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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	350.514	369.154	376.418	0.000	376.418	358.005	362.759	368.401	375.546	Continuing	Continuing
0541: <i>AUTEC</i>	54.724	55.962	57.885	0.000	57.885	59.034	59.921	61.090	62.280	Continuing	Continuing
0566: <i>NAVAIR Environmental Compliance</i>	3.809	4.070	2.098	0.000	2.098	2.089	2.161	2.204	2.247	Continuing	Continuing
0653: <i>NAWC Weapons Division</i>	145.823	150.085	154.442	0.000	154.442	156.085	158.836	161.810	164.834	Continuing	Continuing
0654: <i>NAWC Acft Division</i>	112.333	116.049	122.604	0.000	122.604	102.145	104.109	105.923	107.806	Continuing	Continuing
2921: <i>Pacific Missile Range Facility</i>	5.954	5.119	5.227	0.000	5.227	3.330	1.438	0.109	0.111	Continuing	Continuing
2922: <i>MRTFB Maint & Repair</i>	15.520	25.368	21.300	0.000	21.300	22.236	23.043	23.756	24.498	Continuing	Continuing
3029: <i>T&E Policy Support</i>	0.691	0.755	0.782	0.000	0.782	0.782	0.789	0.804	0.820	Continuing	Continuing
3154: <i>Nanoose and Dabob Bay Ranges</i>	11.660	11.746	12.080	0.000	12.080	12.304	12.462	12.705	12.950	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Environmental Compliance Program; Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu and China Lake, CA; Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD; T&E related capabilities at the Pacific Missile Range Facility, Barking Sands, HI; Maintenance and Repair at NAVAIRWARCENWPNDIV and NAVAIRWARCENACDIV; and the Naval Undersea Warfare Center Keyport (NAVUNSEAWARCENKEYPORT) Nanoose and Dabob Bay Ranges. The Test and Evaluation (T&E) activities make up the Navy portion of the Department of Defense's Major Range and Test Facility Base (MRTFB). These activities are chartered to perform T&E for the development and acquisition of technology advanced weapons systems. Core T&E capabilities and capacity are operated to obtain weapons system performance documentation for acquisition program milestone decisions to provide operational forces with effective weapons systems. This program provides Navy Acquisition Program Managers required test capabilities; lowers cost of T&E; removes cost and scheduling impact of providing their own T&E resources; and retains the physical airspace, land space and sea space needed to conduct testing.

This Program Element includes \$1.688M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>
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B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	340.890	380.733	0.000	0.000	0.000
Current President's Budget	350.514	369.154	376.418	0.000	376.418
Total Adjustments	9.624	-11.579	376.418	0.000	376.418
• Congressional General Reductions		-1.579			
• Congressional Directed Reductions		-10.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	9.999	0.000			
• SBIR/STTR Transfer	-0.375	0.000			
• Program Adjustments	0.000	0.000	376.418	0.000	376.418

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0541: <i>AUTEC</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0541: <i>AUTEC</i>	54.724	55.962	57.885	0.000	57.885	59.034	59.921	61.090	62.280	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

As a detachment of Naval Undersea Warfare Center (NUWC), Division Newport, the mission of the Atlantic Undersea Test and Evaluation Center (AUTEC) is to provide the US Navy an underwater range facility for full-spectrum test and evaluation of Undersea Warfare (USW) systems and for Fleet training and readiness assessment. The AUTEC Program Office is headquartered at Newport, RI. AUTEC's administrative offices are located at West Palm Beach, Florida. Test facilities are located at Andros Island, Sites 1 through 4, and the Berry Islands in the Bahamas. AUTEC aircraft make scheduled daily flights between West Palm Beach and Andros Town Airport.

AUTEC manages and, under service contract, maintains and operates a 500 square nautical miles deep-water and a 100 square nautical miles shallow-water acoustic tracking range; air-target tracking capabilities; sonobuoy simulation systems; electronic warfare threat simulation systems; fixed and rotary wing aircraft; aircraft ground support facilities; acoustic targets; torpedo retrieval and flushing capabilities; open-ocean range craft; marine support facilities; and, data processing and analysis capabilities.

Major test facilities on Andros Island are located at Site 1. The Command Control Building houses the range tracking displays and replay centers, the computer center, operations support functions, communications center, and the central timing system. The Range Support Facility houses a torpedo post-run workshop, Mark 46 /Mark 50 lightweight torpedo Intermediate Maintenance Activity (IMA), a Mark 30 undersea target IMA, a Mark 48 heavyweight torpedo R&D Turnaround facility and related technical facilities. The complex includes electrical and physical calibration labs, a complete electronics maintenance shop, a dive locker, a precision machine shop, and logistics support areas.

AUTEC has a 285-foot concrete pier with a controlling depth of 17 feet (5.2 meters) at mean low tide. An adjacent wharf is approximately 240 feet in length (72 meters) with a controlling depth of 15 feet at mean low tide. Power is available at both locations. Facilities at the pier/marine area include fully equipped machine /fabrication and marine overhaul shops. Also at Site 1, six Range User Buildings (RUBs) are maintained for assembling test equipment and equipment check-out during test mobilization or dockside periods. These staging areas are equipped with a variety of power sources, gantry cranes, compressed air and security features. A fully equipped range user hanger for ground maintenance and storage of helicopters is located at the AUTEC helicopter airstrip. Sites 2, 3, and 4 are small instrumented areas located south of Site 1 used to extend tracking of sonobuoys, communications, and air target track.

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 0541: <i>AUTEC</i>		
This Project includes \$.270M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.						
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Atlantic Undersea Test and Eval Ctr Facility		43.404	44.912	46.835	0.000	46.835
<p>AUTEC is a Test and Evaluation (T&E) facility for collecting selected underwater, surface and air tracking data on test participants. This project funds the overhead/institutional costs required to sustain the MRTFB capabilities at AUTEC in accordance with Department of Defense Directive 3200.11.</p> <p><i>FY 2009 Accomplishments:</i> Atlantic Undersea Test and Evaluation Center Facility. Maintained and operated mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services.</p> <p><i>FY 2010 Plans:</i> Atlantic Undersea Test and Evaluation Center Facility. Continue to maintain and operate mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.</p>						
Bahamian Lease		11.050	11.050	11.050	0.000	11.050
Rental payments to the Bahamian government for use of land and ocean in the Bahamas.						

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B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Bahamian Lease. Provided rental payments to the Bahamian government for use of land and ocean in the Bahamas.</p> <p><i>FY 2010 Plans:</i> Bahamian Lease. Continue to provide rental payments to the Bahamian government for use of land and ocean in the Bahamas.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.</p>								
<p>DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding.</p> <p><i>FY 2009 Accomplishments:</i> DAWDF Realignment.</p>				0.270	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals				54.724	55.962	57.885	0.000	57.885
C. Other Program Funding Summary (\$ in Millions) N/A								
D. Acquisition Strategy N/A								
E. Performance Metrics Maintain MRTFB infrastructure in a ready state to provide between 2,500-2,900 range hours in support of multiple Navy and DoD acquisition programs and fleet training.								

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>				PROJECT 0566: <i>NAVAIR Environmental Compliance</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0566: <i>NAVAIR Environmental Compliance</i>	3.809	4.070	2.098	0.000	2.098	2.089	2.161	2.204	2.247	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This continuing project supports environmental compliance, conservation and pollution prevention related efforts at the Navy Major Range and Test Facility Base (MRTFB) located at Patuxent River, MD, China Lake, CA, Point Mugu, CA, and Atlantic Undersea Test and Evaluation Center (AUTEC), Bahamas. The Navy MRTFB environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.

The MRTFB are test and evaluation facilities that provide for Department of Defense (DoD) test and evaluation support missions. These missions include: Weapons system testing, military operational squadron training on new weapon systems, and validation of performance or operational characteristics.

This Project includes \$.019M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Environmental Compliance Continues hazardous waste disposal, solid waste disposal, natural and cultural resources programs, environmental permits, and environmental monitoring at AUTEC, Patuxent River, China Lake and San Nicolas Island. <i>FY 2009 Accomplishments:</i> Environmental Compliance. Continue comprehensive air pollution meteorology studies at Point Mugu. Continue range contamination assessments at impact areas and lay down yards at China	3.790	4.070	2.098	0.000	2.098

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0653: <i>NAWC Weapons Division</i>	145.823	150.085	154.442	0.000	154.442	156.085	158.836	161.810	164.834	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Project provides continuing maintenance and operational support for the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV) Test and Evaluation (T&E) capabilities. These capabilities include the Pacific Ranges and Facilities, consisting of China Lake Ranges and the Point Mugu Sea Range, aerial and surface targets, test instrumentation, and T&E aircraft. The Pacific Ranges use China Lake's 1.1 million acres of land and 17,000 square miles of military restricted (R-2508) airspace together with Point Mugu's 125,000 square miles of instrumented sea range and 36,000 square miles of controlled overlying airspace, and airfield and test instrumentation at San Nicolas Island to perform its T&E mission. Included in the China Lake ranges is the Electronic Combat Range (ECR), which provides outdoor free space development and operational testing of airborne electronic warfare (EW) systems and tactics against shipboard and land based air defense systems. These ranges perform metric radar, multilateration and optical tracking of test objects; command, control, and destruct for range safety purposes; communications; frequency interference control and analysis; collection processing and display of telemetered data; real-time data processing and display; and the operation of a sub scale aerial target launch capability. Other test capabilities include an outdoor High Power Microwave (HPM) measurement facility; propulsion, warhead, environmental, rocket motor, and other missile component test facilities; and gun ranges. This project funds costs that are not chargeable to customers.

This Project includes \$.725M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Pacific Ranges In accordance with (IAW) Department of Defense Directive (DoDD) 3200.11., this project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities at the Pacific Ranges and Facilities located at China Lake and Point Mugu CA. These facilities provide safe, instrumented, controlled open air testing utilizing the Land Range, Sea Range, Electronic Combat Range, Air Vehicle Modification and Instrumentation, and San Nicholas Island.	63.333	63.942	65.958	0.000	65.958

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.						
Staff This project funds the overhead/institutional costs required to sustain the Naval Air Warfare Center Weapons Division (NAWCWD) MRTFB Test and Evaluation capabilities. <i>FY 2009 Accomplishments:</i> Staff. Reimburses the Command for General and Administrative Support services. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. <i>FY 2010 Plans:</i> Staff. Continue to reimburse the Command for General and Administrative Support services. Continue to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Additional funds for utility costs increases and implementation of DoD IG utility charging findings. <i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.		41.731	45.674	46.783	0.000	46.783
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding. <i>FY 2009 Accomplishments:</i> DAWDF Realignment.		0.725	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals	145.823	150.085	154.442	0.000	154.442

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Maintain MRTFB infrastructure in a ready state to provide between 4,300-4,800 range hours, 125-150 aerial target presentations, 400-450 surface target presentations, 11,000-11,500 ordnance test hours, and over 6,000 flight hours in support of multiple Navy and DoD acquisition programs and fleet training.

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
0654: <i>NAWC Acft Division</i>	112.333	116.049	122.604	0.000	122.604	102.145	104.109	105.923	107.806	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funds for the maintenance and operations of the Naval Air Warfare Center Aircraft Division's (NAVAIRWARCENACDIV's) Major Range Test Facility Base (MRTFB) capabilities used to conduct test and evaluation for air platforms. NAVAIRWARCENACDIV has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft Research Development Test and Evaluation (RDT&E). This includes 50,000 square miles of airspace, 39,375 square miles of sea space, and 7,950 acres of land space. Product areas include aircraft systems flight test and evaluation, carrier suitability certification, test article preparation, installed system test and evaluation, and modeling and simulation support of the acquisition process. The Test and Evaluation (T&E) Group, Patuxent River, performs development and operational test and evaluation of manned and unmanned air vehicle systems, including mission systems, equipment, subsystems, components, and support systems. This project also provides test and evaluation facilities for air-breathing propulsion systems and extensive facilities for conducting both installed and uninstalled aircraft engine development and test and evaluation. This project funds costs that are not chargeable to customers.

This Project includes \$.513M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Atlantic Ranges This project funds the overhead/institutional costs required to sustain the MRTFB capabilities associated with the Atlantic Ranges and Facilities and Air Vehicle Modification and Instrumentation . These facilities provide safe, instrumented, controlled flight testing and training in air, sea, and land arenas.	23.957	25.106	25.065	0.000	25.065

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Atlantic Ranges. Maintained and operated mission essential/core test support resources. These resources include test article instrumentation and/or modification for Flight Test Aircraft and Weapons Under Test as well as, ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p><i>FY 2010 Plans:</i> Atlantic Ranges. Continue to maintain and operate mission essential/core test support resources. These resources include test article instrumentation and/or modification for Flight Test Aircraft and Weapons Under Test as well as, ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increase for the Aircraft Prototype Facility.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.</p>						
<p>Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility (ACETEF)</p> <p>This project funds the overhead/institutional costs required to sustain the MRTFB capabilities associated with Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility . These facilities provide T&E support with integrated, interactive, and repeatable synthetic environments and reduce the risk and cost for programs with the use of installed systems tests to include simulation and stimulation tools, techniques and technologies.</p>		21.598	21.469	21.326	0.000	21.326

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B. Accomplishments/Planned Program (\$ in Millions)																							
<table border="1"> <thead> <tr> <th></th> <th>FY 2009</th> <th>FY 2010</th> <th>FY 2011 Base</th> <th>FY 2011 OCO</th> <th>FY 2011 Total</th> </tr> </thead> <tbody> <tr> <td> maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. <i>FY 2011 Base Plans:</i> Continue all efforts of FY2010. </td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Naval Test Wing Atlantic This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Naval Test Wing Atlantic. These facilities provide support for Naval Aviation Systems Team aircraft, engaged in or supporting T&E of aircraft and aircraft systems. <i>FY 2009 Accomplishments:</i> Naval Test Wing Atlantic. Maintained and operated mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY10-11 budget increased to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF. <i>FY 2010 Plans:</i> Naval Test Wing Atlantic. Continue to maintain and operate mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increase to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF. </td> <td align="right">33.637</td> <td align="right">34.221</td> <td align="right">44.693</td> <td align="right">0.000</td> <td align="right">44.693</td> </tr> </tbody> </table>							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. <i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.						Naval Test Wing Atlantic This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Naval Test Wing Atlantic. These facilities provide support for Naval Aviation Systems Team aircraft, engaged in or supporting T&E of aircraft and aircraft systems. <i>FY 2009 Accomplishments:</i> Naval Test Wing Atlantic. Maintained and operated mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY10-11 budget increased to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF. <i>FY 2010 Plans:</i> Naval Test Wing Atlantic. Continue to maintain and operate mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increase to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF.	33.637	34.221	44.693	0.000	44.693
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total																		
maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. <i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.																							
Naval Test Wing Atlantic This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Naval Test Wing Atlantic. These facilities provide support for Naval Aviation Systems Team aircraft, engaged in or supporting T&E of aircraft and aircraft systems. <i>FY 2009 Accomplishments:</i> Naval Test Wing Atlantic. Maintained and operated mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY10-11 budget increased to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF. <i>FY 2010 Plans:</i> Naval Test Wing Atlantic. Continue to maintain and operate mission essential/core test support resources associated with aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increase to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF.	33.637	34.221	44.693	0.000	44.693																		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 0654: <i>NAWC Act Division</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2011 Base Plans:</i> Continue all efforts of FY2010. Increase to support additional chase and tanker aircraft required to support F/A-18E/F/G and JSF.</p>								
<p>Staff</p> <p>This project funds the overhead/institutional costs required to sustain the Naval Air Warfare Center Aircraft Division (NAWCAD) MRTFB Test and Evaluation capabilities.</p> <p><i>FY 2009 Accomplishments:</i> Staff. Reimburses the Command for General and Administrative Support services. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p><i>FY 2010 Plans:</i> Staff. Continue to reimburse the Command for General and Administrative Support services. Continue to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p><i>FY 2011 Base Plans:</i> Continue all efforts of FY2010 except for the funding of NMCI equipment which was realigned to different program element.</p>				26.611	28.710	25.090	0.000	25.090
<p>DAWDF Alignment</p> <p>Defense Acquisition Workforce Development Fund (DAWDF) funding.</p> <p><i>FY 2009 Accomplishments:</i> DAWDF Realignment.</p>				0.513	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 0654: <i>NAWC Acft Division</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals				112.333	116.049	122.604	0.000	122.604
C. Other Program Funding Summary (\$ in Millions) N/A								
D. Acquisition Strategy N/A								
E. Performance Metrics Maintain MRTFB infrastructure in a ready state to provide between 8,700-9,200 range hours, 4,900-5,300 chamber hours, 9,500-10,000 E3 test hours, and over 10,000 flight hours in support of multiple Navy and DoD acquisition programs and fleet training.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2921: <i>Pacific Missile Range Facility</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2921: <i>Pacific Missile Range Facility</i>	5.954	5.119	5.227	0.000	5.227	3.330	1.438	0.109	0.111	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program provides continuing maintenance and operations support for Test & Evaluation (T&E) related capabilities at the Pacific Missile Range Facility (PMRF) located at Barking Sands on Kauai, HI. PMRF's T&E capabilities include precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), and optical tracking systems. These assets support Navy, DOD, and Army Missile Defense Test & Evaluation. This project funds costs not chargeable to customers. Effective FY 12 and out, PMRF instrumentation will be phased out due to large funding reductions.

This Project includes \$.024M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Pacific Missile Range Facility This project funds the overhead/institutional costs required to sustain the recognized Major Range Test Facility Base (MRTFB) capabilities at PMRF in accordance with Department of Defense Directive 3200.11. <i>FY 2009 Accomplishments:</i> PMRF Test and Evaluation Assets. Maintained and operated mission essential/core test support resources including the precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Telemetry Systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual	5.930	5.119	5.227	0.000	5.227

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>		PROJECT 2921: <i>Pacific Missile Range Facility</i>				
B. Accomplishments/Planned Program (\$ in Millions)								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services. <i>FY 2010 Plans:</i> PMRF Test and Evaluation Assets. Continue to maintain and operate mission essential/core test support resources including the precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Telemetry Systems required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimburses the Command for General and Administrative support services. <i>FY 2011 Base Plans:</i> Continue all efforts of FY2010.								
DAWDF Realignment Defense Acquisition Workforce Development Fund (DAWDF) funding. <i>FY 2009 Accomplishments:</i> DAWDF Realignment.				0.024	0.000	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals				5.954	5.119	5.227	0.000	5.227
C. Other Program Funding Summary (\$ in Millions)								
N/A								
D. Acquisition Strategy								
N/A								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2921: <i>Pacific Missile Range Facility</i>

E. Performance Metrics

Maintain MRTFB infrastructure in a ready state to provide between 600-1,000 range hours in support of multiple Navy and DoD acquisition programs and fleet training.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy									DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>				PROJECT 2922: <i>MRTFB Maint & Repair</i>				
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost	
2922: <i>MRTFB Maint & Repair</i>	15.520	25.368	21.300	0.000	21.300	22.236	23.043	23.756	24.498	Continuing	Continuing	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0			
A. Mission Description and Budget Item Justification												
<p>This project provides funding for the maintenance and repair of the Major Range Test Facility Base (MRTFB) Real Property Maintenance Activities (RPMA) at the Naval Air Warfare Center Weapons Division (W0653) and the Naval Air Warfare Center Aircraft Division (0654). Funds mission critical emergency services, recurring maintenance and repair, and major repair projects. In addition it addresses priority items on the Backlog of Maintenance and Repair (BMAR) list.</p> <p>This Project includes \$.077M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.</p>												
B. Accomplishments/Planned Program (\$ in Millions)												
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
Facility Maintenance and Repair Maintenance and repair of the Major Range Test Facility Base (MRTFB) Real Property Maintenance Activities (RPMA) at the Naval Air Warfare Center Weapons Division (W0653) and the Naval Air Warfare Center Aircraft Division (0654). <i>FY 2009 Accomplishments:</i> Facility Maintenance and Repair. Supported mission critical emergency services, recurring maintenance and repair, and minor and major repair efforts at the Naval Air Warfare Center Weapons Division, the Naval Air Warfare Center Aircraft Division, and the Atlantic Undersea Test and Evaluation Center (AUTEC). FY09 budget funds MRTFB facility to 53% of DoD sustainment model.						15.443	25.368	21.300	0.000	21.300		

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3029: <i>T&E Policy Support</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3029: <i>T&E Policy Support</i>	0.691	0.755	0.782	0.000	0.782	0.782	0.789	0.804	0.820	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funds to support Test and Evaluation (T&E) policy, transformation, programming, requirements validation, and T&E dispute arbitration and resolution in an evolutionary acquisition environment. This expertise is also used as required to support the completion of the Navy T&E mission including oversight of T&E plans for Navy and Joint acquisition programs, liaison with other agencies on T&E matters, development of T&E strategic plans, conduct of T&E studies and assessments, formulation and validation of T&E capability needs, assessment and support of future testing of formal acquisition programs, and identification of Science and Technologies required to support T&E of future acquisition programs.

This Project includes \$.003M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
T&E Policy & Requirements Validation Support Test and Evaluation (T&E) policy and requirements validation. <i>FY 2009 Accomplishments:</i> T&E Policy & Requirements Validation Support. Provided funding for labor, material, and travel in support of the Test and Evaluation (T&E) policy and requirements validation. <i>FY 2010 Plans:</i> T&E Policy & Requirements Validation Support. Continue to provide funding for labor, material, and travel in support of the Test and Evaluation (T&E) policy and requirements validation.	0.688	0.755	0.782	0.000	0.782

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>
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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
3154: <i>Nanoose and Dabob Bay Ranges</i>	11.660	11.746	12.080	0.000	12.080	12.304	12.462	12.705	12.950	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides maintenance and operations support for the Nanoose and Dabob Bay Ranges along with associated support systems to provide Test and Evaluation (T&E) and readiness assessment services for acquisition programs and the Fleet. Operates ocean-based environment, measurement and support systems. Maintains and repairs systems that measure warfare system performance. Oversees test, training, and measurement facilities, equipment, operations and maintenance processes. Satisfies customer exercise and measurement requirements through the operation of ocean based test and measurement systems. Assures the readiness of systems through the implementation of calibration, maintenance, repair and life cycle processes. Performs exercise planning, exercise interpretation and development of surrogate environments, measurement and support systems. Assists in the design, fabrication and testing of systems for Undersea Warfare (USW) warfare environment simulation and performance measurement. Oversees the manning and maintenance of Naval Undersea Warfare Center (NUWC) Division Keyport range craft and range craft systems.

This Project includes \$.057M of Defense Acquisition Workforce Development Fund (DAWDF) funding for FY09.

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Undersea Ranges This project funds the overhead/Institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities at the Nanoose and Dabob Bay undersea tracking ranges. <i>FY 2009 Accomplishments:</i> Undersea Ranges. Maintained and operated mission essential/core test support resources associated with the unique test environments for test and evaluation of undersea weapons, sensors, submarines	11.603	11.746	12.080	0.000	12.080

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>

E. Performance Metrics

Maintain MRTFB infrastructure in a ready state to provide between 1,600-2,000 range hours in support of multiple Navy and DoD acquisition programs and fleet training.

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