

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 Program Element (Number/Name) PE 0604033F I Hypersonics Prototyping							
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	508.858	576.000	0.000	576.000	201.200	28.500	0.000	0.000	Continuing	Continuing
643882: Air-Launched Rapid Response Weapon (ARRW)	-	0.000	219.230	286.000	0.000	286.000	201.200	28.500	0.000	0.000	0.000	734.930
643885: Hypersonic Conventional Strike Weapon (HCSW)	-	0.000	289.628	290.000	0.000	290.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Hypersonic Prototyping program enables integration and demonstration of emerging hypersonic technologies in an operational or operational-like environment to capitalize on successful laboratory hypersonic research and development efforts with high warfighter priority. Integration and demonstration of hypersonic prototypes also allows leadership to make informed strategy and resource decisions based for future programs on the results of such hypersonic prototype demonstrations.

Hypersonic Prototyping enables a key linkage between research and development in the lab and fielding advanced technologies to the warfighter. Under this program, Air-Launched Rapid response Weapon (ARRW) and Hypersonic Conventional Strike Weapon (HCSW) will accelerate the technology transfer of hypersonic technologies to enable a responsive, long range strike capability.

The Hypersonics Prototyping Program Element is new for FY 2019. In FY 2019, the entirety of Hypersonics prototyping efforts were transferred from PE 0604858F, Tech Transition Program, in order to provide increased transparency to Congress on Air Force prototyping activities as directed in the Department of Defense Appropriation Act 2019. This is an administrative realignment only and is not a new start.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver Hypersonics prototyping capabilities. The use of such program funds would be in addition to civilian pay expenses budgeted in program elements 0605826F, 0605827F, 0605828F, 0605829F, 0605830F, 0605831F, 0605832F, 0605898F, and 0605833F.

As directed in the FY 2018 NDAA, Sec 825, amendment to PL 114-92 FY 2016 NDAA, Sec 828 Penalty for Cost Overruns, the FY 2018 Air Force penalty total is \$14.373M. The calculated percentage reduction to each research, development, test and evaluation and procurement account will be allocated proportionally from all programs, projects, or activities under such account.

This effort is in Budget Activity 4, Advanced Component Development and Prototypes (ACD&P), because efforts are necessary to evaluate integrated technologies, representative modes or prototype systems in a high fidelity and realistic operating environment.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force				Date: February 2019	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
3600: Research, Development, Test & Evaluation, Air Force I BA 4: Advanced Component Development & Prototypes (ACD&P)		PE 0604033F I Hypersonics Prototyping			
B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	508.858	576.000	0.000	576.000
Total Adjustments	0.000	508.858	576.000	0.000	576.000
• Congressional General Reductions	0.000	0.000			
• Congressional Directed Reductions	0.000	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	0.000	250.800			
• Congressional Directed Transfers	0.000	258.058			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	576.000	0.000	576.000
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 643882: Air-Launched Rapid Response Weapon (ARRW)				FY 2018	FY 2019
Congressional Add: Program increase - air-launched rapid response weapon				0.000	50.500
Congressional Add Subtotals for Project: 643882				0.000	50.500
Project: 643885: Hypersonic Conventional Strike Weapon (HCSW)					
Congressional Add: Program Increase - Hypersonic Conventional Strike Weapon				0.000	200.300
Congressional Add Subtotals for Project: 643885				0.000	200.300
Congressional Add Totals for all Projects				0.000	250.800
Change Summary Explanation					
Increase in FY 2019 due to a Congressionally-directed transfer in the Department of Defense Appropriations Act 2019 to move hypersonics prototyping efforts from PE 0604858F, Tech Transition Program, to its own program element (PE 0604033F).					
Increase in FY 2020 is due to hypersonics prototyping efforts being transferred from PE 0604858F, Tech Transition Program, and additional funding for both the Air-Launched Rapid Response Weapon and Hypersonic Conventional Strike Weapon efforts.					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643882 / Air-Launched Rapid Response Weapon (ARRW)			
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
643882: Air-Launched Rapid Response Weapon (ARRW)	-	0.000	219.230	286.000	0.000	286.000	201.200	28.500	0.000	0.000	0.000	734.930
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
The Air-Launched Rapid Response Weapon (ARRW) project integrates Air Force and DARPA enabled system technologies into a prototype that will demonstrate the viability of this concept to be fielded as a long range prompt strike capability. ARRW will design, develop, manufacture, and test, a number of prototype vehicles to inform decisions concerning ARRW acquisition and production.												
In FY 2019, ARRW efforts were transferred from PE 0604858F, Tech Transition Program to PE 0604033, Hypersonics Prototyping , Project 643882, Air-Launched Rapid Response Weapon (ARRW), in order to provide increased transparency to Congress on Air Force prototyping activities as directed in the Department of Defense Appropriations Act 2019. This was an administrative realignment and not a new start.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2018	FY 2019	FY 2020	
Title: Air Launched Rapid Response Weapon (ARRW)									0.000	168.730	286.000	
Description: Integrates Air Force and DARPA enabled system technologies into a prototype that will demonstrate the viability of this concept to be fielded as a long range prompt strike capability. ARRW will design, develop, manufacture, and test, a number of prototype vehicles to inform decisions concerning ARRW acquisition and production.												
In FY 2018, this work was performed under the Lifecycle Prototyping effort in PE 0604858F, Tech Transition Program, Project 645351, Prototyping.												
FY 2019 Plans: Continue with ARRW design activities and complete the system delta preliminary design review. Construct and test instrumented measurement vehicles.												
FY 2020 Plans: Continue with ARRW design activities and complete the system critical design review. Construct and test the booster test vehicles.												
FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 increased compared to FY 2019 by \$117.270 million. Funding increased to support ARRW system critical design review, construction, and testing of booster test vehicles.												
Accomplishments/Planned Programs Subtotals									0.000	168.730	286.000	

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604033F / <i>Hypersonics Prototyping</i>	Project (Number/Name) 643882 / <i>Air-Launched Rapid Response Weapon (ARRW)</i>	

	FY 2018	FY 2019
Congressional Add: Program increase - air-launched rapid response weapon	0.000	50.500
FY 2018 Accomplishments: Not Applicable		
FY 2019 Plans: Conduct Congressionally directed efforts		
Congressional Adds Subtotals	0.000	50.500

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

Line Item	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
• RDTE 04 0604858F: <i>Tech Transition Program</i>	82.581	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	82.581

Remarks

In FY 2018, the work for ARRW was performed under the Lifecycle Prototyping effort in PE 0604858F, Tech Transition Program, Project 645351, Prototyping.

D. Acquisition Strategy

Acquisition Decision Memorandum (signed 3 May 2018) designated Air-Launched Rapid Response Weapon (ARRW) as Section 804 Rapid Prototyping Program.

The Air Force awarded in August 2018 an undefinitized contract in order to complete a critical design review and procure all long lead parts and materials. Upon definitization, the ARRW program will modify the contract to award the entire RDT&E effort (through the end of flight test). The cost type contract includes schedule incentives to earn a higher fixed fee. The government agency responsible for managing this program is the Air Force Life Cycle Management Center, Armament Directorate, Eglin AFB, FL.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643882 / Air-Launched Rapid Response Weapon (ARRW)					
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
ARRW - Contract	C/FFP	LMCO: Various: TBD : TBD	-	0.000		185.000	Feb 2019	259.200	Mar 2020	-		259.200	Continuing	Continuing	-
ARRW - Mission Planning	C/CPFF	Various: TBD : TBD	-	0.000		1.900	Mar 2019	1.900	Mar 2020	-		1.900	Continuing	Continuing	-
Subtotal			-	0.000		186.900		261.100		-		261.100	Continuing	Continuing	N/A
Remarks															
In FY 2018, ARRW data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															
ARRW - This effort is part of the DARPA Other Transaction Authority (OTA) and Air Force contracts.															
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
ARRW - Government Test	Various	Various: TBD : TBD	-	0.000		28.830	May 2019	21.000	May 2020	-		21.000	Continuing	Continuing	-
Subtotal			-	0.000		28.830		21.000		-		21.000	Continuing	Continuing	N/A
Remarks															
In FY 2018, ARRW data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															
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
ARRW - Program Management Administration	Various	Multiple: TBD : TBD	-	0.000		3.500	Sep 2019	3.900	Sep 2020	-		3.900	Continuing	Continuing	-
Subtotal			-	0.000		3.500		3.900		-		3.900	Continuing	Continuing	N/A
Remarks															
In FY 2018, ARRW data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															
Includes A&AS support requirements plus TDY, and office supplies. FY 2019 reflects full staffing.															

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force											Date: February 2019							
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643882 / Air-Launched Rapid Response Weapon (ARRW)								
						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		219.230		286.000		-		286.000	Continuing	Continuing	N/A

Remarks

Additional details on Hypersonics prototyping concepts can be provided in the appropriate forum.

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping	Project (Number/Name) 643882 / Air-Launched Rapid Response Weapon (ARRW)

	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
Air Launched Rapid Response Weapon (ARRW)																												
ARRW- Contract																												
Design and Preliminary Design Review																												
Design and Critical Design Review																												
Flight Tests																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604033F / <i>Hypersonics Prototyping</i>	Project (Number/Name) 643882 / <i>Air-Launched Rapid Response Weapon (ARRW)</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Air Launched Rapid Response Weapon (ARRW)</i>				
ARRW- Contract	1	2019	4	2022
Design and Preliminary Design Review	1	2019	2	2020
Design and Critical Design Review	2	2020	4	2020
Flight Tests	3	2019	4	2022

Note

In FY 2018, the schedules are reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.

Further schedule details can be provided in the appropriate forum.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 4					R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643885 / Hypersonic Conventional Strike Weapon (HCSW)			
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
643885: Hypersonic Conventional Strike Weapon (HCSW)	-	0.000	289.628	290.000	0.000	290.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Hypersonic Conventional Strike Weapon (HCSW) Project integrates Air Force, Strategic Capabilities Office, and Conventional Prompt Strike (CPS) glide body into a prototype that will demonstrate the viability of this concept to be fielded as a long range prompt strike capability. HCSW will design, develop, manufacture, and test, a number of prototype vehicles to inform decisions concerning future HCSW acquisition and production.

In FY 2019, HCSW efforts were transferred from PE 0604858F, Tech Transition Program, to PE 0604033, Hypersonics Prototyping, Project 643885, Hypersonic Conventional Strike Weapon (HCSW), in order to provide increased transparency to Congress on Air Force prototyping activities as directed in the Department of Defense Appropriations Act 2019. This was an administrative transfer and not a new start.

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

	FY 2018	FY 2019	FY 2020
Title: Hypersonic Conventional Strike Weapon (HCSW)	0.000	89.328	290.000
<p>Description: Integrates Air Force enabled system technologies into a prototype that will demonstrate the viability of this concept to be fielded as a long range prompt strike capability. Hypersonic Conventional Strike Weapon (HCSW) will design, develop, manufacture, and test, a number of prototype vehicles to inform decisions concerning HCSW acquisition and production.</p> <p>In FY 2018 this work was performed under the Lifecycle Prototyping effort in PE 0604858F, Tech Transition Program 645351, Project Prototyping.</p> <p>FY 2019 Plans: Continue program office support, analysis, technical risk reduction, development and integration for the Hypersonic Conventional Strike Weapon and complete Preliminary Design Review (PDR). Begin Critical Design Review.</p> <p>FY 2020 Plans: Continue integration and design activities for the Hypersonic Conventional Strike Weapon. Identify key performance parameters, and complete Critical Design Review. Increase program office footprint and seating via re-locatable, temporary equipment</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Air Force										Date: February 2019		
Appropriation/Budget Activity 3600 / 4				R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643885 / Hypersonic Conventional Strike Weapon (HCSW)				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2018	FY 2019	FY 2020
to support workforce and management of programs and security infrastructure upgrades to ensure program schedules are maintained.												
FY 2019 to FY 2020 Increase/Decrease Statement: FY 2020 increased compared to FY 2019 by \$200.672 million. Funding increased to support HCSW integration and critical design review activities.												
Accomplishments/Planned Programs Subtotals										0.000	89.328	290.000
										FY 2018	FY 2019	
Congressional Add: Program Increase - Hypersonic Conventional Strike Weapon										0.000	200.300	
FY 2018 Accomplishments: Not applicable												
FY 2019 Plans: Conduct Congressionally directed effort.												
Congressional Adds Subtotals										0.000	200.300	
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• RDTE 04 0604858F: Tech Transition Program	49.182	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	49.182	
Remarks In FY 2018 Hypersonics Conventional Strike Weapon was funded under the Lifecycle Prototyping effort in PE 0604858F, Tech Transition Program, Project 645351, Prototyping.												
D. Acquisition Strategy Acquisition Decision Memorandum (signed 3 May 2018) designated Hypersonic Conventional Strike Weapon (HCSW) as Section 804 Rapid Prototyping Program. The Air Force awarded in April 2018 an Indefinite Delivery / Indefinite Quantity to Lockheed Martin Corp. - Space for the design, development, engineering, systems integration, test, logistics, planning, and aircraft integration support of all the elements of a hypersonic, conventional, air-launched, stand-off weapon. The government agency responsible for managing this program is the Air Force Life Cycle Management Center, Armament Directorate, Eglin AFB, FL.												
E. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.												

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643885 / Hypersonic Conventional Strike Weapon (HCSW)					
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
Hypersonic program office support, analysis, technical risk reduction,	C/CPFF	Lockheed Martin : Huntsville, AL	-	0.000		194.101	Jan 2019	190.279	Jan 2020	0.000		190.279	Continuing	Continuing	-
Hypersonic product development	C/CPAF	Lockheed Martin : Huntsville, AL	-	0.000		-		-		-		-	Continuing	Continuing	-
Subtotal			-	0.000		194.101		190.279		0.000		190.279	Continuing	Continuing	N/A
Remarks															
In FY 2018 Hypersonic Conventional Strike Weapon (HCSW) data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															
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
Development & Prototyping	C/CPFF	Multiple: TBD : Various	-	0.000		57.057	Apr 2019	0.784	Mar 2020	0.000		0.784	Continuing	Continuing	-
Subtotal			-	0.000		57.057		0.784		0.000		0.784	Continuing	Continuing	N/A
Remarks															
In FY 2018 Hypersonic Conventional Strike Weapon (HCSW) data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															
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
Test and Evaluation	C/CPAF	Multiple: TBD : Various	-	0.000		33.070	Jan 2019	95.804	Jan 2020	0.000		95.804	Continuing	Continuing	-
Subtotal			-	0.000		33.070		95.804		0.000		95.804	Continuing	Continuing	N/A
Remarks															
In FY 2018 Hypersonic Conventional Strike Weapon (HCSW) data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity 3600 / 4						R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping				Project (Number/Name) 643885 / Hypersonic Conventional Strike Weapon (HCSW)					
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
Management Services	C/TBD	Multiple: TBD : Various	-	0.000		5.400	Sep 2019	3.133	Sep 2020	0.000		3.133	Continuing	Continuing	-
Subtotal			-	0.000		5.400		3.133		0.000		3.133	Continuing	Continuing	N/A
Remarks															
In FY 2018 Hypersonic Conventional Strike Weapon (HCSW) data is reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.															
Includes A&AS support requirements plus TDY and office supplies.															
			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		289.628		290.000		0.000		290.000	Continuing	Continuing	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force										Date: February 2019																			
Appropriation/Budget Activity 3600 / 4										R-1 Program Element (Number/Name) PE 0604033F / Hypersonics Prototyping										Project (Number/Name) 643885 / Hypersonic Conventional Strike Weapon (HCSW)									

	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
Hypersonic Conventional Strike Weapon (HCSW)																												
Preliminary Design Review																												
Critical Design Review																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 4	R-1 Program Element (Number/Name) PE 0604033F / <i>Hypersonics Prototyping</i>	Project (Number/Name) 643885 / <i>Hypersonic Conventional Strike Weapon (HCSW)</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Hypersonic Conventional Strike Weapon (HCSW)</i>				
Preliminary Design Review	1	2019	3	2019
Critical Design Review	3	2019	4	2020

Note

In FY 2018, the HCSW schedules are reported under PE 0604858F, Tech Transition Program, Project 645351, Prototyping.

Further schedule details can be provided in the appropriate forum.