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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army **Date:** February 2018

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 2: Applied Research					R-1 Program Element (Number/Name) PE 0602303A / Missile Technology							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	66.173	43.742	50.183	-	50.183	50.468	55.097	51.240	45.228	0.000	362.131
214: Missile Technology	-	42.673	43.742	50.183	-	50.183	50.468	55.097	51.240	45.228	0.000	338.631
G05: MISSILE TECHNOLOGY INITIATIVES (CA)	-	23.500	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	23.500

A. Mission Description and Budget Item Justification

This Program Element (PE) designs, fabricates and evaluates advanced component technologies for tactical missiles, rockets, guided munitions, and their launch systems in order to increase lethality, precision, and effectiveness under adverse battlefield conditions while reducing system cost, size and weight. Major goals in Project 214 include enhancing the survivability of the munition, launch and fire control systems and increasing kill probabilities against diverse targets.

The work in this PE is complimentary to PE 0603313A (Missile and Rocket Advanced Technology) and fully coordinated with PE 0602307A (Advanced Weapons Technology), PE 0602618A (Ballistics Technology, Robotics Technology), PE 0602624A (Weapons and Munitions Technology), PE 0603004A (Weapons and Munitions Advanced Technology), PE 0602782A (Command, Control, Communications Technology), and PE 0708045A (End Item Industrial Preparedness Activities).

The cited work is consistent with the Assistant Secretary of Defense for Research and Engineering Science and Technology priority focus areas and the Army Modernization Strategy.

The work in this PE is performed by the Army Research, Development and Engineering Command (RDECOM).

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	44.313	43.742	46.919	-	46.919
Current President's Budget	66.173	43.742	50.183	-	50.183
Total Adjustments	21.860	0.000	3.264	-	3.264
• Congressional General Reductions	-	-	-	-	-
• Congressional Directed Reductions	-	-	-	-	-
• Congressional Rescissions	-	-	-	-	-
• Congressional Adds	23.500	-	-	-	-
• Congressional Directed Transfers	-	-	-	-	-
• Reprogrammings	-	-	-	-	-
• SBIR/STTR Transfer	-1.619	-	-	-	-
• Adjustments to Budget Years	-	-	3.264	-	3.264
• FFRDC	-0.021	-	-	-	-

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<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2017	FY 2018
Project: G05: <i>MISSILE TECHNOLOGY INITIATIVES (CA)</i>			
Congressional Add: <i>Congressional Program Increase</i>		15.000	-
Congressional Add: <i>Weapon Effectiveness in urban engagement</i>		8.500	-
Congressional Add Subtotals for Project: G05		23.500	-
Congressional Add Totals for all Projects		23.500	-
<u>Change Summary Explanation</u> FY17 Congressional increase in G05 Missile Technology Initiatives. FY19 funding increased in this PE to address higher priority Army Modernization efforts in the area of Air and Missile Defense.			

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040 / 2					R-1 Program Element (Number/Name) PE 0602303A / <i>Missile Technology</i>				Project (Number/Name) 214 / <i>Missile Technology</i>			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
214: <i>Missile Technology</i>	-	42.673	43.742	50.183	-	50.183	50.468	55.097	51.240	45.228	0.000	338.631

A. Mission Description and Budget Item Justification

This Project designs, fabricates, and evaluates missile and rocket component technologies that support demonstration of affordable, lightweight, highly lethal missiles and rockets. Major areas of research include: guidance, navigation, and controls; target acquisition systems; multi-spectral seekers; high-fidelity simulations; sustainment; aerodynamics and structures; launch systems, fire control technologies; payloads; and propulsion including research to help solve the insensitive munitions requirements. A theme embedded throughout the efforts in this project is smaller, lighter, and cheaper (SLC) missile technology to reduce the cost and logistical burden of precision munitions.

This Project supports the Army Science and Technology Lethality and Command, Control, Communications and Intelligence (C3I) portfolios.

Major products of this Project transition to PE 0603313A (Missile and Rocket Advanced Technology).

The cited work is consistent with the Director, Defense Research and Engineering Science and Technology priority focus areas and the Army Modernization Strategy.

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

	FY 2017	FY 2018	FY 2019
Title: Missile Seeker Technology	4.659	4.740	4.761
Description: This effort focuses on the design, fabrication and evaluation of missile seekers, sensors, and software. The goal is to increase affordability and performance of missile seekers through improvement of algorithms, imaging, and thermal management.			
FY 2018 Plans: Develop feature extraction/classification and tracker algorithms for resolved and unresolved unmanned aerial system to supplement existing surveillance assets; continue to develop infrared passive precision acquisition and tracking algorithms for true fire-and-forget engagements in GPS-denied environments with seeker hardware and interface formed for use on small guided munitions with modular open systems architectures; investigate technologies that support a low cost, strap down seeker system for counter unmanned aerial systems and will evaluate potential missile guidance errors; conduct design analysis for field of view, stabilization, resolution for a man-portable, Air Defense missile and investigate the performance of tactical optics over temperature with the use of additive manufacturing; develop a compact, low cost laser ranging sensor for range finding and target detection of personnel in defilade and develop a height of burst sensor for lethality against personnel.			
FY 2019 Plans: Will enhance infrared passive precision acquisition and tracking algorithms for true fire-and-forget engagements in global positioning system (GPS)-denied environments; will design, fabricate and evaluate novel mechanical designs utilizing additive			

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Appropriation/Budget Activity 2040 / 2		R-1 Program Element (Number/Name) PE 0602303A / <i>Missile Technology</i>		Project (Number/Name) 214 / <i>Missile Technology</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
<p>manufacturing and new materials for optical sensor applications to enable lower cost infrared seeker optics; perform design analysis to determine man-portable, Air Defense missile seeker requirements and will develop robust seeker modeling and simulation tools to verify design parameter; will design, fabricate and evaluate technologies that support a low cost, strap down, active, electro-optic seeker system for counter unmanned aerial systems (UAS) and counter ground target missiles; design concepts for a multi-band active optical tracker that laser-designates small UAS to increase probability of defeat for seeker based kinetic weapons.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to inflation.</p>					
<p>Title: Missile Guidance, Navigation and Controls Technologies</p> <p>Description: This effort designs, fabricates and evaluates guidance, navigation, and control systems and software, as well as information and signal processing systems for rocket and missile applications. Goals of this effort include more affordable missile guidance; miniaturization of guidance electronics; maintaining performance in global positioning system (GPS) denied environments; improved image processing; improved missile power systems; improved communication with ground and other systems; technologies to track and respond to threat and offensive munition swarms.</p> <p>FY 2018 Plans: Refine and develop a multi-sensor survey system by integrating inertial navigation sensors, chip-scale atomic clock (CSAC), optics and Global Positioning System (GPS) to provide highly accurate Position, Navigation and Timing (PNT) data in GPS degraded or denied environments; refine the design of small, precision inertial sensors/accelerometers for fast, accurate north-finding required to support target location systems/missile initialization; continue design and fabrication of test articles for increased current capacity batteries for long range, small guided missiles; combine Radio Frequency (RF) and electronics in 3-dimensional (3D) printed objects, generate models and databases, and assess applications to reduce size, weight, and cost of missile systems; design microelectromechanical systems (MEMS) gyroscope and optical frequency shifting device for next generation inertial sensors; develop laser source filters for semi-active Laser seeker optics and develop advanced machine intelligence and image processing techniques for enhanced target acquisition and engagement; investigate magneto-electric composites, advanced system-on-a-chip (SoC) integrated circuit electronics parts, and design processes that reduce the amount of thermal buildup.</p> <p>FY 2019 Plans: Will perform investigation and performance analysis of a multi-sensor survey emplacement system for GPS degraded or denied environments; will fabricate and develop microelectromechanical systems (MEMS) concentric proof mass gyroscope for next generation inertial sensor; will investigate radio frequency (RF) ? based navigation via RF range-finding datalinks as a GPS-independent position aid; will investigate a non-line-of-sight datalink for airborne loitering missiles with air/ground launch capability; will complete evaluation of experimental articles for increased current capacity batteries for long range, small guided</p>			7.630	7.773	8.424

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Appropriation/Budget Activity 2040 / 2		R-1 Program Element (Number/Name) PE 0602303A / <i>Missile Technology</i>		Project (Number/Name) 214 / <i>Missile Technology</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
missiles; develop magnetoelectric composites, advanced system-on-chip (SoC) integrated circuit electronics parts, and will design processes that reduce the amount of thermal buildup enabling significant improvements in overall material performance and size/weight reduction; will develop a 4-D printing technology where the printed device properties vary continuously throughout the structure creating a material with varied resistive, graded dielectric, electrical, and thermal management to support RF components; will further develop and evaluate laser source filters for semi-active Laser seeker optics, advanced machine intelligence, and image processing techniques for enhanced target acquisition and engagement.					
FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to continue efforts to investigate guidance and navigation technologies for GPS degraded/denied environments.					
Title: Missile Fire Control Systems, Sustainment, Simulations, and Launchers			7.355	7.409	7.017
Description: This effort designs and evaluates fire control and tracking sensor technologies for area protection and air defense, technologies to increase the longevity of developed missiles and reliability, advanced simulations to increase performance and reduce size, weight, and cost of missile systems, and launcher technology to deliver effects from air and ground platforms. Fire control radar effort is in coordination with PE 0602270A, Project 906 and PE 0603772A, Project 243.					
FY 2018 Plans: Further development of the Digital Array Radar Testbed (DART) to be used in the development of methods to counter evolving threats and maintain overmatch capability; further fabrication and evaluation of transmit/receive element array for increased firm track ranges and higher update rates; refine the Interface Control Document (ICD) between the digital radar testbed antenna array front-end and the Future Fires Radar open systems architecture back-end processing software to ensure compatibility and utilization for air defense capabilities; investigate a radar employing a Low Probability of Intercept chaotic waveform to detect and track small Unmanned Aircraft System (UAS) systems and document results to quantify system performance and investigate the transition of the technology to other Army Air Defense radars; will refine target identification algorithms for targets of interest with multiple sensor; further develop the design of modeling and simulation tools to enable increased weather fidelity with simultaneous results across all United States (US) and world climates; further develop UAS modeling validation processes with establishment of radio frequency (RF) predictive methodologies; investigate designs for missile airframe stability and control that includes advanced materials and miniature actuator technology; establish behind armor debris prediction capabilities for multiple shaped charge materials and designs; investigate missile battery aging behavior and mechanisms responsible for degraded reliability; investigate the viability of an affordable common, man-portable fire control system to launch both ground and Air Defense missile.					
FY 2019 Plans: Will further develop DART technologies; will design and develop the full array beginning with RF characterization, digital beam forming evaluations, and algorithm and scenario development; maintain compatibility with Future Fires Radar open systems architecture back-end processing; will refine and increase capabilities for target identification and discrimination algorithms utilizing threat flight dynamics and multiple sensors; will develop amplitude modulated pulse waveforms for next generation radars					

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Appropriation/Budget Activity 2040 / 2		R-1 Program Element (Number/Name) PE 0602303A / <i>Missile Technology</i>		Project (Number/Name) 214 / <i>Missile Technology</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
and seekers in order to improve target resolution and discrimination for challenging air defense scenarios; will develop a generic algorithm and design antennas that allow the use of non-linear conformal antenna structures across any arbitrary array and operating frequency to reduce effective sensor size, weight, and power (SWAP); will investigate and design an open/modular architecture for future missile health monitoring units (HMUs) that address shortfalls/limitations in existing fielded capability and accommodate lower cost/quicker expansion of missile HMU capability; will develop and demonstrate subscale novel conductive materials capable of supplementing battery life, and also have the ability to be electrically ignited to increase lethality; will develop modeling & simulation capabilities of hypersonic vehicles in low density flows at high altitude and develop a supersonic inlet code tailor made for air breathing missile propulsion enabling rapid design decisions.					
FY 2018 to FY 2019 Increase/Decrease Statement: Decrease due to moving aerodynamic simulation activities into areas to further excel Propulsion, Structures, Lethality and Aero technologies.					
Title: Missile Propulsion, Structures, Lethality, and Aerodynamic Technology			5.658	5.749	7.315
Description: This effort designs, fabricates, evaluates and tests missile enabling technologies including: advanced missile propulsion with reduced launch signatures; increased lethality and reduced weight and size using advanced materials and additive manufacturing. Missile Propulsion, Structures and Lethality efforts are in coordination with PE 0602618A, Project H80 and PE 0602624A, Project H28.					
FY 2018 Plans: Conduct static test firings in representative propellant grain geometries for both minimum smoke and high performance propellants; investigate attributes of technology to mitigate temperature sensitivity of reduced shock-sensitivity minimum smoke propellants; investigate low-cost integral rocket ramjet solutions, including combustion testing of advanced fuels, for Army missions to allow extended range within a smaller size than achievable using all-solid propulsion approaches; validate laser welding process and electrically conductive coating technology to reduce weight and cost of composite structures; design and test novel warhead technologies for providing overwhelming catastrophic effects against current and emerging threat vehicles to include Main Battle Tanks (MBT); refine concept characterization and integration experiments of brassboard designs of advanced shaped charge, explosively formed penetrators, and fragmentation technologies to enhance warfighter lethality and provide overmatch; investigate approaches to reduce multi-spectral launch signature for minimum smoke propulsion systems; investigate the utility of a low-cost pulsed solid rocket motor approach to provide enhanced mission flexibility for aviation-launched small guided missiles; investigate modeling tools, additive manufacturing processes, and materials to optimize performance and reducing weight and cost of missile structures; investigate lethality performance low-cost reactive penetrators against dispersed targets.					
FY 2019 Plans:					

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
<p>Will investigate and characterize enabling energetic technologies for applications to missile propellants; will perform final characterization and evaluation of next generation minimum smoke propellants that improve missile performance via reduced burning rate sensitivity; will further develop low-cost integral rocket ramjet technology for extended range deep strike capability; will demonstrate techniques for reducing rocket motor light emissions sufficient to defeat adversary's launch detection methods for increased survivability; will develop advanced hardware and subsystem technology to enable mission flexibility via dual pulse motor for future small guided missiles from rotary wing and UAS platforms; will design and develop high performance variable thrust and impulse technologies that can efficiently operate over extended duty cycles, altitudes, and tactical temperatures providing enhanced capabilities against highly maneuverable targets; will design and analyze of high temperature materials supporting high flight speed missiles and dynamic end game scenarios; will further develop modeling tools, additive manufacturing processes, and materials to optimize performance and reducing weight and cost of missile structures; will develop and perform proof of principle testing of novel warhead technologies for providing overwhelming catastrophic effects against current and emerging threat vehicles to include Main Battle Tanks (MBT); will design and develop warhead subsystem analysis of advanced shaped charge, explosively formed penetrators, and fragmentation technologies to enhance warfighter lethality and provide overmatch; will develop lethality simulations utilized for trade space and predicting the probability of kill for multiple-purpose warhead configurations against multiple target classes.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to moving aerodynamic simulation activities into areas to further excel Structures, Lethality and Aero technologies. Also, moved Propulsion efforts from Multi-role Missile Technology into this effort.</p>					
<p>Title: Multi-Role Missile Technology</p> <p>Description: This effort evaluates critical technology and designs component for future affordable rockets and missiles to provide overwhelming defeat of conventional and asymmetrical threats in all environments. Successful technologies are matured and demonstrated in PE 0603313A, Project 263/704.</p> <p>FY 2018 Plans: Continue detailed designs and component development of low-cost guidance, navigation and control systems; multi-purpose warhead/fuzing technologies; and low-cost range finding and sighting systems for small unit precision lethality against multiple targets at extended ranges; design and conduct laboratory evaluations of subsystems for expanding the applicability of the modular open systems architecture to the drop/glide variant missile.</p> <p>FY 2019 Plans: Will mature modular missile technology components and open system architecture into subsystems and verify subsystem performance for the drop/glide variant in bench-level and laboratory environments.</p> <p>FY 2018 to FY 2019 Increase/Decrease Statement:</p>			6.099	4.070	1.770

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2017	FY 2018	FY 2019
Decrease due to funding moved to begin new effort, Cooperative Engagement Lethality Technology.					
Title: Air Defense Missile Technologies (formerly Counter Unmanned Aerial Systems and Counter Cruise Missile) Description: This effort evaluates and provides technologies and performs necessary trade studies to provide the key components for maturation and demonstration of air defense missiles to counter threats such as Unmanned Aircraft System (UAS) and cruise missile systems. This work supports efforts in PE 0603313A, Projects 263 & 704. FY 2018 Plans: Further the design of critical air defense interceptor technologies and components; perform the mission computer, and power system laboratory bench testing and demonstration in preparation for integration into guidance electronics units for the Ballistic and Control Test Vehicle evaluations; continue design of the control actuation system and demonstrate it in laboratory dynamic flight test simulation apparatus; design and develop software algorithms to provide common targeting data across multiple tactical echelons, enabling a common operating picture for maneuver and fire support weapon targeting. FY 2019 Plans: Will further the design of critical air defense interceptor technologies and components; will mature guidance electronics units for the Ballistic and Control Test Vehicle evaluations and will conduct Ballistic Test Vehicle Flight Testing; mature the control actuation system and demonstrate it in laboratory dynamic flight test simulation apparatus; will continue to develop software algorithms to fuse data from radar, electro-optical/Infrared, and acoustic sensors enabling a common operating picture of threat unmanned aerial systems. FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to funding for accelerating capability for a maneuver-short range air defense interceptor.			5.176	5.368	8.501
Title: Affordable Precision Missile Enabling Technology Description: This effort focuses on the studies, design, establishment, fabrication, and evaluation of components and subsystems critical to produce affordable discriminate extended range precision missiles. Critical component technologies include: advanced propulsion, seekers/sensors, fire control, datalink, guidance, navigation and controls, and airframes. These technologies transition to PE 0603313A, Project 263 for maturation. FY 2018 Plans: Refine component/subsystem trade studies and begin to design, fabricate and test component technologies to provide the capability to engage maritime targets with lethal effects. Critical component technologies include: sensors, data-links, guidance, navigation, controls, aerodynamics, thermal protection systems and fuze integrated payloads. FY 2019 Plans:			1.970	3.787	2.276

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
Will perform trade studies, develop concepts, generate designs, and explore technologies for affordable discrimination of extended range precision missiles for indirect fires capabilities.			
FY 2018 to FY 2019 Increase/Decrease Statement: Decrease due to funding for capability to engage maritime targets with lethal effects funding being transferred into Long Range Fire Enabling Technology.			
Title: Long Range Fires Enabling Technology		4.126	4.846
Description: This effort focuses on performing the necessary trade studies, and designing, establishing, fabricating and evaluating critical component technologies needed to support a long range fires capability. These technologies transition to PE 0603313A Project 263 for maturation.			6.711
FY 2018 Plans: Investigate emerging navigation technologies and techniques; design navigation system integration architectures and algorithms capable of combining emerging navigation technologies into an alternate precision navigation solution; design propulsion systems to increase the range of the system; design light weight airframe structures to increase range of the system.			
FY 2019 Plans: Will continue to develop and evaluate emerging navigation technologies and techniques; will design navigation system integration architectures and algorithms capable of integration emerging navigation technologies into an enhanced precision navigation solution; will design propulsion systems, including alternate propulsion cycles, to increase the range of the system; will design lightweight airframe structures to increase range of the system; will develop technologies that contribute to missile survivability in a contested environment. Will develop and evaluate a multi-mode seeker to enable precision guidance in global positioning system (GPS) denied or degraded environments; radio frequency sensor to guide to radiating targets, infrared sensor with advanced image processing to enable target classification and aim point selection for both land and maritime targets; miniaturization of sensor and guidance components; investigate data link technologies to provide in-flight target updates.			
FY 2018 to FY 2019 Increase/Decrease Statement: Increase due to funding for capability to engage maritime targets with lethal effects being moved into this effort.			
Title: Cooperative Engagement Lethality Technology		-	-
Description: This effort investigates critical component technology and designs for future missiles that provide expeditionary, scalable, precision strike and loiter capability to rapidly defeat hard targets and swarming or disbursed threats at the Tactical Edge. Provides the missile technology path to supervised autonomous target detection and cooperative engagement/manned-unmanned teaming for offensive, multiple simultaneous engagement capabilities. These efforts transition to PE 0603313A, Project 263 for maturation.			3.408

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018
<i>FY 2019 Plans:</i> Will develop optimized missile design with multi-effects lethal mechanism, man-in-the-loop and loiter capability for situational awareness, targeting, and lethal effects against hard and soft targets. Will develop application-based fire control unit software hosted on a commercial end user device, extended range datalink enablers, and GPS/comms denied navigation/targeting technologies.			
<i>FY 2018 to FY 2019 Increase/Decrease Statement:</i> New focus area in FY19.			
Accomplishments/Planned Programs Subtotals		42.673	43.742
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
N/A			

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Appropriation/Budget Activity 2040 / 2					R-1 Program Element (Number/Name) PE 0602303A / <i>Missile Technology</i>				Project (Number/Name) G05 / <i>MISSILE TECHNOLOGY INITIATIVES (CA)</i>																					
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost																		
G05: <i>MISSILE TECHNOLOGY INITIATIVES (CA)</i>	-	23.500	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	23.500																		
<p>Note Congressional Program increase for FY17</p> <p>A. Mission Description and Budget Item Justification This is a Congressional Interest Item.</p> <p>B. Accomplishments/Planned Programs (\$ in Millions)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td></td> <td align="center">FY 2017</td> <td align="center">FY 2018</td> </tr> <tr> <td>Congressional Add: Congressional Program Increase</td> <td align="right">15.000</td> <td align="center">-</td> </tr> <tr> <td>FY 2017 Accomplishments: N/A</td> <td></td> <td></td> </tr> <tr> <td>Congressional Add: Weapon Effectiveness in urban engagement</td> <td align="right">8.500</td> <td align="center">-</td> </tr> <tr> <td>FY 2017 Accomplishments: N/A</td> <td></td> <td></td> </tr> <tr> <td align="right">Congressional Adds Subtotals</td> <td align="right">23.500</td> <td align="center">-</td> </tr> </table> <p>C. Other Program Funding Summary (\$ in Millions) N/A</p> <p>Remarks</p> <p>D. Acquisition Strategy N/A</p> <p>E. Performance Metrics N/A</p>														FY 2017	FY 2018	Congressional Add: Congressional Program Increase	15.000	-	FY 2017 Accomplishments: N/A			Congressional Add: Weapon Effectiveness in urban engagement	8.500	-	FY 2017 Accomplishments: N/A			Congressional Adds Subtotals	23.500	-
	FY 2017	FY 2018																												
Congressional Add: Congressional Program Increase	15.000	-																												
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