

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force **Date:** April 2022

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>
---	---

COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	3.085	2.954	3.273	0.000	3.273	3.338	3.401	3.473	3.550	Continuing	Continuing
653166: <i>Joint Smart Munitions Test and Evaluation</i>	-	3.085	2.954	3.273	0.000	3.273	3.338	3.401	3.473	3.550	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; this data feeds 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/Concept of Operations (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 Combatant Command/Major Command/Intelligence Community high value targets.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver weapon system capability. The use of such programs funds would be in addition to the civilian pay expenses budgeted in program element 00605827F, 0605828F, 0605829F, 0605831F, 0605832F, 0605833F, 0605898F, 0606398F. In FY22 \$0.00 was expended for civilian pay expenses in this program element, and in FY23 \$0.00 is forecasted for civilian pay expenses in this program element.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force	Date: April 2022
--	-------------------------

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>
---	---

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	3.085	2.954	0.000	0.000	0.000
Current President's Budget	3.085	2.954	3.273	0.000	3.273
Total Adjustments	0.000	0.000	3.273	0.000	3.273
• 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	0.000	0.000			
• Other Adjustments	0.000	0.000	3.273	0.000	3.273

Change Summary Explanation

The FY 2022 President's Budget submittal did not reflect FY 2023 through FY 2026 funding. Therefore, an explanation of the change between the two budget positions for FY2023 cannot be made in a relevant manner.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Title: Project Chicken Little (PCL)	3.085	2.954	3.273	0.000	3.273
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, PCL 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/Intelligence, Surveillance, and Reconnaissance (ISR) technologies.					
Plan and conduct captive carry flight tests and signature collection for seeker/sensor technology evaluations.					

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force	Date: April 2022
--	-------------------------

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
<p>Develop, validate, and accredit improved models for target vulnerability and weapons effectiveness in support of Combatant Commands' (COCOMs) requirements.</p> <p>FY 2022 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.</p> <p>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.</p> <p>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).</p> <p>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.</p> <p>Develop, validate, and accredit improved computer models to determine target vulnerability and weapons effectiveness in support of warfighter requirements.</p> <p>FY 2023 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.</p> <p>Conduct Acoustic Week, providing a singularly unique forum for joint service demonstration of developmental and operational acoustic sensors against a wide array of US, coalition, and foreign national ground targets. Sensor platforms will include highly proliferated, asymmetric threat Unmanned Aerial Systems (UAS).</p>					

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Air Force **Date:** April 2022

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
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. <i>FY 2023 OCO Plans:</i> N/A <i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Funding increased (a) due to inflation, and (b) because the FY2022 funding request had been reduced by \$0.157 million to account for the availability of prior year execution balances.					
Accomplishments/Planned Programs Subtotals	3.085	2.954	3.273	0.000	3.273

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. Work is performed in-house by the 96th Test Wing.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force **Date:** April 2022

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 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Maintain Test Asset Relevancy	PO	Various : Las Vegas, NV	-	0.800	Nov 2020	0.800	Nov 2021	0.800	Nov 2022	-		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 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Conduct Test and Analysis	MIPR	96th Test Wing : Eglin AFB, FL	-	2.230	Nov 2020	2.109	Nov 2021	2.411	Nov 2022	-		2.411	Continuing	Continuing	-
Subtotal			-	2.230		2.109		2.411		-		2.411	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 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Management Services	MIPR	46TS/TGBB : Eglin, FL	-	0.055	Nov 2020	0.045	Nov 2021	0.062	Nov 2022	-		0.062	Continuing	Continuing	-
Subtotal			-	0.055		0.045		0.062		-		0.062	Continuing	Continuing	N/A

Remarks
96th Test Wing (96 CTG, 46 TS) is the Program Office which conducts in house testing.

	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals		-	3.085	2.954	3.273	-	3.273	Continuing	Continuing	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Air Force							Date: April 2022			
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>				
	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract	

Remarks

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2023 Air Force		Date: April 2022
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	2021	4	2027
FY21 Acoustic Week	1	2021	3	2021
FY22 Sensor Week	1	2022	4	2022
FY23 Acoustic Week	1	2023	3	2023
FY24 Sensor Week	1	2024	4	2024
FY25 Acoustic Week	1	2025	3	2025
FY26 Sensor Week	1	2026	4	2026
FY27 Acoustic Week	1	2027	3	2027