Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 6: RDT&E

PE 0604759N I Major T&E Investment

Management Support

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO <sup>#</sup>	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	0.000	32.989	38.033	123.993	-	123.993	62.526	44.986	42.128	42.429	Continuing	Continuing
2195: T & E Investment	0.000	32.989	38.033	123.993	-	123.993	62.526	44.986	42.128	42.429	Continuing	Continuing

<sup>&</sup>lt;sup>#</sup> The FY 2015 OCO Request will be submitted at a later date.

## A. Mission Description and Budget Item Justification

This project corrects major deficiencies, improves Test & Evaluation (T&E) capabilities, and increases T&E support effectiveness at Navy Major Range and Test Facility Base. 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, 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. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	35.894	38.033	38.976	-	38.976
Current President's Budget	32.989	38.033	123.993	-	123.993
Total Adjustments	-2.905	-	85.017	-	85.017
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Program Adjustments</li> </ul>	-	-	0.068	-	0.068
<ul> <li>Rate/Misc Adjustments</li> </ul>	-	-	84.949	-	84.949
<ul> <li>Congressional General Reductions</li> </ul>	-2.905	-	-	-	-
Adjustments					

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy		Date: March 2014		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 6: RDT&E Management Support	R-1 Program Element (Number/Name)			
Change Summary Explanation Technical: Not applicable. Schedule: Not applicable.				

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy									Date: March 2014			
					, , , , , , , , , , , , , , , , , , , ,				Number/Name) & E Investment			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
2195: T & E Investment	-	32.989	38.033	123.993	-	123.993	62.526	44.986	42.128	42.429	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

<sup>\*</sup> The FY 2015 OCO Request will be submitted at a later date.

## A. Mission Description and Budget Item Justification

This project corrects major deficiencies, improves Test & Evaluation (T&E) capabilities, and increases T&E support effectiveness at Navy Major Range and Test Facility Base. 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.

The increase in funding in FY 2015 is for procurement of a Range Support Aircraft (RSA). RSA will provide range clearance and Beyond Line-of-Sight (BLoS) Telemetry (TM) and Flight Termination Services (FTS) on Navy sea ranges - primarily Pt. Mugu, CA and Pacific Missile Range Facility, HI. The current TM equipped P-3 aircraft must be replaced because the airframe is not supportable beyond FY 2019.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: UNDERSEA RANGE INVESTMENTS	7.700	6.700	7.437
Articles:	-	-	-
<b>Description:</b> 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 2013 Accomplishments:			
- Continued the minor upgrade and modernization of test capabilities at AUTEC, Nanoose and Dabob.			
- Continued the upgrade to the T&E target at Nanoose and Dabob.			
- Initiated and completed the development and installation of broadband capable T&E targets at Nanoose and Dabob.			
- Initiated the refurbishment and service life extension of a range vessel at AUTEC.			
- Initiated the development of Information Operations T&E capability at AUTEC.			
FY 2014 Plans:			
- Continue the minor upgrade and modernization of test capabilities at AUTEC, Nanoose and Dabob.			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	larch 2014	
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0604759N I Major T&E Investment		ct (Number/N		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quant	ities in Each)		FY 2013	FY 2014	FY 2015
<ul> <li>Continue the development of Information Operations T&amp;E capability at a</li> <li>Complete the refurbishment and service life extension of a range vesse</li> <li>Initiate range data information assurance project at Nanoose and Dabo</li> <li>Initiate range noise monitoring project at Nanoose and Dabob</li> <li>Initiate range radar obsolescence project at Nanoose and Dabob</li> </ul>	l at AUTEC.				
FY 2015 Plans:  - Continue the minor upgrade and modernization of test capabilities at At Nanoose and Dabob.  - Continue the development of Information Operations Test & Evaluation  - Continue range data information assurance project at Nanoose and Dale  - Complete range noise monitoring project at Nanoose and Dabob.  - Complete the upgrade to the T&E target at Nanoose and Dabob.  - Initiate replacement of in-water sensors at AUTEC.  - Initiate range craft service life extension at Nanoose and Dabob.  - Initiate and complete tracking radar replacement at Nanoose and Dabo	(T&E) capability at AUTEC. bob.	EC),			
Title: OPEN AIR RANGE INVESTMENTS	A	rticles:	18.164 -	30.233	114.93
<b>Description:</b> This effort funds the modernization and upgrades of existin capabilities required at the Navy's Major Range Test Facility Base open a Division (NAWCAD), Patuxent River, MD, Naval Air Warfare Center Wealake, CA and Pacific Missile Range Facility (PMRF), Kauai, HI.  The increase in funding in FY 2015 is for procurement of a Range Suppose Beyond Line-of-Sight (BLoS) Telemetry (TM) and Flight Termination Service CA and Pacific Missile Range Facility, HI. The current TM equipped P-3 supportable beyond FY 2019.	air ranges at the Naval Air Warfare Center Aircraft apons Division (NAWCWD), Point Mugu, CA and Clort Aircraft (RSA). RSA will provide range clearance vices (FTS) on Navy sea ranges - primarily Pt. Mug	e and Ju,			
FY 2013 Accomplishments:  - Continued the minor upgrade and modernization of test capabilities at N - Continued radar service life extension project at NAWCAD Continued video instrumentation modernization at NAWCAD Completed the modernization and upgrade of crypto equipment at NAW - Completed the development and installation of a remote telemetry syste Completed the modernization of the Kineto Tracking Mounts at NAWCA	/CAD, NAWCWD and PMRF. em for San Nicolas Island at NAWCWD.				

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: I	March 2014			
Appropriation/Budget Activity 1319 / 6						
B. Accomplishments/Planned Programs (\$ in Millions, Articl	le Quantities in Each)	FY 2013	FY 2014	FY 2015		
<ul> <li>Completed telemetry re-radiation pod modernization at NAWC,</li> <li>Continued cultural resources surveys at NAWCWD.</li> <li>Initiated development of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the control of the Aircraft Prototype Facility secure named to the Aircraft Prototype Prototype Prototype Prototype Prototype Prototype Prototype Protot</li></ul>						
FY 2014 Plans:  Continue the minor upgrade and modernization of test capability continue cultural resources surveys at Naval Air Warfare Center Continue development of the Aircraft Prototype Facility secure Complete radar service life extension project at NAWCAD.  Complete video instrumentation modernization at NAWCAD.  Initiate upgrade to the Land Range communications infrastructed Initiate Sea Range telemetry antenna servo upgrades.  Initiate procurement of new aircraft position tracking system.  Initiate and complete the purchase of secure network system for Initiate the replacement of the voice switch at NAWCAD.  Initiate and complete the upgrade to the airborne separation videonitate and complete the modernization of a radar signal proce.  Initiate the modernization of the Kineto Tracking Mounts at NAVIII Initiate the modernization of object tracking radars at PMRF.	ter Weapons Division (NAWCWD).  network at Naval Warfare Center Aircraft Division (NAWCA)  ture.  for the aircraft prototyping facility.  deo system at NAWCAD.  essor at NAWCAD.  WCAD.	AD).				
FY 2015 Plans:  - Continue the minor upgrade and modernization of test capability.  - Continue Sea Range telemetry antenna servo upgrades.  - Continue procurement of new aircraft position tracking system.  - Continue the upgrade to the airborne separation video system.  - Continue the modernization of the Kineto Tracking Mounts at N.  - Continue the modernization of the telemetry system at PMRF.  - Complete upgrade to the Land Range communications infrastr.  - Complete cultural resources surveys at NAWCWD.  - Complete the purchase of secure network system for the aircraft.  - Complete the replacement of the voice switch at NAWCAD.  - Initiate the modernization of the imaging radar at PMRF.  - Initiate video microwave link replacement at NAWCWD.	at NAWCAD. NAWCAD. ructure. aft prototyping facility.					

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- Initiate target vessel modernization at NAWCWD.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy	Date: March 2014
	Number/Name) & E Investment

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
- Initiate procurement of Range Support Aircraft.			
Title: TEST FACILITIES INVESTMENTS  Articles:	7.125 -	1.100 -	1.623 -
<b>Description:</b> This effort funds the modernization and upgrades of existing capabilities and the development of new Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD, and Naval Air Warfare Center Weapon Division (NAWCWD), Point Mugu, CA and China Lake, CA.			
FY 2013 Accomplishments:  - Continued the minor upgrade and modernization of test capabilities at NAWCAD and NAWCWD.  - Completed the helicopter drive system test facility sustainment program at NAWCAD.  - Completed the bio-fuel blending and evaluation facility development at NAWCAD.  - Initiated and completed the development of a Joint Precision Approach and Landing System capability at NAWCAD.			
FY 2014 Plans: - Continue the minor upgrade and modernization of test capabilities at NAWCAD and NAWCWD Initiate the upgrade to general instrumentation and equipment.			
FY 2015 Plans:  - Continue the minor upgrade and modernization of test capabilities at NAWCAD and NAWCWD.  - Continue the upgrade to general instrumentation and equipment.  - Initiate the modernization of the helicopter propulsion data acquisition system.			
Accomplishments/Planned Programs Subtotals	32.989	38.033	123.993

# C. Other Program Funding Summary (\$ in Millions)

N/A

Navy

## Remarks

# D. Acquisition Strategy

Not Applicable.

# **E. Performance Metrics**

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.

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