

**UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Army										Date: March 2019		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0604182A / Hypersonics							
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	-	0.000	0.000	228.000	-	228.000	181.000	137.000	359.000	274.000	0.000	1,179.000
HX1: Land-Based Hypersonic Missile	-	0.000	0.000	228.000	-	228.000	181.000	137.000	359.000	274.000	0.000	1,179.000

**Note**

This program is a new start beginning in FY 2020.

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

<b><u>B. Program Change Summary (\$ in Millions)</u></b>	<b><u>FY 2018</u></b>	<b><u>FY 2019</u></b>	<b><u>FY 2020 Base</u></b>	<b><u>FY 2020 OCO</u></b>	<b><u>FY 2020 Total</u></b>
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	228.000	-	228.000
Total Adjustments	0.000	0.000	228.000	-	228.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	228.000	-	228.000

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army									Date: March 2019			
Appropriation/Budget Activity 2040 / 4					R-1 Program Element (Number/Name) PE 0604182A / Hypersonics				Project (Number/Name) HX1 / Land-Based Hypersonic Missile			
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
HX1: Land-Based Hypersonic Missile	-	0.000	0.000	228.000	-	228.000	181.000	137.000	359.000	274.000	0.000	1,179.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note This is a New program beginning in FY2020.												
A. Mission Description and Budget Item Justification This Program Element (PE) funds hypersonic development efforts performed by the US Army Space and Missile Defense Command/Army Forces Strategic Command (USASMDC/ARSTRAT).  Project HX1: Funds USASMDC/ARSTRAT to prototype a Long Range Hypersonic Weapon (LRHW) System is to provide the Army with a prototype strategic attack weapon system to defeat Anti Access/Area Denial (A2/AD) capabilities, suppress adversary Long Range Fires, and engage other high payoff/time sensitive targets. The LRHW Integrated System contractor will integrate Common Hypersonic Glide Bodies (CHGBs) with 2 stage boosters into canisters to create LRHW All Up Rounds (AUR) as detailed in the following sections and a build a prototype LRHW System. A leave behind prototype LRHW system is expected as an Early Operational Capability (EOC).												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2018	FY 2019	FY 2020	
Title: Land Based Hypersonic Missile  Description: Funding is provided for planning,.  FY 2020 Plans: The Army Hypersonic Project Office will work with the Weapon System Integration Contractor to get through Systems Requirements Review and move towards a Preliminary Design Review for the system. Funding will be used to order CHGBs and boosters for integration into All Up Rounds starting in FY21.  FY 2019 to FY 2020 Increase/Decrease Statement: New program for FY2020									-	-	228.000	
Accomplishments/Planned Programs Subtotals									-	-	228.000	
C. Other Program Funding Summary (\$ in Millions) N/A												
Remarks												

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Army		Date: March 2019
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0604182A / Hypersonics	Project (Number/Name) HX1 / Land-Based Hypersonic Missile
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		

## UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army												Date: March 2019			
Appropriation/Budget Activity 2040 / 4						R-1 Program Element (Number/Name) PE 0604182A / Hypersonics				Project (Number/Name) HX1 / Land-Based Hypersonic Missile					
Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
.Government Personnel and Operations Support	TBD	.SMDC/ARSTRAT Huntsville AL : .	-	-		-		20.000		-		20.000	0.000	20.000	-
Subtotal			-	-		-		20.000		-		20.000	0.000	20.000	N/A
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
.Contracts for Technology Development, and weapon system design, integration, and prototyping	TBD	.TBD : .	-	-		-		208.000		-		208.000	0.000	208.000	-
Subtotal			-	-		-		208.000		-		208.000	0.000	208.000	N/A
Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
.	TBD	. : .	-	-		-		0.000		-		0.000	-	-	-
Subtotal			-	-		-		0.000		-		0.000	-	-	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
.	TBD	. : .	-	-		-		0.000		-		0.000	-	-	-
Subtotal			-	-		-		0.000		-		0.000	-	-	N/A
			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		0.000		228.000		-		228.000	0.000	228.000	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Army							Date: March 2019			
Appropriation/Budget Activity 2040 / 4				R-1 Program Element (Number/Name) PE 0604182A / Hypersonics			Project (Number/Name) HX1 / Land-Based Hypersonic Missile			
	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Army										Date: March 2019			
Appropriation/Budget Activity					R-1 Program Element (Number/Name)					Project (Number/Name)			
2040 / 4					PE 0604182A / Hypersonics					HX1 / Land-Based Hypersonic Missile			

Event Name	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Systems Requirement Review																												
Preliminary Design Review																												
Critical Design Review																												
All Up Round Test																												
System Flight Test																												

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2020 Army			<b>Date:</b> March 2019
<b>Appropriation/Budget Activity</b> 2040 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604182A / <i>Hypersonics</i>	<b>Project (Number/Name)</b> HX1 / <i>Land-Based Hypersonic Missile</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Systems Requirement Review	2	2020	4	2020
Preliminary Design Review	4	2020	1	2022
Critical Design Review	1	2022	4	2022
All Up Round Test	4	2022	1	2023
System Flight Test	1	2023	4	2023