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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army	Date: March 2019
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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army I BA 3: Advanced Technology Development (ATD)</i>					R-1 Program Element (Number/Name) PE 0603607A / <i>Joint Service Small Arms Program</i>							
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	-	5.628	22.799	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	28.427
627: <i>Jt Svc Sa Prog (JSSAP)</i>	-	5.628	5.879	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.507
62D: <i>SMALL ARMS ADVANCED TECHNOLOGY DEV (CA)</i>	-	0.000	16.920	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	16.920

Note

In Fiscal Year (FY) 2020 this Program Element (PE) is being eliminated, with continuity of effort realigned to the following PEs:
 * PE 0603118A Soldier Lethality Advanced Technology

A. Mission Description and Budget Item Justification

This Program Element (PE) matures and demonstrates advanced technologies that provide greater lethality, target acquisition, fire control, and range at a significantly reduced weight. These technologies lighten the Soldier's load, provide improved battlefield mobility, and reduce logistics burden while maintaining or improving current levels of performance.

Efforts in this PE support the Army Science and Technology Lethality Portfolio.

In FY18/FY19, work in this PE was related to and fully integrated with the efforts funded in PE 0602623A (Joint Service Small Arms Program), PE 0602624A (Weapons and Munitions Technology) and PE 0602618A (Ballistic Technology). Beginning in FY20, work in this PE is related to, and fully coordinated with PE 0603118A (Soldier Lethality Advanced Technology).

The cited work is consistent with the Under Secretary of Defense for Research and Engineering priority focus areas and the Army Modernization Strategy. All FY20 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

The work in this PE is performed by the U.S. Army Futures Command (AFC)

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Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 3: Advanced Technology Development (ATD)		R-1 Program Element (Number/Name) PE 0603607A I Joint Service Small Arms Program				
B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget		5.796	5.885	4.604	-	4.604
Current President's Budget		5.628	22.799	0.000	-	0.000
Total Adjustments		-0.168	16.914	-4.604	-	-4.604
• Congressional General Reductions		-0.003	-0.006			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	16.920			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-0.165	-			
• Adjustments to Budget Years		-	-	-4.604	-	-4.604
Congressional Add Details (\$ in Millions, and Includes General Reductions)						
Project: 62D: SMALL ARMS ADVANCED TECHNOLOGY DEV (CA)						
Congressional Add: Next Generation Squad Weapon - Carbine						
Congressional Add: Next Generation Squad Weapon Ammunition						
Congressional Add Subtotals for Project: 62D						
Congressional Add Totals for all Projects						
Change Summary Explanation						
FY19 congressional add (\$16.920 million) for soldier lethality.						
In FY20, this PE is eliminated due to Science & Technology portfolio financial restructuring.						

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040 / 3					R-1 Program Element (Number/Name) PE 0603607A / Joint Service Small Arms Program				Project (Number/Name) 627 / Jt Svc Sa Prog (JSSAP)			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
627: Jt Svc Sa Prog (JSSAP)	-	5.628	5.879	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.507

Note

In Fiscal Year (FY) 2020 this Project is being realigned to:
Program Element (PE) 0603118A Soldier Lethality Advanced Technology, Project:
* AY5 Soldier Squad Small Arms Armaments Advanced Technology

A. Mission Description and Budget Item Justification

This Project matures and demonstrates advanced technologies that provide greater lethality, target acquisition, fire control, training effectiveness and range at a significantly reduced weight. These technologies lighten the Soldier's load, provide improved battlefield mobility, and reduce logistics burden while maintaining or improving current levels of performance.

Efforts in this Project support the Army Science and Technology Lethality Portfolio.

In FY 2018/FY 2019 work in this Project is related to, and fully integrated with the efforts funded in Program Element (PE) 0602623A (Joint Service Small Arms Program) and PE 0602624A (Weapons and Munitions Technology). Beginning in FY 2020, work in this PE is related to, and fully coordinated with PE 0603118A (Soldier Lethality Advanced Technology).

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

All FY 2020 adjustments align program financial structure to Army Modernization Priorities in support of the National Defense Strategy.

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

Title: Volume Effects

Description: This effort addresses the maturation and demonstration of emerging small arms technologies from PE 0602623A efforts into current and next generation weapon systems to address Volume (sustained suppressive and lethal fires for area targets) capability gaps for improved effectiveness at extended ranges.

FY 2019 Plans:

FY 2018	FY 2019	FY 2020
2.205	1.900	-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
Mature technology concepts to inform NGSAR requirements and optimize designs for the next generation carbines and Squad Designated Marksman (SDM) weapon systems; mature weapon system, fire control, and ammunition technologies to increase the current performance of the lightweight medium machine gun. FY 2019 to FY 2020 Increase/Decrease Statement: In FY 2020, this effort is realigned to PE 0603118A / Project AY5.				
Title: Precision Effects Description: This effort focuses on the maturation and demonstration of emerging small arms technologies from PE 0602623A efforts into current and next generation weapon systems to address precision fire (Precision fire is support fire in the offense during the assault and engagement of targets to the maximum effective range of the weapon), and fire control capability gaps for improved accuracy at extended ranges. FY 2019 Plans: Optimize and demonstrate anti-material, improved performance and subsonic precision ammunition in three different calibers to support requirements for extended range and increased accuracy and terminal effects required to meet those needs across multiple fielded or emerging weapon platforms. FY 2019 to FY 2020 Increase/Decrease Statement: In FY 2020, this effort is realigned to PE 0603118A / Project AY5.		1.428	1.008	-
Title: Small Arms Systems Integration and Demo Description: This effort addresses the maturation and demonstration of small arms component technologies resulting from PE 0602623A efforts and applied into advanced small arms technologies as to inform the user requirement process, address operational capability gaps and transition mature components and technology concepts. FY 2019 Plans: Demonstrate next Generation Small Arms Squad Technologies at the Army Expeditionary Warrior Experiment (AEWE) in support of increasing small unit effectiveness. FY 2019 to FY 2020 Increase/Decrease Statement: In FY 2020, this effort is realigned to PE 0603118A / Project AY5.		0.495	1.450	-
Title: Joint Service Small Arms Science and Technology Collaboration Description: This effort addresses the continued operations of the Joint Service Small Arms Program (JSSAP) office to coordinate and harmonize new Services' materiel requirements with potential joint applications, and to maintain awareness of the		1.500	1.350	-

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Appropriation/Budget Activity 2040 / 3	R-1 Program Element (Number/Name) PE 0603607A / Joint Service Small Arms Program	Project (Number/Name) 627 / Jt Svc Sa Prog (JSSAP)	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
<p>Services' efforts to improve Small Arms capabilities thus reducing duplication of ongoing and planned technology, acquisition and sustainment activities.</p> <p>FY 2019 Plans: Continue to manage Joint Services Small Arms Programs; continue technology developmental efforts on material solutions for transitioning to small arms programs of record; continue to influence small arms technology maturation activities in collaboration with North Atlantic Treaty Organization (NATO) partners.</p> <p>FY 2019 to FY 2020 Increase/Decrease Statement: This effort ends in FY 2019.</p>			
<p>Title: FY 2019 SBIR / STTR Transfer</p> <p>Description: FY 2019 SBIR / STTR Transfer</p> <p>FY 2019 Plans: FY 2019 SBIR / STTR Transfer</p> <p>FY 2019 to FY 2020 Increase/Decrease Statement: FY 2019 SBIR / STTR Transfer</p>		-	0.171
Accomplishments/Planned Programs Subtotals		5.628	5.879
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 / 3					R-1 Program Element (Number/Name) PE 0603607A / Joint Service Small Arms Program				Project (Number/Name) 62D / SMALL ARMS ADVANCED TECHNOLOGY DEV (CA)			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
62D: SMALL ARMS ADVANCED TECHNOLOGY DEV (CA)	-	0.000	16.920	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	16.920

A. Mission Description and Budget Item Justification
 Congressional Interest FY 2019 Program Increase for Soldier Lethality.

<u>B. Accomplishments/Planned Programs (\$ in Millions)</u>	FY 2018	FY 2019
<i>Congressional Add:</i> Next Generation Squad Weapon - Carbine	-	8.800
<i>FY 2019 Plans:</i> Next Generation Squad Weapon - Carbine		
<i>Congressional Add:</i> Next Generation Squad Weapon Ammunition	-	8.120
<i>FY 2019 Plans:</i> Next Generation Squad Weapon Ammunition		
Congressional Adds Subtotals	-	16.920

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

Remarks

D. Acquisition Strategy
 N/A

E. Performance Metrics
 N/A