

# UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy DATE: April 2013

<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 6: <i>RDT&amp;E Management Support</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604759N: <i>Major T&amp;E Investment</i>
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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	0.000	36.670	35.894	38.033	-	38.033	38.976	39.624	40.175	40.850	Continuing	Continuing
2195: <i>T &amp; E Investment</i>	0.000	36.670	35.894	38.033	-	38.033	38.976	39.624	40.175	40.850	Continuing	Continuing

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

## A. Mission Description and Budget Item Justification

This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Division Newport Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility located at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD and the test and evaluation capabilities located at the Pacific Missile Range Facility, Kauai, HI.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RESEARCH, DEVELOPMENT, TEST and EVALUATION MANAGEMENT SUPPORT because it supports efforts directed toward sustaining or modernizing installations or operations required for general research, development, test and evaluation.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014 Base</b>	<b>FY 2014 OCO</b>	<b>FY 2014 Total</b>
Previous President's Budget	37.957	35.894	36.089	-	36.089
Current President's Budget	36.670	35.894	38.033	-	38.033
Total Adjustments	-1.287	0.000	1.944	-	1.944
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.152	0.000			
• SBIR/STTR Transfer	-0.135	0.000			
• Program Adjustments	0.000	0.000	1.944	-	1.944

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Navy									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support					R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment				PROJECT 2195: T & E Investment			
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO <sup>##</sup>	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
2195: T & E Investment	0.000	36.670	35.894	38.033	-	38.033	38.976	39.624	40.175	40.850	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Division Newport Atlantic Undersea Test and Evaluation Center (AUTEC), Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility located at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD and the test and evaluation capabilities located at the Pacific Missile Range Facility, Kauai, HI.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: UNDERSEA RANGE INVESTMENTS									13.813	8.700	6.700	
									0	0	0	
Articles:												
Description: This effort funds the modernization, upgrades, and new test and evaluation capabilities required at the Navy's Major Range Test Facility Base undersea ranges, to include AUTEC, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA.												
FY 2012 Accomplishments:												
- Continued the minor upgrade and modernization of test capabilities at AUTEC, Nanoose and Dabob.												
- Completed the modernization and upgrade of acoustic acquisition, tracking and processing systems and hydrophone arrays at Nanoose & Dobob.												
- Completed the overhaul of a range craft.												
- Completed the development and installation of broadband capable bottom mounted targets at Nanoose and Dabob.												
- Completed the refurbishment and service life extension of a range vessel at AUTEC.												
- Completed the modernization and upgrade of the optical tracking and surveillance system at Nanoose and Dabob.												
- Completed the acquisition of a new range recovery system at Nanoose and Dabob.												

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 6: RDT&E Management Support	R-1 ITEM NOMENCLATURE PE 0604759N: Major T&E Investment	PROJECT 2195: T & E Investment		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2012	FY 2013	FY 2014
- Initiated the upgrade to the T&E target at Nanoose and Dabob.  <b>FY 2013 Plans:</b> - Continue the minor upgrade and modernization of test capabilities at AUTEC, Nanoose and Dabob. - Continue the upgrade to the Test and Evaluation (T&E) target at Nanoose and Dabob. - Initiate and complete the development and installation of broadband capable T&E targets at Nanoose and Dabob. - Initiate the refurbishment and service life extension of a range vessel at Atlantic Undersea Test and Evaluation Center (AUTEC). - Initiate the development of Information Operations T&E capability at AUTEC.  <b>FY 2014 Plans:</b> - Continue the minor upgrade and modernization of test capabilities at AUTEC, Nanoose and Dabob. - Continue the development of Information Operations T&E capability at AUTEC. - Complete the refurbishment and service life extension of a range vessel at AUTEC. - Initiate range data information assurance project at Nanoose and Dabob. - Initiate range noise monitoring project at Nanoose and Dabob. - Initiate range radar obsolescence project at Nanoose and Dabob.				
Title: OPEN AIR RANGE INVESTMENTS  <div>Articles:</div> <b>Description:</b> This effort funds the modernization and upgrades of existing capabilities and the development of new T&E capabilities required at the Navy's Major Range Test Facility Base open air ranges at the Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD, Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA and China Lake, CA and Pacific Missile Range Facility (PMRF), Kauai, HI.  <b>FY 2012 Accomplishments:</b> - Continued the minor upgrade and modernization of test capabilities at NAWCAD, NAWCWD and PMRF. - Continued the modernization of the Kineto Tracking Mounts at NAWCWD. - Continued the development and installation of a remote telemetry system for San Nicolas Island at Naval Air Warfare Center Weapons Division NAWCWD. - Continued the modernization and upgrade of crypto equipment at NAWCAD, NAWCWD and PMRF. - Completed the cleanup of expended depleted uranium at NAWCWD. - Completed the modernization of optical and radar tracking equipment and telemetry systems at PMRF. - Completed the modernization and upgrade of the Multiple Target Instrumented Radar at NAWCAD. - Initiated cultural resource surveys at NAWCWD. - Initiated aircraft prototyping secure network installation at NAWCAD.		19.349 0	20.069 0	30.233 0

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2012</b>	<b>FY 2013</b>
<ul style="list-style-type: none"> <li>- Initiated radar service life extension project at NAWCAD.</li> <li>- Initiated telemetry re-radiation pod modernization at NAWCAD.</li> <li>- Initiated video instrumentation modernization at NAWCAD.</li> <li>- Initiated and completed the Mobile Aerial Target Support System modernization at Pacific Missile Range Facility (PMRF).</li> </ul> <p><b>FY 2013 Plans:</b></p> <ul style="list-style-type: none"> <li>- Continue the minor upgrade and modernization of test capabilities at Naval Air Warfare Center Aircraft Division (NAWCAD), Naval Air Warfare Center Weapons Division (NAWCWD) and PMRF.</li> <li>- Continue radar service life extension project at NAWCAD.</li> <li>- Continue video instrumentation modernization at NAWCAD.</li> <li>- Complete the modernization and upgrade of crypto equipment at NAWCAD, NAWCWD and PMRF.</li> <li>- Complete the development and installation of a remote telemetry system for San Nicolas Island at NAWCWD.</li> <li>- Complete the modernization of the Kineto Tracking Mounts at NAWCWD.</li> <li>- Complete telemetry re-radiation pod modernization at NAWCAD.</li> <li>- Continue cultural resources surveys at NAWCWD.</li> <li>- Initiate development of the Aircraft Prototype Facility secure network at NAWCAD.</li> </ul> <p><b>FY 2014 Plans:</b></p> <ul style="list-style-type: none"> <li>- Continue the minor upgrade and modernization of test capabilities at NAWCAD, NAWCWD and PMRF.</li> <li>- Continue development of the Aircraft Prototype Facility secure network at NAWCAD.</li> <li>- Complete radar service life extension project at NAWCAD.</li> <li>- Complete video instrumentation modernization at NAWCAD.</li> <li>- Initiate upgrade to the Land Range communications infrastructure.</li> <li>- Initiate Sea Range telemetry antenna servo upgrades.</li> <li>- Initiate procurement of new aircraft position tracking system.</li> <li>- Initiate and complete the purchase of secure network system for the aircraft prototyping facility.</li> <li>- Initiate the replacement of the voice switch at NAWCAD.</li> <li>- Initiate and complete the upgrade to the airborne separation video system at NAWCAD.</li> <li>- Initiate and complete the modernization of a radar signal processor at NAWCAD.</li> <li>- Initiate the modernization of the Kineto Tracking Mounts at NAWCAD.</li> <li>- Initiate the modernization of the telemetry system at PMRF.</li> <li>- Initiate the modernization of object tracking radars at PMRF.</li> </ul>			
<b>Title:</b> TEST FACILITIES INVESTMENTS		3.508	7.125
<b>Articles:</b>		0	0
		1.100	0

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2012</b>	<b>FY 2013</b>
<p><b>Description:</b> This effort funds the modernization and upgrades of existing capabilities and the development of new NAWCAD, Patuxent River, MD, and NAWCWD, Point Mugu, CA and China Lake, CA.</p> <p><b>FY 2012 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>- Continued the minor upgrade and modernization of test capabilities at Naval Air Warfare Center Aircraft Division (NAWCAD) and Naval Air Warfare Center Weapons Division (NAWCWD).</li> <li>- Initiated the helicopter drive system test facility sustainment program at NAWCAD.</li> <li>- Initiated the bio-fuel blending and evaluation facility development at NAWCAD.</li> <li>- Initiated and complete the drop tower facility upgrade at NAWCWD.</li> <li>- Initiated and complete the propulsion control room upgrade at NAWCWD.</li> <li>- Initiated and complete upgrade of the CT-1 facility at NAWCWD.</li> </ul> <p><b>FY 2013 Plans:</b></p> <ul style="list-style-type: none"> <li>- Continue the minor upgrade and modernization of test capabilities at NAWCAD and NAWCWD.</li> <li>- Complete the helicopter drive system test facility sustainment program at NAWCAD.</li> <li>- Complete the bio-fuel blending and evaluation facility development at NAWCAD.</li> <li>- Initiate and complete the development of a Joint Precision Approach and Landing System capability at NAWCAD.</li> </ul> <p><b>FY 2014 Plans:</b></p> <ul style="list-style-type: none"> <li>- Continue the minor upgrade and modernization of test capabilities at NAWCAD and NAWCWD.</li> <li>- Initiate the upgrade to general instrumentation and equipment.</li> </ul>			
<b>Accomplishments/Planned Programs Subtotals</b>		36.670	35.894
<b>C. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b>			
Not Applicable.			
<b>E. Performance Metrics</b>			
Successfully achieve Initial Operational Capability of 8-15 Improvement and Modernization projects per year and have 90% of test capabilities scheduled in support of Navy acquisition test programs within 180 days.			