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Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy **Date:** May 2021

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 6: RDT&E Management Support</i>					R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>							
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
Total Program Element	0.000	522.497	418.873	429.277	-	429.277	-	-	-	-	-	-
0541: <i>AUTEC</i>	0.000	53.840	54.213	59.626	-	59.626	-	-	-	-	-	-
0566: <i>NAVAIR Environmental Compliance</i>	0.000	4.572	4.158	4.960	-	4.960	-	-	-	-	-	-
0653: <i>NAWC Weapons Division</i>	0.000	155.988	152.741	150.136	-	150.136	-	-	-	-	-	-
0654: <i>NAWC Acft Division</i>	0.000	100.281	101.753	103.943	-	103.943	-	-	-	-	-	-
2511: <i>Natural Disaster Relief</i>	0.000	130.444	26.388	26.631	-	26.631	-	-	-	-	-	-
2921: <i>Pacific Missile Range Facility</i>	0.000	5.394	5.413	5.960	-	5.960	-	-	-	-	-	-
2922: <i>MRTFB Maint & Repair</i>	0.000	41.382	37.246	47.081	-	47.081	-	-	-	-	-	-
2958: <i>Cyberspace Activities</i>	0.000	0.433	0.439	0.444	-	0.444	-	-	-	-	-	-
3154: <i>Nanoose and Dabob Bay Ranges</i>	0.000	12.714	12.899	14.429	-	14.429	-	-	-	-	-	-
3386: <i>MRTFB Marine Vessels</i>	0.000	17.449	23.623	16.067	-	16.067	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

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 and maintenance required to support research, development, test and evaluation.

This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Environmental Compliance Program; Naval Air Warfare Center Weapons Division, Point Mugu and China Lake, CA; Naval Air Warfare Center Aircraft Division, Patuxent River, MD; Test and Evaluation related capabilities at the Pacific Missile Range Facility, Barking Sands, HI; Maintenance and Repair at Naval Air Warfare Center Weapons Division, Naval Air Warfare Center Aircraft Division, and Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center. The program also provides marine vessels overhauls and preventative maintenance in support of the 23 Major Range and Test Facility Base marine vessels located at Naval Air Warfare Center Weapons Division, Point Mugu, CA, Pacific Missile Range Facility, Honolulu, HI, Naval Undersea Warfare Center Keyport Nanoose and Dabob Bay Ranges, Keyport, WA, Naval Air Warfare Center Aircraft Division, Patuxent River, MD, and Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center. The Test and Evaluation activities make up the Navy portion of the Department of Defense's Major Range and Test Facility Base. These activities are chartered to perform Test and Evaluation for the development and acquisition of technologically advanced weapons systems. Core Test and Evaluation capabilities and capacity are operated to obtain weapons system performance documentation for acquisition program milestone decisions to

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provide operational forces with effective weapons systems. This program provides Navy Acquisition Program Managers required test capabilities; lowers cost of Test and Evaluation; removes cost and scheduling impact of developing and providing their own Test and Evaluation capabilities; and retains the physical airspace, land space and sea space needed to conduct testing.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	522.972	446.960	444.077	-	444.077
Current President's Budget	522.497	418.873	429.277	-	429.277
Total Adjustments	-0.475	-28.087	-14.800	-	-14.800
• Congressional General Reductions	-	-0.339			
• Congressional Directed Reductions	-	-27.748			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.891	0.000			
• SBIR/STTR Transfer	-1.366	0.000			
• Program Adjustments	0.000	0.000	-13.023	-	-13.023
• Rate/Misc Adjustments	0.000	0.000	-1.777	-	-1.777

Change Summary Explanation

The FY 2022 funding request was increased since the previous President's Budget submission by \$4.786M for Natural Disaster Recovery efforts; reduced by \$17.809M to account for the availability of prior year execution balances; and reduced by \$1.777M for miscellaneous rate adjustments.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy										Date: May 2021		
Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>				Project (Number/Name) 0541 / <i>AUTEC</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
0541: <i>AUTEC</i>	0.000	53.840	54.213	59.626	-	59.626	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

As a detachment of Naval Undersea Warfare Center, Division Newport, the mission of the Atlantic Undersea Test and Evaluation Center is to provide the US Navy an underwater range facility for full-spectrum test and evaluation of Undersea Warfare systems and for Fleet training and readiness assessment. The Atlantic Undersea Test and Evaluation Center Program Office is headquartered at Newport, RI. Atlantic Undersea Test and Evaluation Center'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. Atlantic Undersea Test and Evaluation Center aircraft make scheduled daily flights between West Palm Beach and Andros Town Airport.

Atlantic Undersea Test and Evaluation Center manages and, under service contract, maintains and operates a 500 square nautical mile deep-water and a 100 square nautical miles shallow-water range; air-target tracking capabilities; sonobuoy simulation systems; electronic warfare threat simulation systems; 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 and Mark 54 lightweight torpedo Intermediate Maintenance Activity, a Mark 30 undersea target Intermediate Maintenance Activity, a Mark 48 heavyweight torpedo Research and Development 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.

Atlantic Undersea Test and Evaluation Center 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 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 Atlantic Undersea Test and Evaluation Center 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. This project funds costs that are not chargeable to customers.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Atlantic Undersea Test and Eval Ctr Facility	42.084	42.457	47.870	0.000	47.870
Articles:	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Description: Atlantic Undersea Test and Evaluation Center is a Test and Evaluation facility for collecting selected underwater, surface and air tracking data on test participants. In accordance with Department of Defense Directive 3200.11, this project funds the overhead/institutional costs required to sustain the Major Range and Test Facility capabilities at Atlantic Undersea Test and Evaluation Center.</p> <p>FY 2021 Plans: Continue to maintain and operate mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Major Range and Test Facility Base operations. Reimburse the Command for General and Administrative support services. Continue to support resolution of policy compliance issues resulting from a Naval Sea Systems Command Inspector General/Newport Office of Counsel and Contracting review.</p> <p>FY 2022 Base Plans: Continue to maintain and operate mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Major Range and Test Facility Base operations. Reimburse the Command for General and Administrative support services. Continue to support resolution of policy compliance issues resulting from a Naval Sea Systems Command Inspector General/Newport Office of Counsel and Contracting review.</p> <p>FY 2022 OCO Plans: Not Applicable</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding increase from FY 2021 to FY 2022 in support of Information Assurance, Cyber Security and Vehicle Recapitalization.</p>					
<p>Title: Bahamian Lease</p> <p align="right">Articles:</p> <p>Description: Rental payments to the Bahamian government for use of land and ocean in the Bahamas.</p> <p>FY 2021 Plans: Continue to provide rental payments to the Bahamian government for use of land and ocean in the Bahamas.</p>	11.756 -	11.756 -	11.756 -	0.000 -	11.756 -

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
OCO: Not applicable FY 2022 Base Plans: Continue to provide rental payments to the Bahamian government for use of land and ocean in the Bahamas. FY 2022 OCO Plans: Not applicable					
Accomplishments/Planned Programs Subtotals	53.840	54.213	59.626	0.000	59.626

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / Test & Evaluation Support				Project (Number/Name) 0566 / NAVAIR Environmental Compliance			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
0566: NAVAIR Environmental Compliance	0.000	4.572	4.158	4.960	-	4.960	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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 located at Patuxent River, MD, China Lake, CA, Point Mugu, CA, and Atlantic Undersea Test and Evaluation Center, Bahamas. The Navy Major Range and Test Facility Base environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.

The Major Range and Test Facility Base are test and evaluation facilities that provide for Department of Defense 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.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Environmental Compliance	4.572	4.158	4.960	0.000	4.960
Articles:	-	-	-	-	-
<p>Description: Projects supporting level 1 compliance requirements at Naval Air Systems Command Ranges inclusive of hazardous waste disposal, Resource Conservation & Recovery Act, Subtitle C - 40 CFR 260 through 279, and Emergency Planning and Community Right-to-Know Act, Sections 311-312; solid waste disposal, Resource Conservation & Recovery Act, Subtitle D - 40 CFR Parts 239 through 259; natural & cultural resources programs, National Environmental Policy Act, Environmental Protection Act, Marine Mammal Protection Act, Endangered Species Act, Archeological and Historic Preservation Act, maintenance of environmental permits, Clean Air Act, Clean Water Act, and environmental monitoring. Resource Conservation & Recovery Act, 42 U.S.C. Section 6901 et sequens 1976; Emergency Planning and Community Right-to-Know Act, 42 U.S.C. Section 11001-11050 et sequens 1986; National Environmental Policy Act, 42 U.S.C. Section 4331 et sequens 1969; Marine Mammal Protection Act, 16 U.S.C. Section 1361 et sequens 1972; Clean Water Act, 33 U.S.C. Section 1251-1387 1972; ESA, 7 U.S.C. Section 136, 16 U.S.C. Section 1531 et sequens 1973; Archeological and Historic Preservation Act, 16 USC Section 469-469c-2 1960; and Clean Air Act, Title V, 33 U.S.C. Section 1251 et sequens 1972.</p> <p>FY 2021 Plans: Continue the identification and funding of level 1 requirements that support compliance projects at Naval Air and Naval Sea Systems Command Ranges to ensure applicable laws and regulations are met and Range mission/</p>					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>operations proceed unencumbered. Support Testing for Global Information Systems Encroachment and Cultural Surveys.</p> <p>FY 2022 Base Plans: Continue the identification and funding of level 1 requirements that support compliance projects at Naval Air and Naval Sea Systems Command Ranges to ensure applicable laws and regulations are met and Range mission/ operations proceed unencumbered. Support Testing for Global Information Systems Encroachment and Cultural Surveys.</p> <p>FY 2022 OCO Plans: N/A</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding increase from FY 2021 to FY 2022 reflects an increase in Solid Waste Disposal at AUTECH, Bahamas.</p>					
Accomplishments/Planned Programs Subtotals	4.572	4.158	4.960	0.000	4.960

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>				Project (Number/Name) 0653 / <i>NAWC Weapons Division</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
0653: <i>NAWC Weapons Division</i>	0.000	155.988	152.741	150.136	-	150.136	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

Project provides continuing maintenance and operational support for the Naval Air Warfare Center Weapons Division Test and Evaluation capabilities. These capabilities include the Pacific Ranges and Facilities, consisting of China Lake Ranges, Ordnance T&E facilities and the Point Mugu Sea Range, aerial and surface target launch and recovery, target test instrumentation and Test and Evaluation 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 Test and Evaluation mission. Included in the China Lake ranges is the Electronic Combat Range, which provides outdoor free space developmental and operational testing of airborne electronic warfare 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 sled tracks, measurement facilities; propulsion, warhead, environmental, rocket motor, and other missile component test facilities; and gun ranges. This project funds costs that are not chargeable to customers.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Pacific Ranges	64.112	62.917	61.365	0.000	61.365
Articles:	-	-	-	-	-
Description: In accordance with Department of Defense Directive 3200.11., this project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base 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 Ranges, and San Nicholas Island.					
FY 2021 Plans: Continue to maintain and operate mission essential/core test support resources. These resources include test article instrumentation as well as ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Sustain maintenance activities associated with five Radar Signal Emulators (RSEs) and					

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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 0653 / <i>NAWC Weapons Division</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>a battlespace shaping capability that requires Special Access Program (SAP) facilities. Initiate maintenance activities to sustain warfare battle shaping capability.</p> <p>OCO: Not applicable</p> <p>FY 2022 Base Plans: Continue to maintain and operate mission essential/core test support resources. These resources include test article instrumentation as well as ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Sustain maintenance activities associated with five Radar Signal Emulators (RSEs) and a battlespace shaping capability that requires Special Access Program (SAP) facilities. Initiate maintenance activities to sustain warfare battle shaping capability.</p> <p>FY 2022 OCO Plans: Not applicable</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding decrease from FY 2021 to FY 2022 due to reduction in civilian and contractor workforce.</p>					
<p>Title: Navy Test Wing Pacific</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities of the Naval Test Wing Pacific located at China Lake and Point Mugu, CA. These facilities provide the Navy's principal Pacific test activity for Naval Aviation Systems Command aircraft, engaged in or supporting Test & Evaluation of aircraft, weapons and weapons systems and services in support of Range Surveillance and Clearance, airborne telemetry and optical data collection.</p> <p>FY 2021 Plans: Continue to maintain and operate mission essential/core test support aircraft associated with aviation platform and weapon system test and evaluation. Fund civilian labor, travel, transportation, equipment, supplies,</p>	27.118	24.595	22.865	0.000	22.865
	-	-	-	-	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
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communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Naval Test Wing Pacific operations.

FY 2022 Base Plans:
Continue to maintain and operate mission essential/core test support aircraft associated with aviation platform and weapon system test and evaluation. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Naval Test Wing Pacific operations.

FY 2022 OCO Plans:
Not applicable.

FY 2021 to FY 2022 Increase/Decrease Statement:
Funding Decrease from FY 2021 to FY 2022 due to delay in delivery of C20 and G550 Range Support Aircraft.

Title: Threat/Target Systems	11.804	11.713	11.986	0.000	11.986
Articles:	-	-	-	-	-

Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities of the Threat/Target Systems facilities. These facilities provide airborne and seaborne target presentations for test and evaluation.

FY 2021 Plans:
Continue to maintain and operate mission essential/core test support resources associated with airborne and seaborne target operations required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base target operations.

OCO:
Not applicable.

FY 2022 Base Plans:
Continue to maintain and operate mission essential/core test support resources associated with airborne and seaborne target operations required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base target operations.

FY 2022 OCO Plans:

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Description: This project funds the overhead/institutional costs required to sustain the Naval Air Warfare Center Weapons Division Major Range and Test Facility Base Test and Evaluation capabilities.</p> <p>FY 2021 Plans: Continue to reimburse the Command for General and Administration Support services. Continue to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities, Navy Marine Corps Intranet, and any costs necessary to manage and sustain Major Range and Test Facility Base operations.</p> <p>OCO: Not applicable</p> <p>FY 2022 Base Plans: Continue to reimburse the Command for General and Administration Support services. Continue to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities, Navy Marine Corps Intranet, and any costs necessary to manage and sustain Major Range and Test Facility Base operations.</p> <p>FY 2022 OCO Plans: Not applicable</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: There is no significant change from FY 2021 to FY 2022.</p>					
Accomplishments/Planned Programs Subtotals	155.988	152.741	150.136	0.000	150.136

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>				Project (Number/Name) 0654 / <i>NAWC Acft Division</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
0654: <i>NAWC Acft Division</i>	0.000	100.281	101.753	103.943	-	103.943	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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 Major Range and Test Facility Base capabilities used to conduct test and evaluation of air platforms and associated systems. Naval Air Warfare Center Aircraft Division has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft Research Development Test and Evaluation. 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 program test requirements. The Test and Evaluation 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.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Atlantic Ranges	24.871	25.257	25.912	0.000	25.912
Articles:	-	-	-	-	-
Description: In accordance with Department of Defense Directive 3200.11, this project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base 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.					
FY 2021 Plans: 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 ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Continue maintenance for two new control rooms that operate at the Special Access Program (SAP) level, including the IT equipment required to perform test and evaluation operations from the control rooms.					
OCO:					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
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Not applicable

FY 2022 Base Plans:
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 ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Continue maintenance for two new control rooms that operate at the Special Access Program (SAP) level, including the IT equipment required to perform test and evaluation operations from the control rooms.

FY 2022 OCO Plans:
Not applicable

FY 2021 to FY 2022 Increase/Decrease Statement:
The increase from FY 2021 to FY 2022 reflects increase in maintenance requirements associated with critical legacy test instrumentation.

Title: Electromagnetic Environmental Effects and Air Combat Environment Test and Evaluation Facility	21.084	21.794	22.687	0.000	22.687
Articles:	-	-	-	-	-
Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities associated with Electromagnetic Environmental Effects and Air Combat Environment Test and Evaluation Facility. These facilities provide Test and Evaluation 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.					
FY 2021 Plans: Continue to maintain and operate mission essential/core test support resources required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Electromagnetic Environmental Effects and Air Combat Environment Test and Evaluation Facility operations.					
OCO:					

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 0654 / <i>NAWC Acft Division</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
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<p>Not applicable</p> <p>FY 2022 Base Plans: Continue to maintain and operate mission essential/core test support resources required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Electromagnetic Environmental Effects and Air Combat Environment Test and Evaluation Facility operations.</p> <p>FY 2022 OCO Plans: Not applicable</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: Funding increase from FY 2021 to FY 2022 supports increase in maintenance requirements associated with Air Combat Environment Test and Evaluation Facility Electronic Warfare test capabilities.</p>					
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<p>Title: Propulsion Systems Evaluation Facility</p> <p align="right">Articles:</p>	4.587	4.646	4.693	0.000	4.693
	-	-	-	-	-

Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities of the Propulsion Systems Evaluation Facility. These facilities perform Test and Evaluation of propulsion systems in the laboratories, engine test chambers and component test rigs of the Propulsion Systems Evaluation Facility and the Aircraft Test and Evaluation Facility. Propulsion Systems consists of engines, engine components and accessories.

FY 2021 Plans:
Continue to maintain and operate mission essential/core test support resources required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Propulsion System Evaluation Facility operations.

OCO:
Not applicable.

FY 2022 Base Plans:
Continue to maintain and operate mission essential/core test support resources required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 0654 / <i>NAWC Acft Division</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Propulsion System Evaluation Facility operations.</p> <p>FY 2022 OCO Plans: Not applicable.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: There is no significant change from FY 2021 to FY 2022.</p>					
<p>Title: Threat/Target Systems</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base. Threat/Target Systems operations to provide airborne and seaborne target presentations for test and evaluation.</p> <p>FY 2021 Plans: Continue to maintain and operate mission essential/core test support resources associated with airborne and seaborne target operations required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base target operations.</p> <p>OCO: Not applicable.</p> <p>FY 2022 Base Plans: Continue to maintain and operate mission essential/core test support resources associated with airborne and seaborne target operations required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base target operations.</p> <p>FY 2022 OCO Plans: Not applicable.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: There is no significant change from FY 2021 to FY 2022.</p>	2.329	2.376	2.362	0.000	2.362
Articles:	-	-	-	-	-
<p>Title: Naval Test Wing Atlantic</p> <p align="right">Articles:</p>	22.757	22.747	23.203	0.000	23.203
Articles:	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 0654 / <i>NAWC Acft Division</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities of the Naval Test Wing Atlantic located at NAS Patuxent River, MD. These facilities provide the Navy's principal Atlantic test activity for Naval Aviation Systems Command aircraft, engaged in or supporting Test & Evaluation of aircraft, weapons and weapons systems.</p> <p>FY 2021 Plans: Continue to maintain and operate mission essential/core test support aircraft associated with aviation platform and weapon system test and evaluation. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Naval Test Wing Atlantic operations.</p> <p>OCO: Not applicable.</p> <p>FY 2022 Base Plans: Continue to maintain and operate mission essential/core test support aircraft associated with aviation platform and weapon system test and evaluation. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Naval Test Wing Atlantic operations.</p> <p>FY 2022 OCO Plans: Not applicable.</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: The increase from FY 2021 to FY 2022 reflects increase of maintenance costs associated with critical Safety of Flight test equipment.</p>					
<p>Title: Naval Air Warfare Center Aircraft Division Command</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the Naval Air Warfare Center Aircraft Division Major Range and Test Facility Base Test and Evaluation capabilities.</p>	24.653	24.933	25.086	0.000	25.086
	-	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 0654 / <i>NAWC Acft Division</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p><i>FY 2021 Plans:</i> 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 the Naval Air Warfare Center Aircraft Division Range and Test Facility Base operations.</p> <p>OCO: Not applicable</p> <p><i>FY 2022 Base Plans:</i> 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 the Naval Air Warfare Center Aircraft Division Range and Test Facility Base operations.</p> <p><i>FY 2022 OCO Plans:</i> Not applicable</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> There is no significant change from FY 2021 to FY 2022.</p>					
Accomplishments/Planned Programs Subtotals	100.281	101.753	103.943	0.000	103.943

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy **Date:** May 2021

Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / Test & Evaluation Support				Project (Number/Name) 2511 / Natural Disaster Relief			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
2511: <i>Natural Disaster Relief</i>	0.000	130.444	26.388	26.631	-	26.631	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project was created in response to the 2019 Searles Valley Earthquakes at Naval Weapons Station China Lake to support repairs at Navy MRTFB sites that have been damaged by natural disasters to include earthquakes, wildfires, hurricanes, tornadoes, landslides and floods.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Natural Disaster Relief	130.444	26.388	26.631	0.000	26.631
Articles:	-	-	-	-	-
FY 2021 Plans: This is a continuation efforts to repair damage caused by natural disasters at Navy MRTFB sites. FY21 repairs will include: Class-3 property; Propulsion Lab Repairs at Cal Tech Sites 1 and 4, the Environmental Test Area and Burro Canyon. Plans also include network fiber optic repairs to instrumentation on North and South Range complexes; Replacement and integration of Optical Systems; Replacement and integration of Communications Systems; and Repairs to Remotely Operated Tracking Radars Instrumentation; Energetic Material mixers; and Laser equipment					
FY 2022 Base Plans: This is a continuation efforts to repair damage caused by natural disasters at Navy MRTFB sites. FY22 repairs will include: Class-3 property; Propulsion Lab Repairs at Cal Tech Site 6, the Environmental Test Area and Burro Canyon. Plans also include network fiber optic repairs to instrumentation on North and South Range complexes; Replacement and integration of Optical Systems; Replacement and integration of Communications Systems; and Repairs to Remotely Operated Tracking Radars Instrumentation; Energetic Material mixers; and Laser equipment					
FY 2022 OCO Plans: not applicable					
FY 2021 to FY 2022 Increase/Decrease Statement: No significant increase from FY 2021 to FY 2022					
Accomplishments/Planned Programs Subtotals	130.444	26.388	26.631	0.000	26.631

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 2511 / <i>Natural Disaster Relief</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u> <u>Base</u>	<u>FY 2022</u> <u>OCO</u>	<u>FY 2022</u> <u>Total</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OMN/BSS1: <i>Base Operating Support</i>	9.000	17.954	9.925	-	9.925	-	-	-	-	-	-
• OMN/BSM1: <i>Sustainment, Restoration and Modernization</i>	324.000	217.833	39.881	-	39.881	-	-	-	-	-	-
• OPN/4213: <i>Aircraft Support Equipment</i>	0.000	39.295	50.871	64.674	115.545	-	-	-	-	-	-

Remarks

Natural Disaster Relief funding is only a portion of the Line Items listed above.

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy **Date:** May 2021

Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / Test & Evaluation Support				Project (Number/Name) 2921 / Pacific Missile Range Facility			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
2921: Pacific Missile Range Facility	0.000	5.394	5.413	5.960	-	5.960	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program provides continuing maintenance and operations support for Test and Evaluation related capabilities at the Pacific Missile Range Facility located at Barking Sands on Kauai, HI. Pacific Missile Range Facility's Test and Evaluation capabilities include precision radar and telemetry assets, the Mobile At Sea Sensor System, and Stabilized High-accuracy Optical Tracking System. These assets support Navy, Department of Defense, and Missile Defense Agency Test and Evaluation. This project funds costs not chargeable to customers.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Pacific Missile Range Facility	5.394	5.413	5.960	0.000	5.960
Articles:	-	-	-	-	-
<p>Description: This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities at Pacific Missile Range Facility in accordance with Department of Defense Directive 3200.11.</p> <p>FY 2021 Plans: Continue to maintain and operate mission essential/core test support resources including three precision radars and eight telemetry antennas, the Mobile Aerial Target Support System barge, and the four Optical Systems required to meet customer test requirements. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Reimburse the Command for General and Administrative support services.</p> <p>OCO: Not applicable</p> <p>FY 2022 Base Plans: Continue to maintain and operate mission essential/core test support resources including three precision radars and eight telemetry antennas, the Mobile Aerial Target Support System barge, and the four Optical Systems required to meet customer test requirements. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 2921 / <i>Pacific Missile Range Facility</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
to manage and sustain the Major Range and Test Facility Base operations. Reimburse the Command for General and Administrative support services. <i>FY 2022 OCO Plans:</i> Not applicable <i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funds increase from FY 2021 to FY 2022 to address additional requirements to comply with DoDI 8500.1 Cybersecurity and DoDI 8510.01 Risk Management Framework for DoD Information Technology.					
Accomplishments/Planned Programs Subtotals	5.394	5.413	5.960	0.000	5.960

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy										Date: May 2021		
Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / Test & Evaluation Support				Project (Number/Name) 2922 / MRTFB Maint & Repair			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
2922: MRTFB Maint & Repair	0.000	41.382	37.246	47.081	-	47.081	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides funding for the maintenance and repair of the Major Range and Test Facility Base Real Property Maintenance Activities at the Naval Air Warfare Center Weapons Division, the Naval Air Warfare Center Aircraft Division, and the Atlantic Undersea Test and Evaluation Center. 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 list.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Facility Maintenance and Repair	41.382	37.246	47.081	0.000	47.081
Articles:	-	-	-	-	-
Description: Maintenance and repair of the Major Range and Test Facility Base Real Property assets at Naval Air Warfare Center Weapons Division, Naval Air Warfare Center Aircraft Division, and the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center.					
FY 2021 Plans: Continue to support mission critical emergency services, recurring maintenance and repair, and minor and major repair efforts at Naval Air Warfare Center Weapons Division, Naval Air Warfare Center Aircraft Division, and the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center. FY21 budget funds Major Range and Test Facility Base facility to 65% of Department of Defense Facility Sustainment Model v19.1 with \$11M to continue the Naval Air Systems Command Hangar recapitalization efforts and complete Atlantic Undersea Test and Evaluation Center Inspector General Compliance projects to improve perimeter security.					
OCO: Not applicable.					
FY 2022 Base Plans: Continue to support mission critical emergency services, recurring maintenance and repair, and minor and major repair efforts at Naval Air Warfare Center Weapons Division, Naval Air Warfare Center Aircraft Division, and the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center. FY22 budget funds Major Range and Test Facility Base facility to 73% of Department of Defense Facility Sustainment Model v22.2					

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 2922 / <i>MRTFB Maint & Repair</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
with \$11M to continue the Naval Air Systems Command Hangar recapitalization efforts and continue Atlantic Undersea Test and Evaluation Center Inspector General Compliance projects to improve perimeter security. <i>FY 2022 OCO Plans:</i> Not applicable <i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funding increase from FY 2021 to FY 2022 increased funding to 73% of the Facility Sustainment Model that addresses the backlog of maintenance and repair projects.					
Accomplishments/Planned Programs Subtotals	41.382	37.246	47.081	0.000	47.081

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy **Date:** May 2021

Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / Test & Evaluation Support				Project (Number/Name) 2958 / Cyberspace Activities			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
2958: <i>Cyberspace Activities</i>	0.000	0.433	0.439	0.444	-	0.444	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project provides funding for cyber requirements for the Major Range and Test Facility Base Real Property at the Atlantic Undersea Test and Evaluation Center. Funds critical cybersecurity upgrades to instrumentation and networks to ensure capabilities are secure and available to support customer test requirements.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Cyberspace Activities	0.433	0.439	0.444	0.000	0.444
Articles:	-	-	-	-	-
Description: This project funds network and instrumentation compliance with cybersecurity requirements at the Atlantic Undersea Test and Evaluation Center.					
FY 2021 Plans: Maintain compliance with cybersecurity requirements at Atlantic Undersea Test and Evaluation Center as required to support test and evaluation operations at the Atlantic Undersea Test and Evaluation Center.					
OCO: Not applicable.					
FY 2022 Base Plans: Maintain compliance with cybersecurity requirements at Atlantic Undersea Test and Evaluation Center as required to support test and evaluation operations at the Atlantic Undersea Test and Evaluation Center.					
FY 2022 OCO Plans: Not applicable					
FY 2021 to FY 2022 Increase/Decrease Statement: No significant change					
Accomplishments/Planned Programs Subtotals	0.433	0.439	0.444	0.000	0.444

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy Date: May 2021

Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 2958 / <i>Cyberspace Activities</i>
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C. Other Program Funding Summary (\$ in Millions)

Remarks

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy **Date:** May 2021

Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / Test & Evaluation Support				Project (Number/Name) 3154 / Nanoose and Dabob Bay Ranges			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
3154: Nanoose and Dabob Bay Ranges	0.000	12.714	12.899	14.429	-	14.429	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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 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, for system performance measurement. Assists in the design, fabrication and testing of systems for Undersea Warfare applications. Oversees the manning and maintenance of Naval Undersea Warfare Center Division Keyport range craft and range craft systems. This project funds costs not chargeable to customers.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Undersea Ranges	12.714	12.899	14.429	0.000	14.429
Articles:	-	-	-	-	-
Description: In accordance with Department of Defense Directive 3200.11, this project funds the overhead/institutional costs required to sustain the Major Range and Test Facility Base capabilities at the Nanoose and Dabob Bay undersea tracking ranges.					
FY 2021 Plans: Continue to maintain and operate mission essential/core test support resources associated with the unique test environments for Test and Evaluation of undersea weapons, sensors, submarines and other undersea systems required to meet customer test requirements. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Reimburse the Command for General and Administrative support services.					
OCO: Not applicable.					
FY 2022 Base Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 3154 / <i>Nanoose and Dabob Bay Ranges</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
<p>Continue to maintain and operate mission essential/core test support resources associated with the unique test environments for Test and Evaluation of undersea weapons, sensors, submarines and other undersea systems required to meet customer test requirements. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain the Major Range and Test Facility Base operations. Reimburse the Command for General and Administrative support services.</p> <p><i>FY 2022 OCO Plans:</i> Not applicable</p> <p><i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funding increase from FY 2021 to FY 2022 to support increase maintenance requirements associated with legacy range instrumentation, support equipment and refurbishment of the Shore Side Cable Trays at the Nanoose and Dabob Bay Ranges.</p>					
Accomplishments/Planned Programs Subtotals	12.714	12.899	14.429	0.000	14.429

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

N/A

Remarks

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy										Date: May 2021		
Appropriation/Budget Activity 1319 / 6					R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>				Project (Number/Name) 3386 / <i>MRTFB Marine Vessels</i>			
COST (\$ in Millions)	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	FY 2023	FY 2024	FY 2025	FY 2026	Cost To Complete	Total Cost
3386: <i>MRTFB Marine Vessels</i>	0.000	17.449	23.623	16.067	-	16.067	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-	-	-

A. Mission Description and Budget Item Justification

This project funds the overhauls and preventative maintenance of the 23 Major Range and Test Facility Base marine vessels located at Naval Air Warfare Center Weapons Division, Point Mugu, CA, Pacific Missile Range Facility, Honolulu, HI, Naval Undersea Warfare Center Keyport, WA, Naval Air Warfare Center Aircraft Division, Patuxent River, MD, and Atlantic Undersea Test and Evaluation Center. These vessels are used to launch and recover torpedoes, acoustic systems, and other weapons, provide range surveillance and clearance, and can be configured for target services. Overhauls are required to operate ships over 300 tons in compliance with American Bureau of Shipping "Load Line" certification requirements. Major preventative maintenance requiring shipyard support is also performed during these periods to mitigate risks of failures and sustain critical, Hull, Mechanical and Electrical systems to support operations at sea.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: MRTFB Marine Vessels	17.449	23.623	16.067	0.000	16.067
Articles:	-	-	-	-	-
Description: This project funds the overhauls and preventative maintenance of the 23 Major Range and Test Facility Base marine vessels located at Naval Air Warfare Center Weapons Division, Point Mugu, CA, Pacific Missile Range Facility, Barking Sands, Kauai, HI, Naval Undersea Warfare Center Keyport, Nanoose and Dabob Bay Ranges, Keyport, WA, Naval Air Warfare Center Aircraft Division, Patuxent River, MD, and Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center.					
FY 2021 Plans: Perform overhauls on Naval Undersea Warfare Center Keyport, Atlantic Undersea Test and Evaluation Center, Naval Air Warfare Center Aircraft Division, and Naval Air Warfare Center Weapons Division vessels. Purchase replacement of Naval Air Warfare Center Weapons Division Mobile Ship Target.					
OCO: Not applicable.					
FY 2022 Base Plans: Perform overhauls on Naval Undersea Warfare Center Keyport, Atlantic Undersea Test and Evaluation Center, Naval Air Warfare Center Aircraft Division, and Naval Air Warfare Center Weapons Division vessels. Purchase Replacement of Naval Air Warfare Center Weapons Division HM-08.					
FY 2022 OCO Plans:					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy	Date: May 2021
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Appropriation/Budget Activity 1319 / 6	R-1 Program Element (Number/Name) PE 0605864N / <i>Test & Evaluation Support</i>	Project (Number/Name) 3386 / <i>MRTFB Marine Vessels</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Not applicable					
<i>FY 2021 to FY 2022 Increase/Decrease Statement:</i> Funding Decrease from FY 2021 to FY 2022 reflects completion of the Mobile Ship Target replacement effort, and a decrease in then-year Vessel Service Life Extension Program requirements.					
Accomplishments/Planned Programs Subtotals	17.449	23.623	16.067	0.000	16.067

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

Remarks

D. Acquisition Strategy
Not applicable.