

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 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604604F I Submunitions							
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	-	2.697	2.990	3.045	0.000	3.045	3.096	3.159	3.215	3.273	Continuing	Continuing
653166: Joint Smart Munitions Test and Evaluation	-	2.697	2.990	3.045	0.000	3.045	3.096	3.159	3.215	3.273	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project Chicken Little (PCL) continues providing superior rapid reaction signature exploitation capabilities for use on both the traditional and the asymmetrical battlefield. PCL delivers vital one-of-a-kind research, development, test, and evaluation (RDT&E) expertise directly to the warfighter, capability developer, and allied/coalition forces.

From its inception in 1985, PCL constantly advances the state-of-the-art for developmental smart munitions, seekers/sensors, and their platforms. PCL also focuses its capability against today's networked weapons, emerging weapon concepts, and helps develop innovative targeting technologies to be employed against a wide variety of vehicle targets, theater air defense units, and an extensive array of associated equipment.

Combat systems and support equipment exhibit physical characteristics (i.e. signatures) and present certain vulnerabilities, which can be exploited by various targeting technologies leading to the elimination or incapacitation of the threat through the application of force (e.g. smart munitions or directed energy) or application of intelligence, surveillance, reconnaissance (ISR) methods. PCL collects physical, functional, and signature attributes of real foreign threat systems and related equipment; these data feed high-fidelity models used to predict detection, classification, vulnerability, and effectiveness performance for ISR sensor and weapon system design. PCL collects high resolution signature data using a variety of ground, air, and space-based sensors against both new and existing (obtained, sustained, and maintained to be signature representative) foreign targets; with and without the presence of camouflage, concealment, and deception materials; and operated using enemy tactics/CONOPS. The resulting highly reliable, realistic data directly support munitions/targeting development programs and helps mitigate overall acquisition risk. PCL serves as a major focal point for joint signature exploitation, collection, and dissemination within the DoD. PCL is a prime contributor in the time critical process to rapidly exploit, assess, and determine US and allied weapon/targeting performance against high value targets. Customers include: the major Defense and Service Intelligence Centers, all Services, the Joint Technical Coordinating Group (JTTCG) who develop the Joint Munitions Effectiveness Manuals (JMEMs), Combatant Commands, AF Major Commands, US Air Force Weapons School curriculum support, and others. Current projects include, but are not limited to: target signature exploitation, target geometric modeling (for identifying vulnerabilities), improving air capabilities against protected structures (specifically hard and deeply buried targets), and the testing of multiple seekers, sensors, and targeting technologies in representative environments against COCOM/MAJCOM/IC high value targets.

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

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 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0604604F I Submunitions						
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 program is in Budget Activity 5, System Development and Demonstration (SDD) because it has passed Milestone B approval and is conducting engineering and manufacturing development tasks aimed at meeting validated requirements prior to full rate production.								
B. Program Change Summary (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total		
Previous President's Budget		2.705	2.990	3.045	0.000	3.045		
Current President's Budget		2.697	2.990	3.045	0.000	3.045		
Total Adjustments		-0.008	0.000	0.000	0.000	0.000		
• Congressional General Reductions		0.000	0.000					
• Congressional Directed Reductions		0.000	0.000					
• Congressional Rescissions		0.000	0.000					
• Congressional Adds		0.000	0.000					
• Congressional Directed Transfers		0.000	0.000					
• Reprogrammings		0.000	0.000					
• SBIR/STTR Transfer		-0.008	0.000					
• Other Adjustments		0.000	0.000	0.000	0.000	0.000		
Change Summary Explanation								
N/A								
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Project Chicken Little				2.697	2.990	3.045	0.000	3.045
Description: Provide the DoD community accurate multi-spectral signatures obtained from high-value, signature representative modern threat systems using advanced collection technologies.								
Exploitations typically occur CONUS; however, Project Chicken Little is postured to support OCONUS collections as dictated by mission requirements.								
A critical underpinning of the System Exploitation major thrust area, Sensor Week, occurs every two years and provides a unique air and ground demonstration/validation of candidate Seeker/Sensor/ISR technologies.								

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 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0604604F I Submunitions				
C. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Plan and conduct captive carry flight tests and signature collection for seeker/sensor technology evaluations.						
Develop, validate, and accredit improved models for target vulnerability and weapons effectiveness in support of Combatant Commands' (COCOMs) requirements.						
FY 2019 Plans: Exploit high value threat systems (typically 4 per year). Provide signature data from multiple threat systems in various environments using advanced and developmental seeker/sensor technologies.						
Conduct Sensor Week (SW), providing a singularly unique forum for joint service demonstration of developmental and operational seekers/sensors/ISR assets against a wide array of US, coalition, and foreign national ground targets.						
Exploit the signatures of ISR targets; conduct rapid reaction performance analysis & evaluations in support of COCOM/MAJCOM immediate/urgent warfighter needs; optimize current project methods to support ISR testing; capture and catalog multi-spectral signatures on asymmetric threat Unmanned Aerial Systems (UAS).						
No OCONUS requirements.						
Assist in obtaining relevant, high value, and emergent threat assets and/or decoys. Ensure the fleet foreign threat assets remain properly "signature representative" for systems development and testing.						
Develop, validate, and accredit improved computer models to determine target vulnerability and weapons effectiveness in support of warfighter requirements.						
FY 2020 Base Plans: Exploit high value threat systems (typically 4 per year). Provide signature data from multiple threat systems in various environments using advanced and developmental seeker/sensor technologies.						
Conduct Sensor Week (SW), providing a singularly unique forum for joint service demonstration of developmental and operational seekers/sensors/ISR assets against a wide array of US, coalition, and foreign national ground targets.						

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Air Force				Date: February 2019			
Appropriation/Budget Activity 3600: <i>Research, Development, Test & Evaluation, Air Force I BA 5: System Development & Demonstration (SDD)</i>			R-1 Program Element (Number/Name) PE 0604604F / <i>Submunitions</i>				
C. Accomplishments/Planned Programs (\$ in Millions)							
			FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Exploit the signatures of ISR targets, conduct rapid reaction performance analysis & evaluations in support of COCOM/MAJCOM immediate/urgent warfighter needs, and optimize current project methods to support ISR testing. No OCONUS requirements. Assist in obtaining relevant, high value, and emergent threat assets and/or decoys. Ensure the fleet foreign threat assets remain properly "signature representative" for systems development and testing. Develop, validate, and accredit improved computer models to determine target vulnerability and weapons effectiveness in support of warfighter requirements. <i>FY 2020 OCO Plans:</i> N/A <i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> Funding increased due to inflation.							
Accomplishments/Planned Programs Subtotals			2.697	2.990	3.045	0.000	3.045
D. Other Program Funding Summary (\$ in Millions) N/A							
Remarks							
E. Acquisition Strategy Funds are executed organically in support of test and evaluation activities including studies, analyses, flight & ground tests, model building and simulation. Virtually all of the work is performed in-house by the 96th Test Wing.							
F. 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 / 5						R-1 Program Element (Number/Name) PE 0604604F / <i>Submunitions</i>				Project (Number/Name) 653166 / <i>Joint Smart Munitions Test and Evaluation</i>					
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
96th Test Wing (96 CTG)	PO	Keeping Fleet Relevant : NV	-	0.800	Nov 2017	0.800	Nov 2018	0.800	Nov 2019	-		0.800	Continuing	Continuing	0.800
Subtotal			-	0.800		0.800		0.800		-		0.800	Continuing	Continuing	N/A
Remarks Fleet relevance addresses the acquisition of new and emerging threat vehicles, acquisition of high fidelity decoys, and sustainment of fleet signature quality.															
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
96th Test Wing (96 CTG and 46 TW)	MIPR	Conducting Tests and Analysis : Eglin AFB, FL	-	1.842	Nov 2017	2.135	Nov 2018	2.190	Nov 2019	-		2.190	Continuing	Continuing	-
Subtotal			-	1.842		2.135		2.190		-		2.190	Continuing	Continuing	N/A
Remarks 96th Test Wing (96 CTG, 46 TS) is the Program Office which conducts inhouse testing.															
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
96 Test Wing (96 CTG)	MIPR	46TS/TGBB : Eglin, FL	-	0.055	Nov 2017	0.055	Nov 2018	0.055	Nov 2019	-		0.055	Continuing	Continuing	-
Subtotal			-	0.055		0.055		0.055		-		0.055	Continuing	Continuing	N/A
Remarks 96th Test Wing (96 CTG, 46 TS) is the Program Office which conducts inhouse testing.															

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force											Date: February 2019		
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0604604F / Submunitions				Project (Number/Name) 653166 / Joint Smart Munitions Test and Evaluation				
	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	-	2.697		2.990		3.045		-		3.045	Continuing	Continuing	N/A

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force										Date: February 2019									
Appropriation/Budget Activity 3600 / 5					R-1 Program Element (Number/Name) PE 0604604F / Submunitions					Project (Number/Name) 653166 / Joint Smart Munitions Test and Evaluation									

	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
<i>Project Chicken Little; JMT&E</i>																												
Target/warhead evaluation/analysis, signature test, captive carry flight tests.																												
FY18 Sensor Week																												
FY20 Sensor Week																												
FY22 Sensor Week																												
FY24 Sensor Week																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force		Date: February 2019
Appropriation/Budget Activity 3600 / 5	R-1 Program Element (Number/Name) PE 0604604F / <i>Submunitions</i>	Project (Number/Name) 653166 / <i>Joint Smart Munitions Test and Evaluation</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Project Chicken Little; JMT&E</i>				
Target/warhead evaluation/analysis, signature test, captive carry flight tests.	1	2018	4	2024
FY18 Sensor Week	3	2018	3	2019
FY20 Sensor Week	3	2020	3	2021
FY22 Sensor Week	3	2022	3	2023
FY24 Sensor Week	3	2024	4	2024