Congressional Adjustments	0.000	-0.303	0.000
SBIR/STTR Transfer	0.000	0.000	0.000
Program adjustment	0.000	-0.680	-3.657
Rate/Misc Adjustments	0.000	0.000	-4.100
Total	0.000	-0.983	-7.757

CLASSIFICATION:		UNCLASSIFIED						
EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION						DATE May 2009		
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT				PROJECT NUMBER AND NAME 0568/A/C FLT Hours		
COST (In Millions)	FY 2008	FY 2009	FY 2010					
Project Cost	34.670	34.098	32.629					
RDT&E Articles Qty	0	0	0					
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: RDT&E Aircraft Flight Hours. This non-acquisition project supports direct flight hour costs, including organizational and intermediate level maintenance, as well as associated consumables, including petroleum, oil, and lubricants (POL). These flight hours are used for post-maintenance test flights, aircrew training, and the accomplishment of pilot proficiency requirements (approximately 3 hours per pilot per month), in support of Research and Development programs at four Naval Air Systems Command/Naval Surface Warfare Center/Office of Naval Research (NAVAIR/NSWC/ONR) flight activities.								

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT		PROJECT NUMBER AND NAME 0568/A/C FLT Hours
B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	34.670	34.098	36.850	
RDT&E Articles Quantity	0	0	0	
Providing organizational and intermediate-level maintenance, supply and Petroleum, Oil and Lubricants (POL) in support of RDT&E aircraft operations.				
C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable				
D. ACQUISITION STRATEGY: Not Applicable				
E. MAJOR PERFORMERS: NAWCAD Patuxent River, MD: In support of direct flight hours for R&D programs at NAWCAD. NAWCWD Point Mugu, CA: In support of direct flight hour costs for R&D programs at NAWCWD.				

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT				PROJECT NUMBER AND NAME 0569/A/C Support		
COST (In Millions)	FY 2008	FY 2009	FY 2010					
Project Cost	41.913	45.234	35.850					
RDT&E Articles Qty	0	0	0					
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>RDT&E Aircraft Support. This continuing project funds costs associated with Research, Development, Test and Evaluation (RDT&E) fixed and rotary wing aircraft which accommodate test and evaluation of aircraft/weapon systems. Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. Included in these costs are Aviation Depot-Level Repairables (AVDLRs), which are spare and replacement aircraft parts and components to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), the Integrated Maintenance Concept (IMC) and Phased Depot Maintenance (PDM), in-service repairs, emergency repairs, and engine repairs, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, and other systems for application to and compatibility with RDT&E requirements.</p>								

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B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	40.531	43.548	34.220	
RDT&E Articles Quantity	0	0	0	
Continuing the transition from ASPA/SDLM/MCAPP to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continuing operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	1.382	1.686	1.630	
RDT&E Articles Quantity	0	0	0	
Providing In-Service Repair (ISR) funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects.				
C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable				
D. ACQUISITION STRATEGY: Not Applicable				
E. MAJOR PERFORMERS: NAWCAD Patuxent River, MD: Support of aircraft for RDT&E inventory; AVDLR/IMRL support; Operation and implementation of maintenance and material management programs. NAWCWD Point Mugu, CA: Support of aircraft for RDT&E inventory; AVDLR/IMRL support; Operation and implementation of maintenance and material management programs. NADEP Jacksonville, FL: Provide aircraft depot maintenance and engine repairs for RDT&E aircraft, and in-service repairs. NADEP North Island, CA: Provide aircraft depot maintenance for RDT&E aircraft, and in-service repairs. Hill Air Force Base Hill AFB, UT: Provide aircraft depot maintenance for RDT&E aircraft.				

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT				PROJECT NUMBER AND NAME 2924/SDTS		
COST (In Millions)	FY 2008	FY 2009	FY 2010					
Project Cost	8.815	9.448	9.114					
RDT&E Articles Qty	0	0	0					
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>This project provides for the maintenance of Hull Mechanical and Electrical (HM&E) and installed Combat Systems of the Self-Defense Test Ship (SDTS) in support of the Navy Research, Development, Test and Evaluation (RDT&E) of ship self-defense systems. Testing aboard this ship reduces the number of fleet units required to support RDT&E efforts.</p> <p>SDTS provides the capability to safely test self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship, combat system and remote control maintenance. The remainder of the funds are used for purchase of expendable supplies and routine equipment, fuel and petroleum products, repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.</p>								

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6	PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT	PROJECT NUMBER AND NAME 2924/SDTS		
B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	8.815	9.448	9.114	
RDT&E Articles Quantity	0	0	0	
<p>2008: SDTS priority consisted of installing multiple configurations, deinstalling unused equipment, modifying top side and below deck equipment to coincide with appropriate elements and Combat Systems, testing of all systems listed in the Air Warfare Ship Self Defense T&E Enterprise TEMP, and executing according to the Enterprise TEMP. SDTS began the planning, scheduling, and performing of maintenance onboard EDD 964 for HM&E, CS and remote control elements in support of such activities.</p> <p>2009: NAVSURFWARCENDIV Port Hueneme, CA will plan, schedule, and perform recurring maintenance onboard EDD 964 and continue to support installation of Enterprise Equipment for multiple ship classes (LHDs/CVNs, DDG 1000, and LCS) PHD will also determine the feasibility of multiple configurations in support of the Navy AAW SSD Enterprise Strategy.</p> <p>2010: Continue efforts from 2009</p>				
C. OTHER PROGRAM FUNDING SUMMARY:				
Not Applicable				
D. ACQUISITION STRATEGY:				
This line of accounting is for recurring combat system and ship maintenance.				
E. MAJOR PERFORMERS:				
NSWC PHD Northrop Grumman ATI				

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT				PROJECT NUMBER AND NAME 3186/Air and Missile Defense Radar		
COST (In Millions)	FY 2008	FY 2009	FY 2010					
Project Cost	93.253	0.000	0.000					
RDT&E Articles Qty	0	0	0					
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>The T&E Enterprise consolidates all Air Warfare (AW) Ship Self Defense (SSD) at-sea testing to across multiple class ships, beginning with CVN 74, LHD 8, LPD17, LHA 6, DDG 1000, CVN 78, and 2 versions of Littoral Combat Ship (LCS). This consolidated AW SSD test and evaluation approach meets the Probability of Raid Annihilation (PRA) (PRA is defined as a required surface ship defense against Anti-Ship Cruise Missiles), Self Defense Test Ship (SDTS), and lead/operational ship testing requirements for ESSM TEMP 1471, RAM Blk 2 TEMP 286-1, DDG 1000 TEMP 1560, CVN 78 TEMP 1610, CEC TEMP 1415, SSDS TEMP 1400, LHA 6 TEMP 1697, AN/SPQ-9B TEMP 1463, SEWIP TEMP 1658 (Block 1A), TEMP 0686, and the LCS TEMP 1695.</p> <p>LHA 6 acquisition, installation and testing supports all big deck Amphibs and Carriers in the OA configuration as well RAM BLK 2 OPEVAL, SSDS OA with RAM BLK 2, SEWIP and ESSM.</p> <p>The T&E Enterprise merges common ship, element, and system requirements into the least number of test events while leveraging planned Combat System Ship Qualification Trials (CSSQTs) to accomplish Developmental Testing (DT) and Operational Testing (OT) requirements. All tests on the SDTS require the sharing of infrastructure, missile range allocations, execution time and underway time to eliminate duplicative testing. T&E Enterprise preserves "end-to-end" mission Operational Testing in a realistic operational environment, capitalizing on Probability of Raid Annihilation M&S data validated with results of that Operational Testing, and ensuring a consistent approach across ship classes. Applicability of all test events are beneficial across multiple ship classes with the same variation under test.</p> <p>The T&E Enterprise acquires equipment (FY08-10) for installation onboard the SDTS (FY10), conducts test and evaluation on the SDTS and lead/operational ships (FY08-FY10) and satisfies the Probability of Raid Annihilation (PRA) Testbed Model Development and test execution requirements (FY08-FY10).</p> <p>FY09 and out funding is in PE 0605863N under PU 3206.</p>								

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT		PROJECT NUMBER AND NAME 3186/Air and Missile Defense Radar
B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	93.253	0.000	0.000	
RDT&E Articles Quantity	0	0	0	
<p>2008: This effort initiated Enterprise Acquisition of the LCS SEARAM, and DDG 1000 single MFR array. Efforts focused on the establishment of system engineering planning, components development, Verification and Validation (V&V) Virtual Range Updates, Extensions, Integration and Testbed Verification, Validation and Accreditation (VV&A), and reporting. Developed/implemented/executed Enterprise Test and Evaluation matrix.</p> <p>Test and Evaluation includes all range services, use of the SDTS, aircraft, missiles, threats, target and target build up, planning and execution of test event in conjunction with other Enterprise test events and Navy CSSQT's.</p> <p>C. OTHER PROGRAM FUNDING SUMMARY: LHA 6, CVN 78, DDG 1000, LCS RAM BLK 2, ESSM, SPQ 9B, SSDS, SEARAM</p> <p>D. ACQUISITION STRATEGY: DDG 1000 single MFR array, DDG 1000 Mk 41/57 hybrid, and DDG 1000 TSCE through Raytheon. LCS SEARAM through PEO IWS 3.0 to Raytheon. The acquisition strategy allows for Enterprise equipment to be developed/built, delivered and installed on the Self Defense Test Ship in time to support FY 2010 testing.</p> <p>E. MAJOR PERFORMERS: NSWC PHD NSWC Point Mugu NAWC China Lake Northrop Grumman NSWC Corona Department of Interior NAWCAD Pax River Raytheon Applied Physics Lab PMS 500 and PMS 501 NRL</p>				

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6		PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT				PROJECT NUMBER AND NAME 3206/T&E Enterprise		
COST (In Millions)	FY 2008	FY 2009	FY 2010					
Project Cost	0.000	105.254	115.760					
RDT&E Articles Qty	0	0	0					
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:								
<p>The T&E Enterprise consolidates all Air Warfare (AW) Ship Self Defense (SSD) at-sea testing across multiple class ships, beginning with CVN 74, LHD 8, LPD17, LHA 6, DDG 1000, CVN 78, and 2 versions of Littoral Combat Ship (LCS). This consolidated AW SSD test and evaluation approach meets the Probability of Raid Annihilation (PRA) (PRA is defined as a required surface ship defense against Anti-Ship Cruise Missiles), Self Defense Test Ship (SDTS), and lead/operational ship testing requirements for ESSM TEMP 1471, RAM Blk 2 TEMP 286-1, DDG 1000 TEMP 1560, CVN 78 TEMP 1610, CEC TEMP 1415, SSDS TEMP 1400, LHA 6 TEMP 1697, AN/SPQ-9B TEMP 1463, SEWIP TEMP 1658 (Block 1A), 0686, and the LCS TEMP 1695.</p> <p>LHA 6 acquisition, installation and testing supports all big deck Amphibs and Carriers in the OA configuration as well RAM BLK 2 OPEVAL, SSDS OA with RAM BLK 2, SEWIP and ESSM.</p> <p>The T&E Enterprise merges common ship, element, and system requirements into the least number of test events while leveraging planned Combat System Ship Qualification Trials (CSSQTs) to accomplish Developmental Testing (DT) and Operational Testing (OT) requirements. All tests on the SDTS require the sharing of infrastructure, missile range allocations, execution time and underway time to eliminate duplicative testing.</p> <p>T&E Enterprise preserves "end-to-end" mission Operational Testing in a realistic operational environment, capitalizing on Probability of Raid Annihilation M&S data validated with results of that Operational Testing, and ensuring a consistent approach across ship classes. Applicability of all test events are beneficial across multiple ship classes with the same variation under test.</p> <p>The T&E Enterprise acquires equipment (FY08-10) for installation onboard the SDTS (FY10), conducts test and evaluation on the SDTS and lead/operational ships (FY08-FY10) and satisfies the Probability of Raid Annihilation (PRA) Testbed Model Development and test execution requirements (FY08-FY10).</p> <p>FY08 funding is in PE 0605863N under PU 3186.</p>								

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APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6	PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT	PROJECT NUMBER AND NAME 3206/T&E Enterprise		
B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
	FY 2008	FY 2009	FY 2010	
Accomplishments/Effort/Subtotal Cost	0.000	105.254	115.760	
RDT&E Articles Quantity	0	0	0	
<p>2009: This effort continues acquisition of Enterprise equipment. DDG 1000 Mk 41/57 hybrid, and DDG 1000 TSCE. SSDS MK2 Mod 3b, SPS-48 E, CEC P3I, Mk 53 DLS & NULKA Mod 3, SEWIP SLQ 32 B (V2), LCS Electro-Optic Directors, LCS CS Modules, LCS EW Suites, LCS 57 Bofors Gun Mount, Enterprise Interfaces/Remote Control System/Mods. Establishing System Engineering planning, components development, Verification & Validation (V&V) Virtual Range Updates, extensions, Integration and Testbed Verification, Validation and Accreditations (VV&A). Reporting execution strategies for Probability of Raid Annihilation Testbed development and test execution, and Lead and Operational Ship test and evaluation. Develop/implement/execute Test and Evaluation matrix. Execute testing and evaluation for LPD 17, CVN 74 and SDTS.</p> <p>2010: The primary focus of 2010 for T&E Enterprise is installation of all previously ordered/delivered Enterprise equipment onto the Self Defense Test Ship. Installation services have been combined into a single window in 2010 to reduce the duplication of multiple staging services (scaffolding, rigging, cabling, power generation, integration, etc.) PRA Testbed development, virtual range updates, and systems engineering will continue in support of LCS, LHA 6 and developed architecture will be documented for future support to CVN 78. Implementation and execution of Enterprise test events will continue to effectively leverage resources and support changes in ship delivery schedules.</p>				
C. OTHER PROGRAM FUNDING SUMMARY:				
LHA 6, CVN 78, DDG 1000, LCS				
RAM BLK 2, ESSM, SPQ 9B, SSDS, SEARAM				
DDG Mod and CG MOD				
D. ACQUISITION STRATEGY:				
Acquisition of test equipment assets for Enterprise Ship Classes.				
Acquisition of LHA 6 test equipment assets begins in FY09 and continues in FY10.				
Acquisition of systems is tailored to each ship class, however applicable and beneficial across multiple ship classes with the same variation being testing.				
DDG 1000 test equipment assets will be acquired through a direct contract.				
LHA 6 components will be acquired through the applicable PEO MPM. LCS equipment will have some acquisition through the PMS 501 and direct on contract.				

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EXHIBIT R-2a, RDT&E PROJECT JUSTIFICATION (CONTINUATION)			DATE May 2009
APPROPRIATION/BUDGET ACTIVITY RD TEN/BA 6	PROGRAM ELEMENT NUMBER AND NAME 0605863N/RDT&E SHIP AND AIRCRAFT SUPPORT	PROJECT NUMBER AND NAME 3206/T&E Enterprise	
E. MAJOR PERFORMERS: NSWC PHD NSWC Point Mugu NAWC China Lake Northrop Grumman NSWC Corona Department of Interior NAWCAD Pax River Raytheon Applied Physics Lab PMS 500 and PMS 501 NRL			