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 0305220F *I RQ-4 UAV*

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	2,400.088	120.180	241.828	208.053	-	208.053	289.497	267.500	284.605	289.697	280.300	4,381.748	
675145: RQ-4 Block 30	19.932	10.000	206.437	153.687	-	153.687	219.726	128.608	116.246	118.326	162.348	1,135.310	
675146: RQ-4 Block 40	99.855	56.600	12.636	6.814	-	6.814	8.979	14.299	15.148	15.419	19.533	249.283	
675147: RQ-4 Grnd Segment/ Comm System	31.606	22.309	-	31.460	-	31.460	53.129	112.791	141.400	143.930	86.419	623.044	
675148: Common-Airborne Sense & Avoid (C-ABSAA)	19.036	17.098	11.829	-	-	-	-	-	-	-	-	47.963	
67RTIP: MP-RTIP	198.282	14.173	10.926	16.092	-	16.092	7.663	11.802	11.811	12.022	12.000	294.771	

Program MDAP/MAIS Code: 252
Project MDAP/MAIS Code(s): 293

Note

In FY 2016, PE 0305220F, RQ-4, Project 675148, Common-Airborne Sense & Avoid (C-ABSAA), transferred to PE 0305206F, Airborne Reconnaissance Systems, Project 675148. This transfer will provide greater visibility into this capability and prepares for expanded applications by making the capability program and platform agnostic.

A. Mission Description and Budget Item Justification

This program element funds four (4) related Air Force projects sharing the RQ-4 platform in common: the RQ-4 Block 30 project, the RQ-4 Block 40 project, the RQ-4 Ground Segment/Communications System project, and MP-RTIP project in FY16 and forward.

Global Hawk:

The RQ-4 Remotely Piloted Aircraft (RPA) provides a high altitude, deep look, long-endurance Intelligence, Surveillance, and Reconnaissance (ISR) capability that complements space and other airborne collectors during peacetime, crisis, and war-fighting scenarios. This funding supports the development of RQ-4 aircraft, payloads, ground and support segments. The Block 20/30/40 RQ-4B RPA is the successor to the Block 10 RQ-4A, and is designed to employ 3,000 pounds of payload and enable Multi-Intelligence (multi-INT) collecting.

Block 30 (Project Number 675145) employs upgraded Synthetic Aperture Radar (SAR) and Electro-Optical/Infrared (EO/IR) sensors known as the Enhanced Integrated Sensor Suite (EISS), and the Airborne Signals Intelligence Payload (ASIP) sensor. Activities include mission planning development and testing, enhanced weather

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 $^{^{(+)}}$ The sum of all Prior Years is 2031.377 million less than the represented total due to several projects ending

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

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

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Operational Systems Development

capability development and testing, airspace and interoperability enhancements and updates, airframe upgrades, sensor upgrades, risk reduction and integration, ice protection system development and testing, and resolution of issues with Diminishing Manufacturing Sources (DMS).

The Block 40 (Project Number 675146) employs the MP-RTIP radar sensor. In FY15 and beyond, this includes the Block 40 costs for the development of enhanced weather capability development and testing, maritime mode utilization, mission planning development and testing, airspace integration activities including Mode 5 Automatic Dependent Surveillance-Broadcast (ADS-B), ice protection system development and testing, airframe and sensor enhancements to the Block 40 fleet.

The Ground Segment Modernization (GSM)/Communication System Modernization (CSM) Project Number 675147 includes the GSM project, CSM project and the Next Generation Communication System. The ground segment currently includes the Mission Control Element (MCE), the Launch and Recovery Element (LRE), and the networking resources required to simultaneously disseminate intelligence while remaining compliant with Department of Defense (DoD) cybersecurity network requirements to operate on the Global Information Grid. As a result of the reinstatement of the Block 30s in the FY15 PB, the requirement for ground stations operations significantly increased which increased the need for efforts to address DMS issues. The GSM project will initiate in FY16 in support of a 20 year operational lifecycle, and will comprise an approach that combines the functionality of legacy MCEs and LREs into a single building-based configuration. The CSM project will provide enhancements across the RQ-4 communication network.

When judged feasible and affordable, this program will participate in the development, testing, and implementation of international standards to enhance joint, allied, and coalition interoperability. Studies and activities may be initiated to further explore the utility of incorporating the emerging architectural standards such as the USAF Unmanned Aeriel System (UAS) Command and Control Initiative (UCI) or the DoD's Unmanned Control Segment standards (UCS). GSM and CSM will incorporate UCI and UCS standards.

The RQ-4 program will maintain and upgrade interoperability for Blocks 20/30/40 with system of systems partners and continue to incorporate applicable synergies with other platforms such as the U.S. Navy's Triton, other RPA weapon systems, and Processing, Exploitation & Dissemination (PED) elements. The networking capability for intelligence dissemination is required to provide the data transport interface between the Weapons System, Operations Centers, and external Intelligence Community customers.

C-ABSAA:

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C-ABSAA is an analysis and developmental effort in the pre-Material Development Decision phase of the acquisition lifecycle which supports emerging warfighter requirements to fully integrate Group 4-5 RPA into the National Airspace System (NAS), international airspace, other nations' sovereign airspace, and operational combat airspace to conduct the entire range of military operations across all mission environments. C-ABSAA also supports the "Worldwide Operations" Key Performance Parameter (KPP) in larger RPA requirement documents, and Public Law 112-239 directing DoD collaboration with the Federal Aviation Administration (FAA) and the National Air and Space Administration (NASA) to safely integrate RPA in the NAS. Funding in this project supports the development of a Sense and Avoid (SAA) capability set for Group 4-5 RPA and covers analysis, research, and developmental activities as well as infrastructure and other government costs. Activities included support to the development of warfighter requirements and analysis of possible solution alternatives, the collaboration with the FAA, NASA, and Office of the Secretary of Defense (OSD) to develop national policy and standards, and SAA related studies, analysis, modeling and simulation, program planning and project execution. RPA platform specific integration and testing is not included.

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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 0305220F <i>I RQ-4 UAV</i>	
Operational Systems Development		

In FY16, Project 675148, C-ABSAA, transferred to PE 0305206F, Airborne Reconnaissance Systems, Project 675148, C-ABSAA, in order to provide greater visibility into this capability and prepare for expanded applications.

MP-RTIP:

The MP-RTIP sensor was designed as a family of modular, scalable sensors to provide next generation capabilities to support sustainable network centric operations with integrated Command and Control, Intelligence, Surveillance and Reconnaissance (C2ISR) capability. MP-RTIP provides the RQ-4 Block 40 aircraft with advanced Synthetic Aperture Radar (SAR) and Moving Target Indicator (MTI) sensor capabilities.

This project (67RTIP) includes all MP-RTIP design, development, test, and integration efforts for the RQ-4 Block 40 platform. Integration activities include platform integration of the MP-RTIP sensor and sustainment logistics planning support. MP-RTIP studies and development insertion include the implementation of Maritime Modes (MM), High Range Resolution (HRR) modes, electronic protection, technical refresh, product improvements and other advanced capabilities.

Activities also include studies and analysis supporting current and future program planning and future modes development based on user requirements.

Per direction of USD(AT&L), the RQ-4 program was restructured from the original project 675144 (Baseline) into multiple projects: (1) Block 30, (2) Block 40, (3) GroundSegment/Communications System, and (4) C-ABSAA. Prior year funds in the amount of \$2031.377M were accounted for in project 675144.

In FY 2016 and beyond, the RQ-4 Block 30 project 675145 includes budget necessary for systems engineering/program management, test and evaluation, management services and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System). This reflects contracting/acquisition strategy for these common elements within the Global Hawk program. Projects 675148 (C-ABSAA) and 67RTIP (Multi-Platform Radar Technology Insertion Program (MP-RTIP)) reflect separate costs as they are separately managed/supported programs.

The Cost to Complete and Total Cost for Major Defense Acquistion Program (MDAP) projects in this program element are documented in the R3. Total Cost on the R2 is not reflective of the total cost for MDAP projects since the R2 does not account for prior years funding for in project 675144.

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.

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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 0305220F *I RQ-4 UAV*

Operational Systems Development

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	120.180	244.514	369.014	-	369.014
Current President's Budget	120.180	241.828	208.053	-	208.053
Total Adjustments	-	-2.686	-160.961	-	-160.961
 Congressional General Reductions 	-	-2.686			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
 SBIR/STTR Transfer 	-	-			
Other Adjustments	-	-	-160.961	-	-160.961

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 675145: RQ-4 Block 30

Congressional Add: Study for Adaptation of U-2 Sensors for RQ-4 Block 30

	FY 2014	FY 2015
	10.000	-
Congressional Add Subtotals for Project: 675145	10.000	-
Congressional Add Totals for all Projects	10.000	-

Change Summary Explanation

FY16 (-)\$52.9M decrease: Rephasing of Common-Airborne Sense & Avoid (C-ABSAA) to PE 0305206F

FY16 (-)\$108.1M decrease: Rephasing of Global Hawk program to improve execution

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Exhibit R-2A, RDT&E Project Ju	stification:	PB 2016 A	ir Force							Date: February 2015				
Appropriation/Budget Activity 3600 / 7					_	am Elemen 20F / RQ-4	•	lumber/Name) RQ <i>-4 Block 30</i>						
COST (\$ in Millions)	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			
675145: RQ-4 Block 30	19.932	10.000	206.437	153.687	-	153.687	219.726	128.608	116.246	118.326	162.348	1,135.310		
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-				

A. Mission Description and Budget Item Justification

The RQ-4 Remotely Piloted Aircraft (RPA) provides a high altitude, deep look, long-endurance Intelligence, Surveillance, and Reconnaissance (ISR) capability that complements space and other airborne collectors during peacetime, crisis, and war-fighting scenarios. RDT&E funding in this project supports design, development, integration, and testing of capabilities needed to meet validated requirements for Block 30 aircraft, including continuing aircraft system modernization for Enhanced Integrated Sensor Suite (EISS) sensors and the Airborne Signals Intelligence Payload (ASIP).

This funding also supports aircraft systems modernization to include continuing aircraft operations surety, cybersecurity, information assurance, and mission critical repair of Government Furnished Equipment (GFE).

In FY15 and beyond, this RQ-4 Block 30 project 675145 includes budget necessary for enterprise management, test and evaluation, software integration, and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System) as well as program protection projects, studies and analysis supporting future system enhancements. This reflects the contracting/acquisition strategy for these common elements within the RQ-4 program.

The RQ-4 program will maintain capability and interoperability for Block 30 including efforts with system of systems partners and continue to incorporate applicable synergies with other platforms, such as the U.S. Navy's Triton, other RPA weapon systems, and Processing, Exploitation & Dissemination (PED) elements.

Activities include mission planning development and testing, completion of Synthetic Aperture Radar - Complex Imagery development testing, next gen sensor study, enhanced weather capability development and testing, airspace and interoperability enhancements and updates, airframe and software upgrades and deficiency report resolution across RQ-4 fleet, sensor interoperability enhancements and upgrades, upgrades to ASIP SIGINT sensor, Mode 5/ADS-B development and testing, development and testing activities associated with enhancing sensor capability and sensor integration, development and testing of ice protection system, program protection projects, and studies and analysis supporting future system enhancements.

The RQ-4 program will maintain and upgrade interoperability for Blocks 20/30/40 with system of systems partners and continue to incorporate applicable synergies with other platforms such as the U.S. Navy's Triton, other RPA weapon systems, and Processing, Exploitation & Dissemination (PED) elements. The networking capability for intelligence dissemination is required to provide the data transport interface between the Weapons System, Operations Centers, and external Intelligence Community customers.

When judged feasible and affordable, this program will participate in the development, testing, and implementation of international standards to enhance joint, allied, and coalition interoperability. Likewise, studies and activities may be initiated to further explore the utility of incorporating the emerging architectural standards such as the USAF Unmanned Aerial System (UAS) Command and Control Initiative (UCI) or the DoD's Unmanned Control Segment standards (UCS).

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force Appropriation/Budget Activity 3600 / 7 B. Accomplishments/Planned Programs (\$ in Millions) Title: RQ-4 Block 30 System Development and Demonstration (SDD) Description: RQ-4 Development and Demonstration (includes enterprise management, test and evaluation, software integration, and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System) as well as program protection projects, studies and analysis supporting future system enhancements) FY 2014 Accomplishments: N/A FY 2015 Plans: Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic Aperture Radar - Complex Imagery development testing, development of enhanced weather capabilities, missi	er/Name)	Project (N	Date: Febr	uan/ 2015				
B. Accomplishments/Planned Programs (\$ in Millions) Title: RQ-4 Block 30 System Development and Demonstration (SDD) Description: RQ-4 Development and Demonstration (includes enterprise management, test and evaluation, software integration, and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System) as well as program protection projects, studies and analysis supporting future system enhancements) FY 2014 Accomplishments: N/A FY 2015 Plans: Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic	er/Name)			uary 2013				
Title: RQ-4 Block 30 System Development and Demonstration (SDD) Description: RQ-4 Development and Demonstration (includes enterprise management, test and evaluation, software integration, and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System) as well as program protection projects, studies and analysis supporting future system enhancements) FY 2014 Accomplishments: N/A FY 2015 Plans: Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic	R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV							
Description: RQ-4 Development and Demonstration (includes enterprise management, test and evaluation, software integration, and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System) as well as program protection projects, studies and analysis supporting future system enhancements) FY 2014 Accomplishments: N/A FY 2015 Plans: Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total			
software integration, and fielding support for projects 675145, 675146 (Block 40) and 675147 (Ground Segment/Comm System) as well as program protection projects, studies and analysis supporting future system enhancements) FY 2014 Accomplishments: N/A FY 2015 Plans: Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic	-	182.323	128.239	-	128.239			
N/A FY 2015 Plans: Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic	1							
Development activities to support required sensor upgrades for the RQ-4 as well as completion of Synthetic								
planning, upgrades to ASIP SIGINT sensor, sensor enhancements and upgrades, airspace integration activitie including Mode 5/ADS-B, integration of advanced sensors, continued system interoperability, cybersecurity and information assurance and reliability & maintainability, and associated testing & evaluation.	s							
FY 2016 Base Plans: Continue activities to support required sensor upgrades for the RQ-4 as well as development of enhanced weather capabilities, mission planning, upgrades to ASIP SIGINT sensor, sensor enhancements and upgrades airspace integration activities including Mode 5/ADS-B, integration of advanced sensors, continued system interoperability, cybersecurity and information assurance and reliability & maintainability, and associated testing & evaluation, and begin development of ice protection system.								
Title: Block 30 Government Test and Non-Prime Support	-	24.114	25.448	_	25.448			
Description: Government test, non-prime technical support and Other Government Costs (OGC) The majority of this funding supports RQ-4 development testing at the 412 Test Wing at Edwards AFB, CA and also includes funding for incidental support from Air Force Operational Test and Evaluation Center (AFOTEC), Joint Interoperability Test Command (JITC), Distributed Common Ground System (DCGS), other interoperability partners and OGC.								
FY 2014 Accomplishments: N/A								
FY 2015 Plans:								

PE 0305220F: RQ-4 UAV

Exhibit R-2A, RDT&E Project J	ibit R-2A, RDT&E Project Justification: PB 2016 Air Force									ruary 2015	
Appropriation/Budget Activity 3600 / 7		ment (Numbe Q-4 UAV	r/Name) Project (Number/Name) 675145 / RQ-4 Block 30								
B. Accomplishments/Planned I	Programs (\$ in ₱	Millions)					FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue government test and no	on-prime enginee	ering and tec	chnical suppo	ort and Othe	r Governme	nt Costs.					
FY 2016 Base Plans: Continue government test and no	on-prime enginee	ering and ted	chnical suppo	ort and Othe	r Governme	nt Costs.					
			Accomplis	hments/Plai	nned Progra	ams Subtotal	s -	206.437	153.687	_	153.687
							FY 2014	FY 2015			
Congressional Add: Study for A	Adaptation of U-2	Sensors for	RQ-4 Block	30			10.000	-			
FY 2014 Accomplishments: Initial sensors or alternative sensors of in flight performance would affect and airspace and sensor interoperates.	comparable cap t sensor performa	ability onto t	the RQ-4B to	o include con	nparing how	differences					
				Cong	ressional A	dds Subtotal	s 10.000	-			
C. Other Program Funding Sun	nmary (\$ in Milli	ons)					,				
l inc Itom	EV 2044	EV 204 <i>E</i>	FY 2016	FY 2016	FY 2016	EV 2047	EV 2040	EV 2040	EV 2020	Cost To	Total Coo
Line Item	FY 2014	FY 2015	<u>Base</u>	<u>000</u>	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	<u>Complete</u>	Total Cos

			FY 2016	FY 2016	FY 2016					Cost To		
Line Item	FY 2014	FY 2015	Base	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost	
 APAF: BA04: Line 	11.000	54.475	37.800	-	37.800	35.552	38.020	16.503	16.800	-	3,840.645	
Item # HAEUAV: RQ-4												
APAF: BA04: Line Item #	1.747	-	-	-	-	-	-	-	-	-	12.438	
RQ440P: RQ-4 Block 40 Proc												
 APAF: BA05: Line Item 	9.313	21.354	50.022	-	50.022	34.493	89.248	67.265	68.477	837.540	1,562.422	
# HAWK00: RQ-4 Mods												
 APAF: BA05: Line 	23.668	-	-	-	-	-	-	-	-	-	23.688	
Item # RQ4GCM: RQ-4												

tem # RQ4GCM: RQ-4

GSRA/CSRA Mods

Remarks

D. Acquisition Strategy

The RQ-4 program uses an evolutionary acquisition strategy to provide the warfighter with a near-term combat capability with increased time-phased capability improvements as technology and risk achieve satisfactory levels. Northrop Grumman Corporation is the prime contractor. A suite of contract vehicles is used for development efforts: primarily, an IDIQ contract covers development, modernization, production, retrofit, fielding, and sustainment efforts through FY 2020.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force		Date: February 2015
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV	Project (Number/Name) 675145 / RQ-4 Block 30
The next event is a Milestone (MS) C decision (date 2QFY15). Upon a program plans to transition from the Production and Deployment phase capabilities beyond the core Acquisition Category I (ACAT) RQ-4 prog	e to the Operations and Support phase of the Defens	e Acquisition System. Future required
E. Performance Metrics		
Please refer to the Performance Base Budget Overview Book for informance performance goals and most importantly, how they contribute to		ow those resources are contributing to Air

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

3600 / 7 PE 0305220F / RQ-4 UAV 675145 / RQ-4 Block 30

Product Developmen	nt (\$ in M	illions)		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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
Engineering Manufacturing & Development/IDIQ Block 30		Northrop Grumman Integrated Systems : San Diego, CA	18.982	10.000	Jul 2014	180.903	Jul 2015	128.139	May 2016	-		128.139	574.654	912.678	912.678
		Subtotal	18.982	10.000		180.903		128.139		-		128.139	574.654	912.678	912.678

Remarks

Target Value of the Global Hawk EMD & IDIQ Contracts is not segregated by Budget Project Number. FY15 and beyond contains budget necessary for GH fleet support with Northrop Grumman.

Support (\$ in Millions	s)			FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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
Non Prime Technical Support	Various	Various : Dayton, OH	0.000	-		1.420	Jan 2015	0.100	Feb 2016	-		0.100	0.500	2.020	-
		Subtotal	0.000	-		1.420		0.100		-		0.100	0.500	2.020	-

Test and Evaluation	(\$ in Milli	ions)		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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
Flight Test & Evaluation	MIPR	412 TW : Edwards AFB, CA	0.950	-		16.522	Oct 2014	17.008	Oct 2015	-		17.008	125.490	159.970	-
	•	Subtotal	0.950	-		16.522		17.008		-		17.008	125.490	159.970	-

Remarks

Air Force

Target Value of the Global Hawk effort is not segregated by Budget Project Number. FY15 and beyond contains budget necessary for GH fleet test support.

Management Service	s (\$ 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 Complete	Total Cost	Target Value of Contract
PMA: A&AS	Various	Various : Dayton, OH	0.000	-		5.270	Nov 2014	5.064	Nov 2015	-		5.064	26.662	36.996	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Project (Number/Name)

3600 / 7

PE 0305220F / RQ-4 UAV

675145 Î RQ-4 Block 30

Management Service	es (\$ in M	illions)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise	FY 2	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
PMA: Other Government Costs	Various	Various : Dayton, OH	0.000	-		2.322	Oct 2014	3.376	Oct 2015	-		3.376	17.948	23.646	-
		Subtotal	0.000	-		7.592		8.440		-		8.440	44.610	60.642	-

Remarks

Target Value of the Global Hawk Contracts is not segregated by Budget Project Number. FY15 and beyond contains budget necessary for GH fleet management services support.

	Prior Years	FY 2	2014	FY 2	2015	FY 2 Ba	FY 2	 FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	19.932	10.000		206.437		153.687	-	153.687	745.254	1,135.310	-

Remarks

Target Value of the Global Hawk EMD & IDIQ Contracts is not segregated by Budget Project Number.

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xhibit R-4, RDT&E Schedule Profile: PB 2	016 Air Fo	rce																		Da	ite: F	ebr	uary	/ 20	15	
ppropriation/Budget Activity 600 / 7								_	m Ele)F <i>I R</i>		•		nber	/Na	me)						ber/l 4 Blo					
		FY 2	014		FY 20)15		FY	2016			FY 2	2017	,		FY	2018	8		F١	201	9		F١	202	0
	1	2	3 4	l 1	2	3 4	1 1	2	3	4	1	2	3	4	1	2	3	4	1	2	2 3	4	. 1	2	2 3	4
SAR Complex Imagery			·	,				,									,						ľ			
Enhanced Weather Capability																										
Mode 5/ADS-B																										
ASIP Inc 1																										
Mission Planning																										
Next Gen Sensor Study																										
Sensor Enhancements & Upgrades																										
Ice Protection System																										
412 Test Wing Support																										

PE 0305220F: *RQ-4 UAV* Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
1	,	, ,	umber/Name)
3600 / 7	PE 0305220F <i>I RQ-4 UAV</i>	6/5145 <i>1</i> F	RQ-4 Block 30

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
SAR Complex Imagery	2	2015	4	2015
Enhanced Weather Capability	2	2015	1	2017
Mode 5/ADS-B	4	2015	4	2017
ASIP Inc 1	2	2015	4	2016
Mission Planning	1	2015	3	2016
Next Gen Sensor Study	4	2014	3	2015
Sensor Enhancements & Upgrades	4	2015	4	2017
Ice Protection System	4	2016	4	2018
412 Test Wing Support	1	2015	4	2020

PE 0305220F: RQ-4 UAV

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2016 A	ir Force							Date: Febr	uary 2015	
Appropriation/Budget Activity 3600 / 7					_	am Elemen 20F / RQ-4	•	Name)	Project (No 675146 / R		,	
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
675146: RQ-4 Block 40	99.855	56.600	12.636	6.814	-	6.814	8.979	14.299	15.148	15.419	19.533	249.283
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

A. Mission Description and Budget Item Justification

The RQ-4 Remotely Piloted Aircraft (RPA) provides a high altitude, deep look, long-endurance Intelligence, Surveillance, and Reconnaissance (ISR) capability that complements space and other airborne collectors during peacetime, crisis, and war-fighting scenarios.

RDT&E funding in this project supports design, development, integration, and testing of items needed to meet validated requirements for Block 40 aircraft, including further development, integration and test of the Multi-Platform Radar Technology Insertion Program (MP-RTIP) sensor capabilities. The Block 40 program provides critical Synthetic Aperture Radar (SAR) and Ground Moving Target Indicator (GMTI) data to the warfighter. This funding also supports continued aircraft/communications systems modernization to include Mode 5/ADS-B, mission planning upgrade development and testing, program protection projects, enhanced weather capability, radar maritime modes, development and testing of ice protection system, and reliability and maintainability improvements. Funding continues RQ-4 unique development and integration of upgraded capabilities.

In FY15 and beyond, the RQ-4 Block 40 project 675146 includes the delta costs only for the development of above common capabilities funded with the RQ-4 Block 30 project, 675145. The RQ-4 Block 30 project, 675145, contains the budget necessary for systems engineering/program management, sofware integration, test and evaluation, and fielding support for the fleet.

When judged feasible and affordable, this program will participate in the development, testing, and implementation of international standards to enhance joint, allied, and coalition interoperability. Likewise, studies and activities may be initiated to further explore the utility of incorporating the emerging architectural standards such as the USAF Unmanned Aerial System (UAS) Command and Control Initiative (UCI) or the DoD's Unmanned Control Segment standards (UCS).

The RQ-4 program will maintain capability and interoperability for Block 40 including efforts with system of systems partners and continue to incorporate applicable synergies with other platforms, such as the U.S. Navy's Triton, other RPA weapon systems, and Processing, Exploitation & Dissemination (PED) elements.

Activities also include studies and analysis supporting future system enhancements, current and future program planning, and project execution.

PE 0305220F: RQ-4 UAV

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^{1.} The RQ-4 Block 40 Project was directed by an Acquisition Decision Memorandum (ADM) signed 14 Jun 2011 by USD (AT&L). At the time of the ADM signature, and subsequent designation of projects, budgets had already been finalized. Prior budgets for all projects are captured under the RQ-4 Baseline project, as its related Project (675144) was the core project for the RQ-4 program prior to the directed restructure.

o	NCLASSIFIED					
Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force				Date: Febr	uary 2015	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number PE 0305220F / RQ-4 UAV	/Name)		umber/Nan Q-4 Block 4		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: RQ-4 Block 40 System Development and Demonstration (SDD)		37.052	12.636	6.814	-	6.814
Description: RQ-4 Block 40 Payload and Aircraft/Communications Development	nent and Demonstration					
FY 2014 Accomplishments: Continued RQ-4 unique development and integration of MP-RTIP upgraded of Communication systems modernization to include Mode 5/ADS-B, mission playoretection. Continued aircraft operations surety, cybersecurity and information maintainability and associated testing & evaluation.	anning upgrade, and program					
FY 2015 Plans: Plan to conduct IOT&E and continue development of enhanced weather capa integration activities including Mode 5/ADS-B, sensor software, integration of continued enhancements to system interoperability, cybersecurity, informatio maintainability improvements and associated testing & evaluation.	MP-RTIP radar maritime modes,					
FY 2016 Base Plans: Continue development of enhanced weather capabilities, mission planning, a including Mode 5/ADS-B, sensor software, utilization of radar maritime modes system interoperability, cybersecurity, information assurance and reliability & associated testing & evaluation, and begin development of ice protection systems.	s, continued enhancements to maintainability improvements and					
Title: RQ-4 Block 40 Government Test and Non-Prime Support		19.548	-	-	-	-
Description: Government test, non-prime technical support and Other Governajority of this funding supports RQ-4 development testing at the 412 Test Wincludes funding for incidental support from Air Force Operational Test and E Interoperability Test Command (JITC), Distributed Common Ground System partners and OGC.	/ing at Edwards AFB, CA and also valuation Center (AFOTEC), Joint					
FY 2014 Accomplishments: Continued government test and non-prime engineering and technical support Government Costs	for Block 40 IOT&E and Other					
FY 2015 Plans: N/A						
FY 2016 Base Plans:						

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Exhibit R-2A, RD1&E Project Jus	stification: PB	2016 Air Fo	rce						Date: Feb	ruary 2015	
Appropriation/Budget Activity 3600 / 7					rogram Eler 305220F / RO	ment (Number Q-4 UAV	r/Name)		umber/Na RQ-4 Block	,	
B. Accomplishments/Planned Pro	ograms (\$ in I	<u>Millions)</u>					FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A											
			Accomplisi	nments/Pla	nned Progra	ams Subtotals	56.600	12.636	6.814	-	6.814
C. Other Program Funding Sumn	nary (\$ in Milli	ons)	FY 2016	FY 2016	FY 2016					Cost To	
Line Item	FY 2014	FY 2015	Base	OCO	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
• APAF: BA04: Line Item # HAEUAV: <i>RQ-4</i>	11.000	54.475	37.800	-	37.800	35.552	38.020	16.503	16.800	-	3,840.645
 APAF: BA04: Line Item # RQ440P: RQ-4 Blk 40 Proc 	1.747	-	-	-	-	-	-	-	-	-	12.438
APAF: BA05: Line Item# HAWK00: RQ-4 Mods	9.313	21.354	50.022	-	50.022	34.493	89.248	67.265	68.477	837.540	1,562.422
 APAF: BA05: Line Item # RQ4GCM: RQ-4 GSRA/CSRA Mods 	23.668	-	-	-	-	-	-	-	-	-	23.668
• RDTE: BA07: PE 0305238F: <i>NATO AGS</i>	221.589	232.851	197.486	-	197.486	39.292	-	-	-	-	825.015

Remarks

D. Acquisition Strategy

Exhibit P 24 PDT8 E Project Justification: DR 2016 Air Force

The RQ-4 program uses an evolutionary acquisition strategy to provide the warfighter with a near-term combat capability with increased time-phased capability improvements as technology and risk achieve satisfactory levels. Northrop Grumman Corporation is the prime contractor. A suite of contract vehicles is used for development efforts: a legacy EMD "C" contract is being phased out with the completion of current efforts; an IDIQ contract covers development, modernization, production, retrofit, fielding, and sustainment efforts through FY 2020.

The next event is a Milestone (MS) C decision (date 2QFY15). Upon a successful MS C decision concluding the Nunn-McCurdy re-certification process, the RQ-4 program plans to transition from the Production and Deployment phase to the Operations and Support phase of the Defense Acquisition System. Future required capabilities beyond the core Acquisition Category I (ACAT) RQ-4 program are planned to be added over time as separate modification programs.

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.

PE 0305220F: RQ-4 UAV

Air Force

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Dato: February 2015

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Project (Number/Name)

3600 / 7

PE 0305220F / RQ-4 UAV

675146 I RQ-4 Block 40

Product Developmen	t (\$ in Mi	illions)		FY 2	2014	FY 2	2015	FY 2 Ba		FY 2	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
Engineering Manufacturing & Development/IDIQ Block 40	55/	Northrop Grumman Integrated Systems : San Diego, CA	84.351	37.052	Oct 2013	12.636	Nov 2014	6.814	Nov 2015	-		6.814	73.378	214.231	214.231
		Subtotal	84.351	37.052		12.636		6.814		-		6.814	73.378	214.231	214.231

Remarks

Target Value of the RQ-4 EMD & IDIQ contracts is not segregated by Budget Project Number. FY15 and beyond budget necessary for RQ-4 fleet support with Northrop Grumman is contained in Budget Project Number 675145, RQ-4 Block 30.

Support (\$ in Millior	ıs)			FY 2	2014	FY 2	2015		2016 ase		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
Non-Prime Technical Support	Various	Various : Dayton, OH	0.712	0.657	Oct 2013	-		-		-		-	-	1.369	-
		Subtotal	0.712	0.657		-		-		-		-	-	1.369	-

Remarks

Target Value of the RQ-4 contract is not segregated by Budget Project Number.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015		2016 ise	FY 2	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
Flight Test & Evaluation	MIPR	412 TW : Edwards AFB, CA	8.700	14.531	Oct 2013	-		-		-		-	-	23.231	-
		Subtotal	8.700	14.531		-		-		-		-	-	23.231	-

Remarks

Target Value of the RQ-4 effort is not segregated by Budget Project Number. FY15 and beyond budget necessary for GH fleet test support is contained in Budget Project Number 675145, RQ-4 Block 30.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0305220F / RQ-4 UAV

675146 / RQ-4 Block 40

FY 2016 FY 2016 FY 2016 **Management Services (\$ in Millions)** FY 2014 FY 2015 Base oco Total Contract Target Method Performing Prior Award Award Award Award **Cost To Total** Value of Cost Cost Contract **Cost Category Item** & Type **Activity & Location** Years Date Cost Date Cost Date Date Cost Complete Cost PMA: A&AS Various: Davton, OH 2.832 Nov 2013 7.040 Various 4.208 PMA: Other Gov't Cost Various: Dayton, OH 1.884 1.528 Oct 2013 3.412 Various 6.092 4.360 Subtotal 10.452

Remarks

Target Value of the RQ-4 contracts is not segregated by Budget Project Number. FY15 and beyond budget necessary for GH fleet management services support and other government cost is contained in Budget Project Number 675145, RQ-4 Block 30.

	Prior Years	FY 2	014	FY 2	015	FY 2 Ba		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	99.855	56.600		12.636		6.814	-		6.814	73.378	249.283	-

Remarks

Target Value of the RQ-4 EMD & IDIQ Contracts is not segregated by Budget Project Number.

PE 0305220F: RQ-4 UAV

xhibit R-4, RDT&E Schedule Profile: Pl	3 2016 Air Fo	orce	!																		Da	te: F	ebr	uary	201	5	
ppropriation/Budget Activity 600 / 7										Iram E 220F <i>I</i>				mbe	er/Na	ame)					ber/N 4 Blo					
		FY	2014	ļ.		FY 2	2015		F	Y 201	3		FY	201	7		FY	' 20'	18		FY	201	9		FY	2020)
	1	2	3	4	1	2	3	4	1	2 3	4	1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4
Block 40 IOT&E																											
Block 40 IOC																											•
Block 40 FOC																											
GH MP-RTIP Integration										,																	
Sensor Enhancement																											
Enhanced Weather Capability																											
Mode 5/ADS-B																											
Mission Planning																											•
Ice Protection System																											
412 Test Wing Support																											

PE 0305220F: RQ-4 UAV

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
	,	, ,	umber/Name)
3600 <i>I</i> 7	PE 0305220F <i>I RQ-4 UAV</i>	675146 <i>I R</i>	RQ-4 Block 40

Schedule Details

	Sta	art	En	ıd
Events	Quarter	Year	Quarter	Year
Block 40 IOT&E	2	2015	4	2015
Block 40 IOC	1	2016	1	2016
Block 40 FOC	1	2017	1	2017
GH MP-RTIP Integration	1	2014	2	2015
Sensor Enhancement	4	2014	1	2016
Enhanced Weather Capability	2	2015	1	2017
Mode 5/ADS-B	4	2015	4	2017
Mission Planning	3	2014	3	2016
Ice Protection System	3	2016	1	2019
412 Test Wing Support	1	2014	4	2014

PE 0305220F: RQ-4 UAV

Exhibit R-2A, RDT&E Project Ju	khibit R-2A, RDT&E Project Justification: PB 2016 Air Force													
Appropriation/Budget Activity 3600 / 7		_	am Elemen 20F / RQ-4	•	lumber/Name) RQ-4 Grnd Segment/Comm									
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		
675147: RQ-4 Grnd Segment/ Comm System	31.606	22.309	-	31.460	-	31.460	53.129	112.791	141.400	143.930	86.419	623.044		
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-				

Note

- 1. The RQ-4 Ground Segment/Communications System Sub-Program was directed by an Acquisition Decision Memorandum (ADM) signed 14 Jun 2011 by USD (AT&L). At the time of the ADM signature, and subsequent designation of sub-program projects, budgets had already been finalized. The budgets for all projects are captured under the RQ-4 baseline project, as its related Project (675144) was the core project for the RQ-4 program prior to the directed restructure.
- 2. The FY15 PB reinstated the Block 30s. As a result, the operational need for ground stations and modern communications significantly increased. The GSM and CSM projects will resolve Diminishing Manufacturing Supply (DMS) and obsolescence issues in the ground and communication systems and support a 20 year planned operational lifecycle for the Block 20/30/40 fleet. GSM and CSM will leverage previous design and development efforts to implement cost-effective solutions.

A. Mission Description and Budget Item Justification

The RQ-4 Remotely Piloted Aircraft (RPA) provides a high altitude, deep look, long-endurance intelligence, surveillance, and reconnaissance (ISR) capability that complements space and other airborne collectors during peacetime, crisis, and war-fighting scenarios.

RDT&E funding in this project supports design, development, integration and testing of the weapon system's ground elements and communications capabilities. The ground segment currently includes the Mission Control Elements (MCE), the Launch and Recovery Elements (LRE), and the networking resources required to simultaneously disseminate intelligence information while remaining compliant with DoD cybersecurity network requirements to operate on the Global Information Grid.

The RDT&E funding in this project also supports the GSM and CSM efforts, as well as next generation communications capabilities. GSM resolves fleet grounding DMS and obsolescence issues associated with ground segment equipment and provides critical warfighter capabilities such as building-based multi-aircraft control. CSM resolves critical DMS and obsolescence issues in the RQ-4 communication infrastructure and provides enhancements across the RQ-4 communication network. Both GSM and CSM will employ the USAF Unmanned Aerial System (UAS) Command and Control Initiative (UCI) and the DoD's Unmanned Control Segment standards (UCS), using a service-oriented, open architecture approach.

When judged feasible and affordable, this program will participate in the development, testing, and implementation of international standards to enhance joint, allied, and coalition interoperability. Likewise, studies and activities may be initiated to explore the utility of next-generation communications technologies, as well as emerging architectural standards such as UCI and UCS.

The RQ-4 program will maintain and upgrade interoperability for Blocks 20/30/40 with system of systems partners and continue to incorporate applicable synergies with other platforms such as the U.S. Navy's Triton, other RPA weapon systems, and Processing, Exploitation & Dissemination (PED) elements. The networking capability

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force			Date: Febr	uary 2015	
Appropriation/Budget Activity 3600 / 7 R-1 Program Element (Number/PE 0305220F / RQ-4 UAV	Name)		umber/Nan PQ-4 Grnd S		mm
for intelligence dissemination is required to provide the data transport interface between the Weapons System, O customers.	perations C	enters, and	external Int	elligence C	ommunity
B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: RQ-4 Ground Station / Communications System- Critical Obsolescence Issues & Modernization	20.804	-	30.785	-	30.785
Description: RQ-4 Ground Segment/ Communications System Development					
FY 2014 Accomplishments: Continued ground station and communication system updates to resolve critical obsolescence issues					
FY 2015 Plans: N/A					
FY 2016 Base Plans: Continue to resolve critical DMS and obsolescence issues with ground segment equipment and software in support of the planned 20-year operational lifecycle. Maintain and upgrade interoperability and cybersecurity with system of systems partners and continue to incorporate applicable synergies with other platforms, such as the U.S. Navy's Triton, other RPA weapon systems, and Processing, Exploitation & Dissemination (PED) elements. Incorporate Air Vehicle (AV) modifications/upgrades into the ground segment architecture. Design and develop the Ground Segment Modernization (GSM) project, leveraging earlier efforts which developed a modern aircraft command and control capability on an open-systems architecture. Remaining development includes software integration, sensor payload command and control, interface implementation, installation of hardware/software into facilities, testing & evaluation. Implement Command and Control Initiative (UCI) and Unmanned Control Segment (UCS) standards into the Global Hawk architecture.					
Title: Government Test and Non-Prime support	1.505	-	0.675	-	0.675
Description: Government test, non-prime technical support and Other Government Costs (OGC) The majority of this funding supports Global Hawk development testing at the 412 Test Wing at Edwards AFB, CA and also includes funding for incidental support from Air Force Operational Test and Evaluation Center (AFOTEC), Joint Interoperability Test Command (JITC), Distributed Common Ground System (DCGS), other interoperability and cybersecurity partners and OGC.					
FY 2014 Accomplishments:					

PE 0305220F: RQ-4 UAV Air Force

,					,		
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/I PE 0305220F / RQ-4 UAV	Name)	• •	umber/Name) Q-4 Grnd Segment/Comm			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
Continued government test and non-prime engineering and technical support a Ground Segment / Comm systems.	nd Other Government Costs for						
FY 2015 Plans: N/A							
FY 2016 Base Plans:							

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

Ground Segment / Comm systems.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force

			FY 2016	FY 2016	FY 2016					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	Base	000	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
 APAF: BA04: Line 	11.000	54.475	37.800	-	37.800	35.552	38.020	16.503	16.800	-	3,840.645
Item # HAEUAV: RQ-4											
APAF: BA04: Line Item #	1.747	-	-	-	-	-	-	-	-	-	12.438
RQ440P: RQ-4 Block 40 Proc											
 APAF: BA05: Line Item 	9.313	21.354	50.022	-	50.022	34.493	89.248	67.265	68.477	837.540	1,562.422
# HAWK00: RQ-4 Mods											
APAF: BA05: Line Item #	23.668	-	-	-	-	-	-	-	-	-	23.668
RQ4GCM: RQ-4 GS/CS Mods											

Accomplishments/Planned Programs Subtotals

Remarks

D. Acquisition Strategy

The RQ-4 program uses an evolutionary acquisition strategy to provide the warfighter with a near-term combat capability with increased time-phased capability improvements as technology and risk achieve satisfactory levels. Northrop Grumman Corporation is the prime contractor. A suite of contract vehicles is used for development efforts: a legacy EMD "C" contract is being phased out with the completion of current efforts; and a 2015 follow-on IDIQ covers development, modernization, production, retrofit, fielding, and sustainment efforts through FY 2020.

The next event is a Milestone (MS) C decision (date 2QFY15). Upon a successful MS C decision concluding the Nunn-McCurdy re-certification process, the RQ-4 program plans to transition from the Production and Deployment phase to the Operations and Support phase of the Defense Acquisition System. Future required capabilities beyond the core Acquisition Category I (ACAT) RQ-4 program are planned to be added over time as separate ACAT modification programs.

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Continue government test and non-prime engineering and technical support and Other Government Costs for

22.309

Date: February 2015

31.460

31.460

xhibit R-2A, RDT&E Project Justification: PB 2016	Air Force	Date: February 2015
Appropriation/Budget Activity 600 / 7	R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV	Project (Number/Name) 675147 / RQ-4 Grnd Segment/Comm System
. Performance Metrics	'	
Please refer to the Performance Base Budget Overview Force performance goals and most importantly, how the	v Book for information on how Air Force resources are applied and ey contribute to our mission.	how those resources are contributing to Air

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

R-1 Program Element (Number/Name)

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Appropriation/Budget Activity

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Project (Number/Name)

675147 I RQ-4 Grnd Segment/Comm

Date: February 2015

System

Product Developmer	nt (\$ in Mi	llions)		FY 2	2014	FY 2	2015	FY 2 Ba		FY 2016 OCO		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
Engineering, Manufacturing & Development/IDIQ Ground Segment and Communication Systems	SS/CPIF	Northrop Grumman Integrated Systems : San Diego, CA	27.271	20.805	Oct 2013	-		30.785	Nov 2015	-		30.785	534.294	613.155	613.155
		Subtotal	27.271	20.805		-		30.785		-		30.785	534.294	613.155	613.155

Remarks

Target Value of the RQ-4 EMD & IDIQ Contracts is not segregated by Budget Project Number. FY16 and beyond budget necessary for RQ-4 fleet support with Northrop Grumman is contained in Budget Project Number 675145, RQ-4 Block 30.

Support (\$ in Millior	ıs)			FY 2	2014	FY 2	2015		2016 ise	FY 2		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
Non-Prime Technical Support	Various	Various : Dayton, OH	1.447	1.291	Oct 2013	-		0.675	Dec 2015	-		0.675	3.375	6.788	TBD
		Subtotal	1.447	1.291		-		0.675		-		0.675	3.375	6.788	-

Remarks

Target Value of the RQ-4 contracts is not segregated by Budget Project Number.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015	FY 2 Ba		FY 2	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
Flight Test & Evaluation	MIPR	412 TW : Edwards AFB, CA	2.500	-	Oct 2013	-		-		-		-	-	2.500	-
		Subtotal	2.500	-		-		-		-		-	-	2.500	-

Remarks

Target Value of the RQ-4 effort is not segregated by Budget Project Number. FY16 and beyond budget necessary for RQ-4 fleet test support is contained in Budget Project Number 675145, RQ-4 Block 30.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Air Force

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Project (Number/Name)

3600 / 7

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675147 I RQ-4 Grnd Segment/Comm

System

Management Service	es (\$ in M	illions)		FY 2	2014	FY 2	2015	FY 2 Ba		FY 2		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
PMA: A&AS	Various	Various : Dayton, OH	0.269	0.132	Oct 2013	-		-		-		-	-	0.401	-
PMA: Other Gov't Cost	Various	Various : Dayton, OH	0.119	0.081	Oct 2013	-		-		-		-	-	0.200	-
	_	Subtotal	0.388	0.213		-		-		-		-	-	0.601	-

Remarks

Target Value of the RQ-4 contracts is not segregated by Budget Project Number. FY16 and beyond budget necessary for RQ-4 fleet management services support and other government cost is contained in Budget Project Number 675145, RQ-4 Block 30.

	Prior Years	FY 2	2014	FY 2	2015	FY 2 Ba	 FY 2	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	31.606	22.309		-		31.460	-	31.460	537.669	623.044	-

Remarks

Target Value of the RQ-4 EMD & IDIQ Contracts is not segregated by Budget Project Number.

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ppropriation/Budget Activity 500 / 7							R-1 PE (_			•		er/	Nan	1e)		675	ojec 5147 sten	7 <i>Ì</i> F	um	ber	/Na	me	*)	201 ent/0	5 Com	m	
		FY	201	4		FY	201	5		FY	201	6	F	Ý 20	17			FY 2	2018	3		F۱	/ 20	19			FY	2020)
	1	2	3	4	1	2	3	4	1	2	3	4	1 :	2 :	3	4	1	2	3	4	1	1	2	3	4	1	2	3	4
Grnd Segment Obsolescence Fixes													,	,		,					,		,	,				,	
Ground Segment Maintenance/Upgrades																													
Ground Segment Modernization Project (GSMP)																													
Comm Sys Obsolescence Fixes																													
Comm Systems Maintenance/Upgrades																													
Communication System Modernization Project (CSMP)																													
412 Test Wing Support																													

PE 0305220F: RQ-4 UAV

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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
• • • • • • • • • • • • • • • • • • •	3	- , (umber/Name) PQ-4 Grnd Segment/Comm

Schedule Details

	St	art	Er	nd
Events	Quarter	Year	Quarter	Year
Grnd Segment Obsolescence Fixes	1	2014	4	2014
Ground Segment Maintenance/Upgrades	1	2016	4	2017
Ground Segment Modernization Project (GSMP)	1	2016	2	2018
Comm Sys Obsolescence Fixes	1	2014	4	2014
Comm Systems Maintenance/Upgrades	1	2016	3	2019
Communication System Modernization Project (CSMP)	2	2018	4	2020
412 Test Wing Support	1	2014	4	2014

PE 0305220F: RQ-4 UAV

Exhibit R-2A, RDT&E Project Ju	ustification:	PB 2016 A	ir Force							Date: Feb	ruary 2015	
Appropriation/Budget Activity 3600 / 7	_	am Elemen 20F / RQ-4	it (Number/ UAV	Name)			ne) rborne Sens	e & Avoid				
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
675148: Common-Airborne Sense & Avoid (C-ABSAA)	19.036	17.098	11.829	-	-	-	-	-	-	-	-	47.963
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

In FY 2016, PE 0305220F, RQ-4, Project 675148, Common-Airborne Sense & Avoid (C-ABSAA), transferred to PE 0305206F, Airborne Reconnaissance Systems, Project 675148. This transfer will provide greater visibility into this capability and prepares for expanded applications by making the capability program and platform agnostic.

A. Mission Description and Budget Item Justification

Common-Airborne Sense and Avoid (C-ABSAA) is an analysis and developmental effort in the pre-Material Development Decision phase of the acquisition lifecycle which supports emerging warfighter requirements to fully integrate Group 4-5 RPA into the National Airspace System (NAS), international airspace, other nations' sovereign airspace, and operational combat airspace to conduct the entire range of military operations across all mission environments. C-ABSAA also supports the "Worldwide Operations" Key Performance Parameter (KPP) in larger Remotely Piloted Aircraft (RPA) requirement documents, and Public Law 112-239 directing DoD collaboration with the Federal Aviation Administration (FAA) and the National Air and Space Administration (NASA) to safely integrate RPA in the NAS. Funding in this project supports the development of a Sense and Avoid (SAA) capability set for Group 4-5 RPA and covers analysis, research, and developmental activities as well as infrastructure and other government costs. Ongoing activities include support to the development of warfighter requirements and analysis of possible solution alternatives, the collaboration with the FAA, NASA, and Office of the Secretary of Defense (OSD) to develop national policy and standards, and SAA related studies, analysis, modeling and simulation, program planning and project execution. RPA platform specific integration and testing is not included.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	oco	Total
Title: SAA-Related Requirements Development and Analysis, National Policy Standards Development, and Technology Development and Demonstration	17.098	11.829	-	-	-
Description: Support development and analysis of warfighter requirements and analysis of possible solution alternatives. Develop Sense and Avoid (SAA) technology and capabilities for Group 4-5 RPA. Collaborate with the FAA, NASA, and OSD to develop national policy and standards. Conduct SAA-related studies, analysis, modeling and simulation, demonstrations, program planning and project execution.					
FY 2014 Accomplishments: Supported Air Combat Command with development of an Initial Capabilities Document, and prepared to conduct Analysis of Alternatives study. Collaborated with FAA and NASA on national policy and standards. Built and exercised modeling and simulation capabilities to support requirements, policy/standards, and technology					

PE 0305220F: RQ-4 UAV

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Air Force				Date: Febr	uary 2015	
Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number PE 0305220F / RQ-4 UAV	/Name)		umber/Nar Common-Air)	•	e & Avoid
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
development. Continued SAA science and technology research and developm (AFRL).	nent with the AF Research Lab					
FY 2015 Plans: Support Air Combat Command with Initial Capabilities Document development Analysis of Alternatives study. Continue to collaborate with FAA and NASA on and to build and exercise modeling and simulation capabilities to support require technology development. Continue SAA science and technology research and demonstrate SAA technologies.	national policy and standards, rements, policy/standards, and					
FY 2016 Base Plans: In FY 2016, Project 675148, C-ABSAA, efforts transferred to PE 0305206F, Air Project 675148.	borne Reconnaissance Systems,					
FY 2016 OCO Plans:						

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

N/A

N/A

Remarks

D. Acquisition Strategy

C-ABSAA will integrate Better Buying Power 3.0 initiatives throughout its acquisition lifecycle and rely upon acquisition of government data rights to maximize contractor competition from Technology Development through Production. The program uses an incremental acquisition strategy to provide the warfighter with SAA capability for Group 4-5 RPA with increased, time-phased capability improvements as technology and risks achieve satisfactory levels. Group 4-5 RPA platforms will be expected to integrate the C-ABSAA provided capability into their unique systems via retrofit or in production.

Accomplishments/Planned Programs Subtotals

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.

PE 0305220F: RQ-4 UAV

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11.829

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	016 Air F	orce							_	Date:	February	2015	
Appropriation/Budg 3600 / 7	et Activity	1					ogram Ele 5220F / R		lumber/Na /	ame)			r/ Name) n-Airborn	e Sense	& Avoid
Product Developme	nt (\$ in M	illions)		FY 2	2014	FY 2	2015		2016 ase		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 Contrac
C-ABSAA Technology Development	C/Various	Various : Various,	18.106	16.512	Oct 2013	10.732	Oct 2014	-		-		-	-	45.350	ТВІ
		Subtotal	18.106	16.512		10.732		-		-		-	-	45.350	-
Support (\$ in Millior	ns)			FY 2	2014	FY 2	2015		2016 ase		2016 CO	FY 2016 Total			
Cost Category Item			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		2016 ase		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 Servic	es (\$ in M	illions)		FY 2	2014	FY 2	2015		2016 ase		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 Management Administration (PMA)	Various	Various : Dayton, OH	0.930	0.586	Oct 2013	1.097	Oct 2014	-		-		-	-	2.613	ТВІ
		Subtotal	0.930	0.586		1.097		-		-		-	-	2.613	-
Remarks The Target supports multi	ple technolog	gy development contract	S									_			
			Prior Years	FY 2	2014	FY 2	2015		2016 ase		2016 CO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contrac
·	Project Cost Totals 19.036			17.098		11.829		_		_		1 -	_	47.963	_

PE 0305220F: *RQ-4 UAV* Air Force

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Exhibit R-3, RDT&E Project Cost Analysis:	PB 2016 Air Fo	rce				Date	February	2015	
Appropriation/Budget Activity 3600 / 7			R-1 Program EI PE 0305220F <i>I F</i>	ement (Number/N RQ-4 UAV	lame)	Project (Numbe 675148 / Commo (C-ABSAA)		e Sense	& Avoid
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2		Cost To Complete	Total Cost	Target Value of Contract
The Target Value supports multiple technology developm									

PE 0305220F: RQ-4 UAV Air Force

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 A	ir F	orce	!																		Dat	te: Fe	ebru	ary	2015	5	
Appropriation/Budget Activity 3600 / 7										ogra i 5220			•	(Num 4 <i>V</i>	ber/	Nam	e)	67	'514	ect (Number/Name) 148 / Common-Airborne Sense & ABSAA)						& Avoid	
		FY 2	2014	4	4	FY 2	201	5	4	FY 2		6	1	FY 20	017	4		Y 201			FY 2	2019	_		FY 2	2020	4
Initial Capabilities Document (ICD)			<u> </u>	4	<u>'</u>		3		<u>'</u>		3	-	<u>'</u>		3	4	•	2 3	4	<u>'</u>			4			3	4
Analysis of Alternatives																											
Material Development Decision																											
Material Solution Analysis																											

PE 0305220F: *RQ-4 UAV* Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
· · · · · · · · · · · · · · · · · · ·	,	- 3 (umber/Name) Common-Airborne Sense & Avoid)

Schedule Details

	St	End			
Events	Quarter	Year	Quarter	Year	
Initial Capabilities Document (ICD)	2	2014	3	2015	
Analysis of Alternatives	2	2015	4	2015	
Material Development Decision	4	2015	4	2015	
Material Solution Analysis	4	2015	4	2015	

PE 0305220F: RQ-4 UAV

Exhibit R-2A, RDT&E Project Ju		Date: February 2015										
Appropriation/Budget Activity 3600 / 7					_	am Elemen 20F / RQ-4	lumber/Name) MP-RTIP					
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
67RTIP: MP-RTIP	198.282	14.173	10.926	16.092	-	16.092	7.663	11.802	11.811	12.022	12.000	294.771
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 293

Note

Beginning in FY09, the Multi-Platform Radar Technology Insertion Program (MP-RTIP) funding was transferred to program 0305220F (RQ-4) Global Hawk (GH). Therefore, the data in this package includes only FY09 and subsequent funding related to program 0305220F.

A. Mission Description and Budget Item Justification

The MP-RTIP sensor was designed as a family of modular, scalable sensors to provide next generation capabilities to support sustainable network centric operations with integrated Command and Control, Intelligence, Surveillance and Reconnaissance (C2ISR) capability. MP-RTIP provides the RQ-4 Block 40 aircraft with advanced Synthetic Aperture Radar (SAR) and Moving Target Indicator (MTI) sensor capabilities.

This project (67RTIP) includes all MP-RTIP design, development, test, and integration efforts for the RQ-4 Block 40 Platform. Integration activities include platform integration of the MP-RTIP sensor and sustainment logistics planning support. MP-RTIP studies and development insertion include the implementation of Maritime Modes (MM), Maritime Inverse SAR (MISAR), technical refresh, product improvements and other advanced capabilities.

Activities also include studies and analysis supporting current and future program planning and future modes development based on user requirements. 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. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: DRACO classified program administered by GH Program Office with MP-RTIP funds	1.751	-	-	-	_
Description: Development and integration					
FY 2014 Accomplishments: Classified					
Title: Development and Integration	12.422	9.876	14.307	-	14.307
Description: MP-RTIP development and integration					
FY 2014 Accomplishments:					

PE 0305220F: RQ-4 UAV

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Exhibit R-2A, RDT&E Project Jus	tification: PB	2016 Air Fo	rce						Date: Feb	ruary 2015						
Appropriation/Budget Activity 3600 / 7					ogram Eler 05220F / RO	nent (Numbe 2-4 UAV	er/Name)	Project (N 67RTIP / M	umber/Name) MP-RTIP							
B. Accomplishments/Planned Pro	ograms (\$ in N	<u>(lillions)</u>					FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total					
Completed MP-RTIP RSD 1.4.5 so & RSD 1.5 software builds. Complete Evaluation (ISE).																
FY 2015 Plans: Completing development of the MP of RSD 1.5.	-RTIP RSD 1.4	4 increment	(1.4.6) softw	/are build. Al	ign develop	nent support										
FY 2016 Base Plans: Will complete RSD 1.5 through Flig	ht Testing.															
Title: Test & Evaluation							-	1.050	1.785	-	1.785					
Description: MP-RTIP Test & Eval	uation															
FY 2014 Accomplishments: N/A																
FY 2015 Plans: Complete MP-RTIP Test & Evaluati complete Test and Evaluation Plant force and range support, interopera	ning for remain	ning requirer	nents includi	ing but not lir	mited to test											
FY 2016 Base Plans: Will complete test & evaluation for frequirements including but not limit and third party performance reviews	ed to test planr															
			Accomplisi	hments/Plar	ned Progra	ıms Subtota	ls 14.173	10.926	16.092	-	16.092					
C. Other Program Funding Summ	ary (\$ in Milli	ons)														
	•	-	FY 2016	FY 2016	FY 2016					Cost To						
<u>Line Item</u> • APAF: BA04: Line Item # HAEUAV: <i>RQ-4</i>	FY 2014 11.000	FY 2015 54.475	Base 37.800	<u>000</u>	<u>Total</u> 37.800	FY 2017 35.552	FY 2018 38.020	FY 2019 16.503	FY 2020 16.800	Complete -	<u>Total Cos</u> 3,840.64					
• APAF: BA04: Line Item # RQ440P: <i>RQ-4 Blk 40 Proc</i>	1.747	-	-	-	-	-	-	-	-	-	12.43					

PE 0305220F: RQ-4 UAV

Exhibit R-2A, RDT&E Project Just	stification: PB	2016 Air Fo	rce						Date: Fel	oruary 2015	
Appropriation/Budget Activity 3600 / 7					rogram Eler 05220F / RG	•	er/Name)	Project (I 67RTIP /	Number/Na MP-RTIP	me)	
C. Other Program Funding Sumi	mary (\$ in Milli	ons)									
			FY 2016	FY 2016	FY 2016					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	Base	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total Cost
 APAF: BA05: Line Item 	9.313	21.354	50.022	-	50.022	34.493	89.248	67.265	68.477	837.540	1,562.422
# HAWK00: RQ-4 Mods											
APAF: BA05: Line	23.668	-	-	-	_	_	_	_	-	-	23.668
Item # RQ4GCM: RQ-4											
GSRA/CSRA Mods											
• RDT&E: BA07: PE	221.589	232.851	197.486	-	197.486	39.292	-	-	-	-	825.015
0305238F: <i>NATO AGS</i>											

Remarks

D. Acquisition Strategy

The sole source SDD contract is planned to be closed out in FY 2016.

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.

PE 0305220F: RQ-4 UAV

Air Force

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Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	016 Air F	orce								Date:	February	2015	
Appropriation/Budge 3600 / 7											(Number				
Product Developmen	nt (\$ in Mi	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 Complete	Total Cost	Target Value of Contract
MP-RTIP	SS/CPFF	Northrop Grumman Integrated Systems : El Segundo, CA	157.782	12.109	Apr 2014	7.697	Nov 2014	11.824	Nov 2015	-		11.824	40.288	229.700	ТВІ
		Subtotal	157.782	12.109		7.697		11.824		-		11.824	40.288	229.700	-
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	Total Cost	Target Value of Contract
IRT Study	Various	Various : Various,	0.105	-		-		-		-		-	-	0.105	0.105
Logistics Planning	SS/CPFF	Northrop Grumman Integrated Systems : El Segundo, CA	3.667	-		-		-		-		-	-	3.667	3.667
		Subtotal	3.772	-		-		-		-		-	-	3.772	3.772
Test and Evaluation	(\$ in Milli	ons)		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
Joint Test Force, Edward AFB, Joint Interoperability Test Center, Navy, & IV&V	MIPR	Various : Various,	8.936	-	Dec 2013	1.050	Jan 2015	1.780	Jan 2015	-		1.780	4.360	16.126	TBD
		Subtotal	8.936	-		1.050		1.780		-		1.780	4.360	16.126	-
Management Service	es (\$ 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 Complete	Total Cost	Target Value of Contract
PMA: A&AS	C/CPFF	Various : Various,	24.297	1.883	Oct 2013	1.973	Nov 2014	2.030	Nov 2015	-		2.030	8.520	38.703	TBC
PMA: Other Gov't Cost	Various	Various : Boston, MA	3.495	0.181	Oct 2013	0.206	Nov 2014	0.458	Nov 2015	-		0.458	2.130	6.470	TBC
		Subtotal	27.792	2.064		2.179		2.488		-		2.488	10.650	45.173	-

PE 0305220F: *RQ-4 UAV* Air Force

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	016 Air F	orce							Date:	February	2015	
Appropriation/Budget Activity 3600 / 7				•	ement (N RQ-4 UAV	umber/Name)	Project 67RTIP	•	•		
	Prior Years	FY 2014	FY 2	2015	FY 2 Ba		FY 2 OC		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	198.282	14.173	10.926		16.092		-		16.092	55.298	294.771	-

Remarks

PE 0305220F: *RQ-4 UAV* Air Force

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xhibit R-4, RDT&E Schedule Profile: PB 2016 A	ir Fo	orc	е																			Dat	e: F	ebru	ary	201	5	
Appropriation/Budget Activity 3600 / 7								R-1 PE (mbe	r/Na	ıme))					oer/N RTIP	lame	e)			_
		FY	201	4		FY	201	5		FY 2	2016	,		FY	201	7		FY	2018	3		FY	2019)		FY	2020)
	1	2	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	,
Test Phase 2B - Interoperability					'																	,	,					
RSD 1.4.5 Software Build																												
DRACO																												
RSD 1.4.6 Software Build																												
RSD 1.5 Software Build (Post IOT&E Updates)																												
Test Phase 3 - ISE (SLPV)																												
IOT&E Readiness & IOT&E																												
Future Software Builds		_																										

PE 0305220F: *RQ-4 UAV* Air Force

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Air Force			Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
3600 / 7	PE 0305220F <i>I RQ-4 UAV</i>	67RTIP / N	MP-RTIP

Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
Test Phase 2B - Interoperability	1	2014	1	2014
RSD 1.4.5 Software Build	1	2014	4	2014
DRACO	4	2014	4	2015
RSD 1.4.6 Software Build	4	2014	3	2015
RSD 1.5 Software Build (Post IOT&E Updates)	4	2014	4	2016
Test Phase 3 - ISE (SLPV)	3	2014	4	2014
IOT&E Readiness & IOT&E	3	2015	3	2015
Future Software Builds	1	2017	4	2020

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