CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							Februa	ry 2006
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMEN	CLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION	, NAVY /	BA-6			0604759N, MAJOF	R T&E INVESTMEN	IT	
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Total PE Cost	40.265	40.486	39.750	41.938	44.053	44.798	45.787	
2195 T&E Investment	38.248	39.086	39.750	41.938	44.053	44.798	45.787	
9605 Adapting Fleet Support and Readiness Training	2.017							
9999 Congressional Adds		1.400						
					1			

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 Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; 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 (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility (PSEF) located at the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD and the test capabilities located at the Pacific Missile Range Facility, Kauai, HI.

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EXHIBIT R-2a, RDT&E Project Justification							DATE:		
							February 2006		
APPROPRIATION/BUDGET ACTIVITY									
RDT&E, N / BA-6	0604759N, MAJOR	1604759N, MAJOR T&E INVESTMENT 2195, T&E Investment							
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Project Cost	38.248	39.086	39.750	41.938	44.053	44.798	45.787		
RDT&E Articles Qty Not Applicable									

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 Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; 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 (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility (PSEF) located at the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD and the test capabilities located at the Pacific Missile Range Facility, Kauai, HI.

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ROPRIATION/BUDGET ACTIVITY T&E, N / BA-6				DATE:
				February 2006
T&E, N / BA-6	PROGRAM ELEMENT NUM	IBER AND NAME	PROJECT NUMBER AND N	IAME
	0604759N, MAJOR T&E INV	/ESTMENT	2195, T&E Investment	
B. ACCOMPLISHMENTS/PLANNED PROG	RAM:			
	FY 2005	FY 2006	FY 2007	
Accomplishments/Effort/Subtotal Cost	6.864	5.902	4.050	
RDT&E Articles Qty				

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
				February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND N	AME	
RDT&E, N / BA-6	0604759N, MAJOR T&E INVESTMENT	2195, T&E Investment		
		-	•	

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

	FY 2005	FY 2006	FY 2007	
Accomplishments/Effort/Subtotal Cost	22.419	25.481	28.978	
RDT&E Articles Qty				

Open Air Range Investments - This effort funds the modernization and upgrades of existing capabilities and the development of new test capabilities required at the MRTFB open air ranges (Sea Range, Land Range, Electronic Combat Range, Air Vehicle Modification and Instrumentation and Atlantic Test Range (ATR).

Sea Range - The modernization of frequency monitoring capabilities; the modernization of the fifth tracking radar; the development and integration of target launch, airborne telemetry, optics, flight termination capabilities for the range support aircraft; the upgrade of video capabilities (from analog to digital); the replacement of Very High Frequency (VHF), Ultra High Frequency (UHF), and High Frequency (HF) radio transmitters; the modernization of the mobile radio communications system; the moderization of range timing and sensor interface hardware/software; the addition of enhanced (digital) flight termination system; the modernization of the telemetry antenna systems; the modernization of the post flight analysis system and the procurement and integration of the next generation Global Positional System (GPS) tracking system Enhanced Range Application Program (EnRAP).

Land Range - The modernization of frequency monitoring capabilities; the upgrade of video capabilities (from analog to digital); the modernization of communication infrastructure; the replacement of VHF and UHF radio transmitters; the modernization of the mobile radio communications system; the moderization of range timing and sensor interface hardware/software; the addition of enhanced (digital) flight termination system; the modernization of the telemetry antenna systems; the modernization of the post flight analysis system; the upgrade of the Infra-Red camera capability, and the procurement and integration of the next generation GPS tracking system (EnRAP).

Electronic Combat Range -The modernization of frequency monitoring and threat calibration capabilities; the procurement and integration of a classified and unclassified voice system; the upgrade of video capabilities, the replacement of VHF and UHF radio transmitters; the modernization of the mobile radio communications system; the modernization of range timing and threat system interface; the modernization of the Post Test Data Warehouse system; the modernization of two tracking radars, the modernization of the telemetry processing system, and the procurement and integration of the next generation GPS tracking system (EnRAP).

Air Vehicle Modification and Instrumentation - The moderization of six telemetry test carts; the procurement of solid state recorders; the moderization of test measurement sensors.

Atlantic Test Range - The modernization of communication links and integration of range safety data between ATR and Webster Field (FY05 Cong. Add - Upgrade and Enhance Instrumentation); the upgrade of video capabilities (from analog to digital); the modernization of the radar cross section emitters pedestals; the upgrade of the classified and unclassified local area network; the moderization and addition of telemetry antennas; the replacement of VHF and UHF radio transmitters; the upgrade of the Infra-Red signature measurement software and hardware; and the procurement and integration of the next generation GPS tracking system (EnRAP).

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EXHIBIT R-2a, RDT&E Project Justificat	tion			DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUME	RED AND NAME	PROJECT NUMBER AND	February 2006
				PIVAINE
RDT&E, N / BA-6	0604759N, MAJOR T&E INV	ESTMENT	2195, T&E Investment	
B. ACCOMPLISHMENTS/PLANNED PROGR	RAM:			
	FY 2005	FY 2006	FY 2007	
Accomplishments/Effort/Subtotal Cost	8.965	7.703	6.722	
RDT&E Articles Qty				
Test Facilities Investments - This effort funds t	he modernization and upgrades of ex	sisting capabilities and	he development of new test ca	pabilities required at the MRTFB test facilities (Air Combat
Environment Test and Evaluation Facility (ACE	ETEF), Electromagnetic Environmenta	al Effects (E3), Propuls	onal Systems Evaluation Facili	ity (PSEF), Ordnance T&E Facility).
ACETEF - The development and integration of	of an advanced radar environment stir	nulator; the procureme	nt and integration of communic	ation and security equipment required to support the classified
		SIL) MILCON; the proc	urement of fiber channel bus m	nonitoring and stimulation capability; the modernization of threat
simulation transimitters; the modernization of t	ne GPS simulator.			
E3 - The modernzation of the tempest certifica	tion systems: and the moderization o	f E3 laboratory test ed	uinment	
20 The modernzation of the tempest sertinous	mon systems, and the moderization o	Lo laboratory tool eq	aipinoni.	
PSEF - The development and integration of a	High Cycle Fatigue (HCF) Test Capa	bility; the upgrade the	Helicopter Transmission Test F	acility (HTTF) to support greater horsepower/torque and
provide quicker setup time.				
Ordnance T&E - The modernization of the tact	ical propulsion data acquisition and v	ideo systems.		

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XHIBIT R-2a, RDT&E Project Justification							DATE:			
							F	ebruary 200	6	
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	EMENT NUMBER A	ND NAME		PROJECT NU	JMBER AND N	AME			
DT&E, N / BA-6	0604759N, MA	IOR T&E INVESTM	ENT		2195, T&E Inv	estment/				
C. PROGRAM CHANGE SUMMARY:										
Funding:		FY 2005	FY 2006	FY 2007						
Previous President's Budget:		40.518	39.682	39.836						
Current BES/President's Budget		38.248	39.086	39.750		=				
Total Adjustments		-2.270	-0.596	-0.086						
Summary of Adjustments										
Congressional Undistributed Redu	uctions	-0.060	-0.415							
Economic Assumption			-0.181	0.487						
Program Adjustments				-0.573						
Execution Adjustments		-2.210				_				
	Subtotal	-2.270	-0.596	-0.086						
D. OTHER PROGRAM FUNDING SUMMARY: N	lot Applicable.									
									То	Total
Line Item No. & Name		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	<u>Complete</u>	Cost
E. ACQUISITION STRATEGY: Not Applicable.										

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EXHIBIT R-2a, RDT&E Project Justification							DATE:		
							Februa	ary 2006	
APPROPRIATION/BUDGET ACTIVITY									
RDT&E, N / BA-6	0604759N, MAJOR T&E INVESTMENT 9605, Adapting Fleet Support and Reading						ness Training		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Project Cost	2.017								
RDT&E Articles Qty Not Applicable									

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project augments and improves existing Test and Evaluation instrumentation located at Naval Air Warfare Center Aircraft Division, Patuxent River, MD in order to better support fleet training requirements. Project will upgrade capabilities at the air ops, ship's ground station, and atlantic test range facilities.

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EXHIBIT R-2a, RDT&E Project Justifica	tion			DATE:	
PROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	ADED AND NAME	PROJECT NUMBER AN	February 200	06
T&E, N / BA-6	0604759N, MAJOR T&E IN\	VESTMENT	9605, Adapting Fleet Supp	ort and Readiness Training	
B. ACCOMPLISHMENTS/PLANNED PROG	RAM:				
	FY 2005	FY 2006	FY 2007		
Accomplishments/Effort/Subtotal Cost	2.017				
RDT&E Articles Qty					
Project will acquire and integrate a manpad si	nulator, blue force target replicas, po	ortable emitter control, c	ommunication links and airsp	ace management improvements.	

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EXHIBIT R-2a, RDT&E Project Justification	KHIBIT R-2a, RDT&E Project Justification						DATE:				
							F	ebruary 200	6		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELE	MENT NUMBER A	ND NAME		PROJECT NU	MBER AND N	AME	-			
RDT&E, N / BA-6	0604759N, MAJ0	OR T&E INVESTM	ENT		9605, Adapting	Fleet Support a	nd Readiness Ti	raining			
·	•										
C. PROGRAM CHANGE SUMMARY:											
Funding:		FY 2005	FY 2006	FY 2007							
Previous President's Budget:		2.055									
Current BES/President's Budget		2.017									
Total Adjustments		-0.038				•					
Summary of Adjustments											
Congressional Undistributed Reduction	ns	-0.049									
Execution Adjustments		0.011									
	Subtotal	-0.038				•					
D. OTHER PROGRAM FUNDING SUMMARY: Not A	pplicable.										
Line Here No. 9 Norse		EV 2005	EV 2000	EV 2007	EV 2000	EV 2000	EV 2010	EV 2011	To	Total	
Line Item No. & Name		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	<u>Complete</u>	<u>Cost</u>	
E. ACQUISITION STRATEGY: Not Applicable.											
		D 4 CHODE	NI 10 1 10 T		4.40						

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EXHIBIT R-2a, RDT&E Project Justification							DATE:		
							Februa	ary 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEM	PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME							
RDT&E, N / BA-6	0604759N, MAJOI	0604759N, MAJOR T&E INVESTMENT 9999, Congressional Adds							
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Project Cost		1.400							
RDT&E Articles Qty Not Applicable									

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional Adds.

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EXHIBIT R-2a, RDT&E Project Justification				DATE:	February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM	BER AND NAME	PROJECT NUMBER AND	NAME	1 051441 2000
RDT&E, N / BA-6	0604759N, MAJOR T&E INV		9999, Congressional Adds		
B. ACCOMPLISHMENTS/PLANNED PROGRAM:	·		, , ,		
9776, Integrating Navy RDT&E and Training Resources	FY 2005	FY 2006	FY 2007		
Accomplishments/Effort/Subtotal Cost		1.400			
RDT&E Articles Qty					
Integrating Navy RDT&E and Training resources to acceler	ate transformation of the fleet.				

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EXHIBIT R-2a, RDT&E Project Justification						DATE:					
							F	ebruary 200	6		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME						
RDT&E, N / BA-6	0604759N, MAJO	0604759N, MAJOR T&E INVESTMENT				9999, Congressional Adds					
C. PROGRAM CHANGE SUMMARY:											
Funding: Previous President's Budget: Current BES/President's Budget Total Adjustments		FY 2005	FY 2006 0.000 1.400	FY 2007		-					
Summary of Adjustments Congressional Increases	Subtotal		1.400								
D. OTHER PROGRAM FUNDING SUMMARY: N									To	Tatal	
Line Item No. & Name		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	<u>Complete</u>	Total <u>Cost</u>	
E. ACQUISITION STRATEGY: Not Applicable.											

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