

**UNCLASSIFIED**

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2023 Army **Date:** April 2022

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 6: RDT&amp;E Management Support</i>	<b>R-1 Program Element (Number/Name)</b> PE 0606002A / <i>Ronald Reagan Ballistic Missile Defense Test Site</i>
--	--

COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	74.089	80.921	90.088	-	90.088	90.858	72.709	71.695	72.393	0.000	552.753
XW9: <i>Reagan Test Site</i>	-	74.089	80.921	90.088	-	90.088	90.858	72.709	71.695	72.393	0.000	552.753

**A. Mission Description and Budget Item Justification**

This funding line supports testing of Army Modernization Priority Programs.

The Ronald Reagan Ballistic Missile Defense Test Site (RTS), with its remote location and one-of-a-kind instrumentation systems, provides a valuable strategic test environment that cannot be replicated. Its function is to: 1) support test and evaluation of major Army and Department of Defense (DOD) acquisition programs of strategic importance to the national defense; and 2) provide space operations and intelligence data (Space Situational Awareness, object tracking & identification) in support of United States Strategic Command (USSTRATCOM), acting as a high value contributing sensor to the United States (U.S.) Space Surveillance Network. Due to its unique geography and instrumentation, RTS is able to provide unmatched data collection capabilities that provide critical test data for programs of national interest to include: Army Missile Defense; Defense Advanced Research Projects Agency hypersonic Boost-Glide developmental tests; Air Force and Navy Intercontinental Ballistic Missile (ICBM) developmental and operational tests; Army, Air Force, Navy, and Missile Defense Agency (MDA) operational, demonstration, and validation tests; National Aeronautics and Space Administration (NASA) scientific and unique space programs; NASA ionospheric studies; space debris tracking; and data collection in support of space experiments.

Funding in this Program Element (PE) covers management and contracting personnel support (salaries and travel) to enable the management of the test and evaluation of major Army and DoD missile systems for the RTS. Funds also provide contracting support for end item procurement, life cycle acquisition planning, and solicitation, negotiation, award, execution and management for weapon systems contracts. This PE provides contractors to accomplish key operations and maintenance functions for RTS instrumentation suites and also provides mission essential bandwidth via a fiber optic cable system. Funds provide the expertise required for operating and maintaining a number of one-of-a-kind radar, optical, telemetry, command/control/communications, safety, and data reduction systems. These systems include: the four unique radars of the Kiernan Reentry Measurement Site; Super Recording Automatic Digital Optical Tracker long range video-metric tracking systems; high density data recorders for high data-rate telemetry collected by ten antennas; an underwater acoustic impact location system; and data analysis/reduction hardware/software and Continental United States (CONUS) based mission control center. The Advanced Research Project Agency Long-Range Tracking and Instrumentation Radar and the Target Resolution Discrimination Experiment radars located at RTS are the only radars in this area of operation that have deep-space tracking capability. The Millimeter Wave Radar is one of the highest resolution imaging radars in the world, providing critical intelligence data. Funding also enables weapon system assessment of operational effectiveness and suitability for the Army, Air Force, Navy and MDA, which all have programs planned that have significant test and data gathering requirements at RTS. This test data cannot be obtained except through the use of technical facilities available on and in the vicinity of RTS. Program supports Army's PATRIOT air defense system; Air Force's Minuteman III ICBM and the Space and Missile Center's associated programs; MDA's Ballistic Missile Defense System, ICBM Targets, and Layered Ballistic Missile Defense operational tests (including: PATRIOT, Terminal High-Altitude Area Defense , and Aegis Weapon System), and NASA's space experiments.

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2023 Army	<b>Date:</b> April 2022
---	-------------------------

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 6: RDT&amp;E Management Support</i>	<b>R-1 Program Element (Number/Name)</b> PE 0606002A / <i>Ronald Reagan Ballistic Missile Defense Test Site</i>
--	--

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>
Previous President's Budget	68.911	80.952	0.000	-	0.000
Current President's Budget	74.089	80.921	90.088	-	90.088
Total Adjustments	5.178	-0.031	90.088	-	90.088
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	5.178	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	90.088	-	90.088
• FFRDC Transfer	-	-0.031	-	-	-

**Change Summary Explanation**

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army										<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 6					<b>R-1 Program Element (Number/Name)</b> PE 0606002A / Ronald Reagan Ballistic Missile Defense Test Site				<b>Project (Number/Name)</b> XW9 / Reagan Test Site			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023 Base</b>	<b>FY 2023 OCO</b>	<b>FY 2023 Total</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
XW9: Reagan Test Site	-	74.089	80.921	90.088	-	90.088	90.858	72.709	71.695	72.393	0.000	552.753
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

This Project funds management and contracting personnel support (salaries and travel) to enable the management of the test and evaluation of major Army and DoD missile systems for the RTS. Funds also provide contracting support for end item procurement, life cycle acquisition planning, and solicitation, negotiation, award, execution and management for weapon systems contracts. This PE provides contractors to accomplish key operations and maintenance functions for RTS instrumentation suites and also provides mission essential bandwidth via a fiber optic cable system. Funds provide the expertise required for operating and maintaining a number of one-of-a-kind radar, optical, telemetry, command/control/communications, safety, and data reduction systems. These systems include the four unique radars of the Kiernan Reentry Measurement Site; Super Recording Automatic Digital Optical Tracker long range video-metric tracking systems; high density data recorders for high data-rate telemetry collected by ten antennas; an underwater acoustic impact location system; and data analysis/reduction hardware/software and Continental United States (CONUS) based mission control center. The Advanced Research Project Agency Long-Range Tracking and Instrumentation Radar and the Target Resolution Discrimination Experiment radars located at RTS are the only radars in this area of operation that have deep-space tracking capability. The Millimeter Wave Radar is one of the highest resolution imaging radars in the world, providing critical intelligence data. Funding also enables weapon system assessment of operational effectiveness and suitability for the Army, Air Force, Navy and MDA, which all have programs planned that have significant test and data gathering requirements at RTS. This test data cannot be obtained except through the use of technical facilities available on and in the vicinity of RTS. Program supports Army's PATRIOT air defense system; Air Force's Minuteman III ICBM and the Space and Missile Center's associated programs; MDA's Ballistic Missile Defense System, ICBM Targets, and Layered Ballistic Missile Defense operational tests (including: PATRIOT, Terminal High-Altitude Area Defense, and Aegis Weapon System), and NASA's space experiments.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<b>Title:</b> Civilian Pay	6.017	6.270	7.306
<b>Description:</b> This effort covers operations and mission support functions at the RTS and is managed by USASMDC.			
<b>FY 2022 Plans:</b> Will continue to provide government personnel support (salaries) to enable the management of the test and evaluation of major Army and DoD missile systems.			
<b>FY 2023 Plans:</b> Will continue to provide government personnel support (salaries) to enable the management of the test and evaluation of major Army and DoD missile systems.			
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b>			

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 6	<b>R-1 Program Element (Number/Name)</b> PE 0606002A / <i>Ronald Reagan Ballistic Missile Defense Test Site</i>	<b>Project (Number/Name)</b> XW9 / <i>Reagan Test Site</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
Increase due to normal inflation and increase of salaries.				
<p><b>Title:</b> Temporary Duty (TDY)/Training/Supplies - Military and Civilian</p> <p><b>Description:</b> Funding will provide for travel and training for civilians and military to assist in the testing of the Army and DoD Missile system Programs.</p> <p><b>FY 2022 Plans:</b> Will continue to provide government personnel support (training and travel) to enable the management of the test and evaluation of major Army and DoD missile systems.</p> <p><b>FY 2023 Plans:</b> Will continue to provide government personnel support (training and travel) to enable the management of the test and evaluation of major Army and DoD missile systems.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase is due to inflation and increase in travel with Covid restrictions being lessened.</p>		1.052	0.782	1.364
<p><b>Title:</b> Outside Obligations/Other Government Agencies (OGAs)</p> <p><b>Description:</b> Funding provided to other Government Agencies for reimbursable-type work efforts.</p> <p><b>FY 2022 Plans:</b> Will continue to provide support to test and evaluation of major Army and DoD missile systems.</p> <p><b>FY 2023 Plans:</b> Will continue to provide support to test and evaluation of major Army and DoD missile systems.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase due to inflation.</p>		9.171	2.600	3.202
<p><b>Title:</b> Fiber Optic Cable (Kwajalein Cable System (KCS))/Inner Ring Submarine</p> <p><b>Description:</b> Fiber Optic Cable provides lease cost for Fiber Optic Cable between Kwajalein and Guam.</p> <p><b>FY 2022 Plans:</b> Will continue to provide funding for lease of the KCS fiber optic cable between Kwajalein Island and Guam. Will fund annual cable maintenance agreement.</p> <p><b>FY 2023 Plans:</b> Will continue to provide funding for lease of the KCS fiber optic cable between Kwajalein Island and Guam. Will fund annual cable</p>		9.102	6.032	6.614

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 6	<b>R-1 Program Element (Number/Name)</b> PE 0606002A / <i>Ronald Reagan Ballistic Missile Defense Test Site</i>	<b>Project (Number/Name)</b> XW9 / <i>Reagan Test Site</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
maintenance agreement.				
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase is due to inflation.				
<b>Title:</b> RTS Contractor Labor		34.336	42.977	55.389
<b>Description:</b> Provide funding for Prime contractor and other contract support to perform technical Operation and Maintenance support to support test and space missions.				
<b>FY 2022 Plans:</b> Will continue to provide technical O&M support (test planning, instrumentation operations and maintenance, systems engineering, flight safety, and launch ordnance) to assure the capability of the Range to support test and space missions.				
<b>FY 2023 Plans:</b> Will continue to provide technical O&M support (test planning, instrumentation operations and maintenance, systems engineering, flight safety, and launch ordnance) to assure the capability of the Range to support test and space missions.				
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase is due to additional requirements for Cyber Security and compliance with Risk Management Framework (RMF) and addressing some maintenance backlog items.				
<b>Title:</b> Contractor Material		6.837	13.134	7.204
<b>Description:</b> Provide for materials to maintain range capabilities and support test operations.				
<b>FY 2022 Plans:</b> Will continue to provide critical non-labor materials to maintain critical range capabilities and prevent obsolescence in support of test operations.				
<b>FY 2023 Plans:</b> Will continue to provide critical non-labor materials to maintain critical range capabilities and prevent obsolescence in support of test operations.				
<b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Decrease due to no Worthy OCCM cost in FY23.				
<b>Title:</b> Federally Funded Research and Development Centers (FFRDC) Contractor Pay		4.056	3.740	4.404
<b>Description:</b> Provide for technical expertise to RTS leadership for the overall performance of Range Operations.				

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 6	<b>R-1 Program Element (Number/Name)</b> PE 0606002A / <i>Ronald Reagan Ballistic Missile Defense Test Site</i>	<b>Project (Number/Name)</b> XW9 / <i>Reagan Test Site</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
<p><b>FY 2022 Plans:</b> Will continue to provide technical advice to RTS leadership in support of Range operations, strategic planning, and technical execution of critical technology.</p> <p><b>FY 2023 Plans:</b> Will continue to provide technical advice to RTS leadership in support of Range operations, strategic planning, and technical execution of critical technology.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase is due to normal inflation.</p>				
<p><b>Title:</b> Contractor Meteorological</p> <p><b>Description:</b> Provide capability for weather sensing capability which allows for test planning and execution of the program.</p> <p><b>FY 2022 Plans:</b> Will continue to provide support for sustained weather sensing capabilities, including weather reporting via radar data. This capability provides critical data to test planning and execution.</p> <p><b>FY 2023 Plans:</b> Will continue to provide support for sustained weather sensing capabilities, including weather reporting via radar data. This capability provides critical data to test planning and execution.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase is due to normal inflation.</p>		2.299	1.974	2.704
<p><b>Title:</b> Ground Transportation</p> <p><b>Description:</b> Provide transportation of material and passenger between Kwajalein and continental U.S. (CONUS).</p> <p><b>FY 2022 Plans:</b> Continuing to provide mission specific material and passenger transportation via air (Air Mobility Command) and sea (Surface Deployment and Distribution Command) between Kwajalein Atoll and CONUS.</p> <p><b>FY 2023 Plans:</b> Continuing to provide mission specific material and passenger transportation via air (Air Mobility Command) and sea (Surface Deployment and Distribution Command) between Kwajalein Atoll and CONUS.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b></p>		0.651	0.378	0.964

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2023 Army		<b>Date:</b> April 2022		
<b>Appropriation/Budget Activity</b> 2040 / 6	<b>R-1 Program Element (Number/Name)</b> PE 0606002A / <i>Ronald Reagan Ballistic Missile Defense Test Site</i>	<b>Project (Number/Name)</b> XW9 / <i>Reagan Test Site</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>
Increase is due to normal inflation and the increase in the material and passenger transportation efforts.				
<p><b>Title:</b> Mission Specific Environmental</p> <p><b>Description:</b> Ensures Range Readiness and all regulatory environmental requirements are compliant with range and test requirements.</p> <p><b>FY 2022 Plans:</b> Will continue to provide the capability to assess and maintain the Range Readiness and compliance with environmental requirements.</p> <p><b>FY 2023 Plans:</b> Will continue to provide the capability to assess and maintain the Range Readiness and compliance with environmental requirements. Begin planning for RTS enhancements to support future DoD test requirements.</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Increase is due to normal inflation and testing requirements.</p>		0.568	0.300	0.937
<p><b>Title:</b> SBIR/STTR Transfer</p> <p><b>FY 2022 Plans:</b> SBIR/STTR Transfer funds</p> <p><b>FY 2022 to FY 2023 Increase/Decrease Statement:</b> Funding transferred in accordance with Title 15 USC ?638</p>		-	2.734	-
<b>Accomplishments/Planned Programs Subtotals</b>		74.089	80.921	90.088
<b>C. Other Program Funding Summary (\$ in Millions)</b>				
N/A				
<b>Remarks</b>				
<b>D. Acquisition Strategy</b>				
N/A				