Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0207247F *I AF TENCAP*

Operational Systems Development

COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	114.816	5.812	31.428	-	31.428	24.197	18.042	18.382	18.710	Continuing	Continuing
670001: Air Force TENCAP	-	114.816	5.812	31.428	-	31.428	24.197	18.042	18.382	18.710	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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, 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 and/or national intelligence agencies for operational use, sustainment and appropriate acquisition Programs of Record for further development. AF TENCAP projects can influence the design and operation of future air, space, cyber, national and global ISR and NTISR while providing awareness to warfighters and national intelligence agency organizations and units.

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 the National Warfighter, operational and Tactical Warfighter, and to Special Operations Forces.

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.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	89.816	5.812	31.637	-	31.637
Current President's Budget	114.816	5.812	31.428	-	31.428
Total Adjustments	25.000	-	-0.209	-	-0.209
Congressional General Reductions	-	-			
Congressional Directed Reductions	-	-			
 Congressional Rescissions 	-	-			
Congressional Adds	-	-			
Congressional Directed Transfers	-	-			
Reprogrammings	25.000	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-	-	-0.209	-	-0.209

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Appropriation/Budget Activity 600: Research, Development, Test & Evaluation, Air Force I BA 7: Department Depa	Pate: FY 2014 11.995	FY 2015 5.812	FY 2016 31.428
Change Summary Explanation FY14 - \$25M Military Intelligence Program (MIP) Omnibus request for Talon HATE. C. Accomplishments/Planned Programs (\$ in Millions) Title: Exploitation Applications Description: Exploiting existing air, space, cyber, national and global ISR, and Non-Traditional ISR (NTISR) for operational and actical applications by rapidly prototyping, demonstrating capability, and influencing the design and operation of future space,			
FY14 - \$25M Military Intelligence Program (MIP) Omnibus request for Talon HATE. C. Accomplishments/Planned Programs (\$ in Millions) Title: Exploitation Applications Description: Exploiting existing air, space, cyber, national and global ISR, and Non-Traditional ISR (NTISR) for operational and actical applications by rapidly prototyping, demonstrating capability, and influencing the design and operation of future space,			
Title: Exploitation Applications Description: Exploiting existing air, space, cyber, national and global ISR, and Non-Traditional ISR (NTISR) for operational and actical applications by rapidly prototyping, demonstrating capability, and influencing the design and operation of future space,			
Description: Exploiting existing air, space, cyber, national and global ISR, and Non-Traditional ISR (NTISR) for operational and actical applications by rapidly prototyping, demonstrating capability, and influencing the design and operation of future space,	11.995	5.812	31.428
actical applications by rapidly prototyping, demonstrating capability, and influencing the design and operation of future space,			
cyber, national and global ISR, and NTISR systems for tactical users.			
NOTE: Based on available funding and requirements, number of Talon projects could fluctuate each year.			
FY 2014 Accomplishments: Continued rapid prototype development of AF TENCAP portfolio comprised of 31 Talon projects across the Air Force's twelve core function mission areas. (Talon is an approved and funded AF TENCAP effort).			
FY 2015 Plans: Continuing to rapidly prototype projects and focus warfighter support and resource allocation based on AF TENCAP mission/ investment areas as a reflection of Air Force Core Function Mission Areas (CFMAs). Continuing to execute projects which provided continued support to the National Warfighter, Operational and Tactical Warfighter, and Special Operations Forces.			
FY 2016 Plans: Will continue to rapidly prototype projects and focus warfighter support and resource allocation based on AF TENCAP mission/ nvestment areas as a reflection of Air Force Core Function Mission Areas (CFMAs). Will continue to execute projects which provide continued support to the National Warfighter, Operational and Tactical Warfighter, and Special Operations Forces.			
Title: Talon Hate	74.000	-	-
Description: In support of PACOM requirement, Talon HATE is a technology demonstration to evaluate the military utility of a next-generation capability for the F-15C providing multi-domain information to tactical users. Talon HATE will provide targeting, situational awareness, and an enhanced decision-maker Common Operational Picture. This effort will increase interoperability petween joint (Air Force, Navy) forces in contested environments.			
FY 2014 Accomplishments: Continued development of four multi-domain fused information pods on F-15s. Cost of all ancillary equipment including antennas is included.			
FY 2015 Plans:			

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force **Date:** February 2015 R-1 Program Element (Number/Name) Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: PE 0207247F I AF TENCAP Operational Systems Development C. Accomplishments/Planned Programs (\$ in Millions) FY 2014 FY 2015 FY 2016 Using FY14 funding; continuing development, testing, and fielding of four multi-domain fused information pods on F-15s. FY 2016 Plans: N/A Title: Increased Lethality in a Contested Environment (Talon Hate II) 28.821 **Description:** Technology demonstrations to evaluate the military utility of providing additional capability to Talon HATE nextgeneration capability for the F-15C. This effort provides enhanced multi-domain fused information to tactical users, targeting, situational awareness, and an enhanced decision-maker Common Operational Picture. This effort will increase interoperability between joint (Air Force, Navy) forces in contested environments. FY 2014 Accomplishments: Developed and built capability to provide enhanced multi-domain fused information to tactical users, targeting, situational awareness, and an enhanced decision-maker Common Operational Picture. This effort increased interoperability between joint (Air Force, Navy) forces in contested environments. FY 2015 Plans: Using FY14 funding; developing, testing, integrating, and evaluating capability to provide enhanced multi-domain fused information to tactical users, targeting, situational awareness, and an enhanced decision-maker Common Operational Picture. Effort continuing to increase interoperability between joint (Air Force, Navy) forces in contested environments. FY 2016 Plans: N/A **Accomplishments/Planned Programs Subtotals** 114.816 5.812 31.428

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

Remarks

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E. Acquisition Strategy

Projects are selected for development based upon needs identified by the program's customers - DOD Departments, Combatant Commands, Components, MAJCOMs, and/or National Intelligence Agencies. Acquisition strategies are developed using a segmented gate strategy to limit and control risks. Many projects are executed via existing contracts maintained by other agencies; others are executed via Air Force TENCAP contracts established with vendors responding to annual Broad Agency

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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0207247F / AF TENCAP	
Announcements. The U.S. government organization sponsoring a project for the developed capability after it has been successfully demonstrated by		stics, and budgetary responsibilities
AF TENCAP projects typically use an incremental acquisition strategy. AF solve problems through a series of segments. Each increment has to be so		
Contracts funded in this program element will be awarded using competitive	ve procedures to the maximum extent possible.	
F. Performance Metrics		
Please refer to the Performance Base Budget Overview Book for informati Force performance goals and most importantly, how they contribute to our		e resources are contributing to Air

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Appropriation/Budge 3600 / 7	et Activity	/					ogram Ele 7247F / A		umber/Na 4 <i>P</i>	ame)		(Number I Air Forc		Р	
Product Developmen	nt (\$ in M	illions)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 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	Total Cost	Target Value of Contract
Exploitation Applications	Various	Various : Various,	-	11.292	Dec 2013	5.462	Dec 2014	30.178	Dec 2015	-		30.178	-	46.932	-
Talon Hate	MIPR	Boeing/Various : Huntington Beach/ Various, CA	-	72.960	Dec 2013	-		-		-		-	-	72.960	-
Increased Lethality in a Contested Environment (Talon Hate II)	MIPR	Lockheed Martin : Orlando, FL	-	28.821	Dec 2013	-		-		-		-	-	28.821	-
		Subtotal	-	113.073		5.462		30.178		-		30.178	-	148.713	-
Support (\$ in Million	s)			FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 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
		Subtotal	-	-		-		-		-		-	-	-	-
Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise		2016 CO	FY 2016 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
		Subtotal	-	-		-		-		-		-	-	-	-
Management Service	es (\$ in M	illions)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise		2016 CO	FY 2016 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,	-	0.703	Dec 2013	0.350	Dec 2014	1.250	Dec 2015	-		1.250	-	2.303	-
Program Support - Talon Hate	Various	Various : Various,	-	1.040	Dec 2013	-		-		-		-	-	1.040	-
		Subtotal	_	1.743		0.350		1.250		_		1.250	-	3.343	_

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2016 Air F	orce					[ate: F	ebruary	2015	
Appropriation/Budget Activity 3600 / 7				•	lement (N AF TENCA	lame)	Project (Nui 670001 / Air		,	Þ	
	Prior Years	FY 2014	FY 2	2015	FY 2 Ba	 FY 2			Cost To	Total Cost	Target Value of Contract
Project Cost Totals	-	114.816	5.812		31.428	-	3	1.428	-	152.056	-

Remarks

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xhibit R-4, RDT&E Schedule Profile: PB 2016 Ai	r Force							[ate:	Feb	oruary	201	5	
ppropriation/Budget Activity 600 / 7			1 Program Elem 0207247F / AF		ame)			t (Nu I <i>I Air</i>				AP		
	FY 2014 1 2 3 4	FY 2015	FY 2016	FY 2017		Y 201	_		Y 20		4 1		2020)
FY 2014 Exploitation Applications Developed	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	' "	2 3	4	•		3	4	1 4	3	_ ~
FY 2014 Exploitation Applications Tested, Evaluated, and Released														
FY 2015 Exploitation Applications Developed														
FY 2015 Exploitation Applications Tested, Evaluated, and Released														
FY 2016 Exploitation Applications Developed														
FY 2016 Exploitation Applications Tested, Evaluated, and Released												,		
FY 2017 Exploitation Applications Developed														_
FY 2017 Exploitation Applications Tested, Evaluated, and Released														
FY 2018 Exploitation Applications Developed														
FY 2018 Exploitation Applications Tested, Evaluated, and Released														
FY 2019 Exploitation Applications Developed														
FY 2019 Exploitation Applications Tested, Evaluated, and Released														
FY 2020 Exploitation Applications Developed														
Talon HATE Developed														
Talon HATE Integrated/Tested	-													
Talon HATE User Evaluation														
Increased Lethality (Talon HATE II) Development														
Increased Lethality (Talon HATE II) Integration/ Test														

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Exhibit R-4, RDT&E Schedule Profile: PB 201	6 Air Fo	orce																				Date	e: Fe	ebru	ary	2015	5	
Appropriation/Budget Activity 3600 / 7										gra i 7247			,	•		/Nai	me)		Pro 670	•	•				,	D		
		FY	2014	4		FY	2015	5		FY 2	2016	;		FY 2	2017	1		FY:	2018	}		FY 2	2019)		FY 2	2020	,
	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
Increased Lethality (Talon HATE II) User Evaluation																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
3600 <i>l</i> 7	PE 0207247F <i>I AF TENCAP</i>	670001 I Air Force TENCAP

Schedule Details

	Sta	art	En	d
Events	Quarter	Year	Quarter	Year
FY 2014 Exploitation Applications Developed	1	2014	2	2015
FY 2014 Exploitation Applications Tested, Evaluated, and Released	2	2015	3	2015
FY 2015 Exploitation Applications Developed	1	2015	2	2016
FY 2015 Exploitation Applications Tested, Evaluated, and Released	2	2016	3	2016
FY 2016 Exploitation Applications Developed	1	2016	2	2017
FY 2016 Exploitation Applications Tested, Evaluated, and Released	2	2017	3	2017
FY 2017 Exploitation Applications Developed	1	2017	1	2018
FY 2017 Exploitation Applications Tested, Evaluated, and Released	1	2018	2	2018
FY 2018 Exploitation Applications Developed	1	2018	1	2019
FY 2018 Exploitation Applications Tested, Evaluated, and Released	2	2019	3	2019
FY 2019 Exploitation Applications Developed	1	2019	1	2020
FY 2019 Exploitation Applications Tested, Evaluated, and Released	1	2020	2	2020
FY 2020 Exploitation Applications Developed	1	2020	4	2020
Talon HATE Developed	1	2014	2	2015
Talon HATE Integrated/Tested	2	2015	3	2015
Talon HATE User Evaluation	3	2015	4	2015
Increased Lethality (Talon HATE II) Development	3	2014	2	2015
Increased Lethality (Talon HATE II) Integration/Test	2	2015	3	2015
Increased Lethality (Talon HATE II) User Evaluation	3	2015	4	2015

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