

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 7: Operational Systems Development					R-1 Program Element (Number/Name) PE 0207247F I AF TENCAP							
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	21.365	0.000	21.365	21.683	22.134	22.536	22.941	Continuing	Continuing
670001: Air Force TENCAP	-	0.000	0.000	21.365	0.000	21.365	21.683	22.134	22.536	22.941	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY2020, PE 1202247F, Air Force TENCAP efforts were transferred to PE 0207247F, Air Force TENCAP, in order to return program to the Major Force Program for General Purpose Forces.

A. Mission Description and Budget Item Justification

Air Force TENCAP increases warfighter effectiveness through the exploitation of national capabilities and promotes cross-domain integration of these capabilities into military operations/training and intelligence, surveillance and reconnaissance (ISR) activities.

AF TENCAP exploits existing air, space, cyber, national and global ISR, and Non-Traditional ISR (NTISR) for operational and tactical applications by rapidly prototyping and providing capability demonstrations. Projects are designed to transition to warfighters or national intelligence agencies for operational use, and to appropriate acquisition Programs of Record for sustainment and further development. AF TENCAP projects influence the design and operation of current and future air, space, cyber, national and global ISR, and NTISR systems while providing situational awareness to warfighters, national intelligence agency organizations, and units.

The program consists of multiple small projects supporting one of the Air Force Core Function Mission Areas (CFMAs). Projects are executed to provide continued support to Special Operations Forces and the warfighter, with impacts at the national, operational, and tactical levels.

This program element may include necessary civilian pay expenses required to manage, execute, and deliver AF TENCAP capability. 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, and 0605898F.

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 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

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 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0207247F I AF TENCAP						
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	0.000	21.365	0.000	21.365		
Total Adjustments		0.000	0.000	21.365	0.000	21.365		
• 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	21.365	0.000	21.365		
C. Accomplishments/Planned Programs (\$ in Millions)				FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Exploitation Applications				0.000	0.000	16.062	0.000	16.062
Description: Exploiting existing air, space, cyber, national and global ISR, and Non-Traditional ISR (NTISR) for operational and tactical applications by rapidly prototyping and demonstrating capabilities. Activities also influence the design and operation of future space, cyber, national and global ISR, and NTISR systems for tactical users.								
FY 2019 Plans: N/A								
FY 2020 Base Plans: - Will continue to rapidly prototype projects and focus warfighter support and resource allocation based on AF TENCAP mission/investment areas - Will continue to execute projects which provide continued support to Special Operations Forces and the warfighter, with impacts at the national, operational, and tactical levels - Will continue focused effort to increase Air Domain Awareness to Air Force and Joint Warfighters								
FY 2020 OCO Plans: N/A								
FY 2019 to FY 2020 Increase/Decrease Statement:								

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 7: Operational Systems Development</i>			R-1 Program Element (Number/Name) PE 0207247F I AF TENCAP		

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
- Funding increased because FY 2019 funding is reflected in PE 1202247F, Air Force TENCAP					
Title: Talon Tactical Mobile Over-the-Horizon Radar (TACMOR) Description: Talon TACMOR is a technology prototype to expand air domain awareness and maritime domain awareness over the Western Pacific region. TACMOR is an FY17 Joint Capability Technology Demonstration project. FY 2019 Plans: N/A FY 2020 Base Plans: - Will continue rapid prototype development of air and maritime domain awareness capability - Will perform system integration testing and conduct initial operational utility assessment FY 2020 OCO Plans: N/A FY 2019 to FY 2020 Increase/Decrease Statement: - Funding increased because FY 2019 funding is reflected in PE 1202247F, Air Force TENCAP	0.000	0.000	5.303	0.000	5.303
Accomplishments/Planned Programs Subtotals	0.000	0.000	21.365	0.000	21.365

D. 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 07 1202247F: AF TENCAP	80.726	31.986	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Remarks N/A											
E. Acquisition Strategy Projects are selected based upon needs identified by the program's customers - DOD Departments, Combatant Commands, Components, MAJCOMs, and/or National Intelligence Agencies. Many projects are executed via existing contracts maintained by other agencies; others are executed via AF TENCAP contracts established with vendors responding to annual Broad Agency Announcements. The U.S. Government organization sponsoring a project is responsible for assuming acquisition, deployment, logistics, sustainment and budgetary responsibilities for the developed capability after it has been successfully demonstrated by AF TENCAP.											

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 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0207247F I AF TENCAP	
<p>AF TENCAP projects typically use an incremental acquisition strategy. AF TENCAP utilizes a disciplined systems engineering approach that allows program teams to solve problems through a series of segments. Each increment has to be successful to pursue the following segment which mitigates cost and schedule risk.</p> <p>Contracts funded in this program element will be awarded using competitive procedures to the maximum extent possible.</p> <p>F. Performance Metrics</p> <p>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.</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Air Force												Date: February 2019			
Appropriation/Budget Activity						R-1 Program Element (Number/Name)				Project (Number/Name)					
3600 / 7						PE 0207247F / AF TENCAP				670001 / Air Force TENCAP					
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
Exploitation Applications	Various	Various : Various	-	-		-		15.062	Dec 2019	-		15.062	Continuing	Continuing	-
Talon TACMOR	SS/CPFF	BAE Systems : Australia	-	-		-		5.303	Nov 2019	-		5.303	Continuing	Continuing	-
Subtotal			-	-		-		20.365		-		20.365	Continuing	Continuing	N/A
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
Program Oversight (PMA)	Various	Various : Various	-	-		-		1.000	Dec 2019	-		1.000	Continuing	Continuing	-
Subtotal			-	-		-		1.000		-		1.000	Continuing	Continuing	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		21.365		-		21.365	Continuing	Continuing	N/A
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Air Force	Date: February 2019
-------------------------------------------------------------------	----------------------------

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207247F / AF <i>TENCAP</i>	Project (Number/Name) 670001 / Air Force <i>TENCAP</i>
--------------------------------------------------	----------------------------------------------------------------------------	------------------------------------------------------------------

	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
AF <i>TENCAP</i> Projects																												
FY 2020 Exploitation Applications Developed, Evaluated, and Released																												
FY 2021 Exploitation Applications Developed, Evaluated, and Released																												
FY 2022 Exploitation Applications Developed, Evaluated, and Released																												
FY 2023 Exploitation Applications Developed, Evaluated, and Released																												
FY 2024 Exploitation Applications Developed, Evaluated, and Released																												
Talon TACMOR System Design/Software Development																												
Talon TACMOR Testing/Operational Utility Assessment																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Air Force			Date: February 2019
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0207247F / AF <i>TENCAP</i>	Project (Number/Name) 670001 / Air Force <i>TENCAP</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>AF TENCAP Projects</i>				
FY 2020 Exploitation Applications Developed, Evaluated, and Released	1	2020	3	2021
FY 2021 Exploitation Applications Developed, Evaluated, and Released	1	2021	3	2022
FY 2022 Exploitation Applications Developed, Evaluated, and Released	1	2022	3	2023
FY 2023 Exploitation Applications Developed, Evaluated, and Released	1	2023	3	2024
FY 2024 Exploitation Applications Developed, Evaluated, and Released	1	2024	4	2024
Talon TACMOR System Design/Software Development	1	2020	3	2020
Talon TACMOR Testing/Operational Utility Assessment	2	2020	2	2021

Note

Most project selection activities occur approximately per the timelines shown, but some projects are initiated on a rolling basis throughout each year in response to time-sensitive operational requirements.