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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 0305220F / RQ-4 UAV							
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												
⁽⁺⁾ The sum of all Prior Years is \$2031.377 million less than the represented total due to several projects ending												
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												

UNCLASSIFIED

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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 Aerial 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: 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.		

UNCLASSIFIED

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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 Acquisition 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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Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development		R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV				
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						
Congressional Add Subtotals for Project: 675145						
Congressional Add Totals for all Projects						
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						

UNCLASSIFIED

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			
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
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).

UNCLASSIFIED

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		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
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, 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. 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.		-	182.323	128.239	-	128.239
Title: Block 30 Government Test and Non-Prime Support 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:		-	24.114	25.448	-	25.448

UNCLASSIFIED

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			
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue government test and non-prime engineering and technical support and Other Government Costs.											
FY 2016 Base Plans: Continue government test and non-prime engineering and technical support and Other Government Costs.											
Accomplishments/Planned Programs Subtotals							-	206.437	153.687	-	153.687
							FY 2014	FY 2015			
Congressional Add: Study for Adaptation of U-2 Sensors for RQ-4 Block 30							10.000	-			
FY 2014 Accomplishments: Initiated next gen sensor study and conducted assessment for integration of U-2 sensors or alternative sensors of comparable capability onto the RQ-4B to include comparing how differences in flight performance would affect sensor performance such as enhanced weather capabilities, mission planning and airspace and sensor interoperability.											
Congressional Adds Subtotals							10.000	-			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• APAF: BA04: Line Item # HAEUAV: RQ-4	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 Block 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	-	-	-	-	-	-	-	-	-	23.688
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 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.		

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Exhibit R-3, RDT&E Project Cost Analysis: 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
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Product Development (\$ in Millions)				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	SS/ Various	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)				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 Millions)				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

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 Services (\$ in Millions)				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
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
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV	Project (Number/Name) 675145 / RQ-4 Block 30
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Management Services (\$ in Millions)				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
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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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.															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: 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				

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 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
SAR Complex Imagery																												
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																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: 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	

Schedule Details

Events	Start		End	
	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

UNCLASSIFIED

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) 675146 / RQ-4 Block 40			
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

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.

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, software 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.

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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) 675146 / RQ-4 Block 40		
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) Description: RQ-4 Block 40 Payload and Aircraft/Communications Development and Demonstration FY 2014 Accomplishments: Continued RQ-4 unique development and integration of MP-RTIP upgraded capabilities. Continued Aircraft/Communication systems modernization to include Mode 5/ADS-B, mission planning upgrade, and program protection. Continued aircraft operations surety, cybersecurity and information assurance, and reliability & maintainability and associated testing & evaluation. FY 2015 Plans: Plan to conduct IOT&E and continue development of enhanced weather capabilities, mission planning, airspace integration activities including Mode 5/ADS-B, sensor software, integration of MP-RTIP radar maritime modes, continued enhancements to system interoperability, cybersecurity, information assurance and reliability & maintainability improvements and associated testing & evaluation. FY 2016 Base Plans: Continue development of enhanced weather capabilities, mission planning, airspace integration activities including Mode 5/ADS-B, sensor software, utilization of radar maritime modes, continued enhancements to system interoperability, cybersecurity, information assurance and reliability & maintainability improvements and associated testing & evaluation, and begin development of ice protection system.	37.052	12.636	6.814	-	6.814
Title: RQ-4 Block 40 Government Test and Non-Prime Support 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: Continued government test and non-prime engineering and technical support for Block 40 IOT&E and Other Government Costs FY 2015 Plans: N/A FY 2016 Base Plans:	19.548	-	-	-	-

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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) 675146 / RQ-4 Block 40				
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A												
Accomplishments/Planned Programs Subtotals								56.600	12.636	6.814	-	6.814
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• APAF: BA04: Line Item # HAEUAV: RQ-4	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: NATO AGS	221.589	232.851	197.486	-	197.486	39.292	-	-	-	-	825.015	
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; 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.												

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Exhibit R-3, RDT&E Project Cost Analysis: 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) 675146 / RQ-4 Block 40					
Product Development (\$ in Millions)				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 40	SS/ Various	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 Millions)				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	0.712	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 Millions)				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	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 **Date:** February 2015

Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV	Project (Number/Name) 675146 / RQ-4 Block 40
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Management Services (\$ in Millions)				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
PMA: A&AS	Various	Various : Dayton, OH	4.208	2.832	Nov 2013	-		-		-		-	-	7.040	-
PMA: Other Gov't Cost	Various	Various : Dayton, OH	1.884	1.528	Oct 2013	-		-		-		-	-	3.412	-
Subtotal			6.092	4.360		-		-		-		-	-	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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	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.

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Exhibit R-4, RDT&E Schedule Profile: 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) 675146 / RQ-4 Block 40			

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 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
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																												

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Exhibit R-4A, RDT&E Schedule Details: 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) 675146 / RQ-4 Block 40	

Schedule Details

Events	Start		End	
	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

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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) 675147 / RQ-4 Grnd Segment/Comm System			
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: February 2015				
Appropriation/Budget Activity 3600 / 7		R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV		Project (Number/Name) 675147 / RQ-4 Grnd Segment/Comm System				
for intelligence dissemination is required to provide the data transport interface between the Weapons System, Operations Centers, and external Intelligence Community customers.								
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:								

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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) 675147 / RQ-4 Grnd Segment/Comm System				
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 and Other Government Costs for Ground Segment / Comm systems.												
FY 2015 Plans: N/A												
FY 2016 Base Plans: Continue government test and non-prime engineering and technical support and Other Government Costs for Ground Segment / Comm systems.												
Accomplishments/Planned Programs Subtotals								22.309	-	31.460	-	31.460
C. Other Program Funding Summary (\$ in Millions)												
Line Item	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	
• APAF: BA04: Line Item # HAEUAV: RQ-4	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 Block 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 GS/CS Mods	23.668	-	-	-	-	-	-	-	-	-	23.668	
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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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) 675147 / RQ-4 Grnd Segment/Comm System

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.

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Exhibit R-3, RDT&E Project Cost Analysis: 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) 675147 / RQ-4 Grnd Segment/Comm System					
Product Development (\$ in Millions)				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 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 Millions)				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	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 Millions)				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	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 3600 / 7						R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV				Project (Number/Name) 675147 / RQ-4 Grnd Segment/Comm System					

Management Services (\$ in Millions)				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
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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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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Exhibit R-4, RDT&E Schedule Profile: 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) 675147 / RQ-4 Grnd Segment/Comm System

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 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
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																												

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Exhibit R-4A, RDT&E Schedule Details: 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) 675147 / RQ-4 Grnd Segment/Comm System	

Schedule Details

Events	Start		End	
	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

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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) 675148 / Common-Airborne Sense & Avoid (C-ABSAA)			
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 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					

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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) 675148 / <i>Common-Airborne Sense & Avoid (C-ABSAA)</i>		
<u>B. Accomplishments/Planned Programs (\$ in Millions)</u>						
		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
development. Continued SAA science and technology research and development with the AF Research Lab (AFRL). <i>FY 2015 Plans:</i> Support Air Combat Command with Initial Capabilities Document development and approval, and conduct Analysis of Alternatives study. Continue to collaborate with FAA and NASA on national policy and standards, and to build and exercise modeling and simulation capabilities to support requirements, policy/standards, and technology development. Continue SAA science and technology research and development with the AFRL to demonstrate SAA technologies. <i>FY 2016 Base Plans:</i> In FY 2016, Project 675148, C-ABSAA, efforts transferred to PE 0305206F, Airborne Reconnaissance Systems, Project 675148. <i>FY 2016 OCO Plans:</i> N/A						
Accomplishments/Planned Programs Subtotals		17.098	11.829	-	-	-
<u>C. Other Program Funding Summary (\$ in Millions)</u>						
N/A						
<u>Remarks</u>						
<u>D. Acquisition Strategy</u>						
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.						
<u>E. Performance Metrics</u>						
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.						

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Exhibit R-3, RDT&E Project Cost Analysis: 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) 675148 / Common-Airborne Sense & Avoid (C-ABSAA)					
Product Development (\$ in Millions)				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
C-ABSAA Technology Development	C/Various	Various : Various,	18.106	16.512	Oct 2013	10.732	Oct 2014	-		-		-	-	45.350	TBD
Subtotal			18.106	16.512		10.732		-		-		-	-	45.350	-
Support (\$ in Millions)				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
Subtotal			-	-		-		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				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
Subtotal			-	-		-		-		-		-	-	-	-
Management Services (\$ in Millions)				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
Program Management Administration (PMA)	Various	Various : Dayton, OH	0.930	0.586	Oct 2013	1.097	Oct 2014	-		-		-	-	2.613	TBD
Subtotal			0.930	0.586		1.097		-		-		-	-	2.613	-
Remarks															
The Target supports multiple technology development contracts.															
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			19.036	17.098		11.829		-		-		-	-	47.963	-

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Exhibit R-3, RDT&E Project Cost Analysis: 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) 675148 / Common-Airborne Sense & Avoid (C-ABSAA)			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Remarks 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. The Target Value supports multiple technology development contracts.									

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Exhibit R-4, RDT&E Schedule Profile: 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) 675148 / Common-Airborne Sense & Avoid (C-ABSAA)	

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 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
Initial Capabilities Document (ICD)																												
Analysis of Alternatives																												
Material Development Decision																												
Material Solution Analysis																												

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Exhibit R-4A, RDT&E Schedule Details: 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) 675148 / <i>Common-Airborne Sense & Avoid (C-ABSAA)</i>	

Schedule Details

Events	Start		End	
	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

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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) 67RTIP / 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) <table><tr><td></td><td>FY 2014</td><td>FY 2015</td><td>FY 2016 Base</td><td>FY 2016 OCO</td><td>FY 2016 Total</td></tr><tr><td>Title: DRACO classified program administered by GH Program Office with MP-RTIP funds</td><td>1.751</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td colspan="6">Description: Development and integration</td></tr><tr><td colspan="6">FY 2014 Accomplishments: Classified</td></tr><tr><td>Title: Development and Integration</td><td>12.422</td><td>9.876</td><td>14.307</td><td>-</td><td>14.307</td></tr><tr><td colspan="6">Description: MP-RTIP development and integration</td></tr><tr><td colspan="6">FY 2014 Accomplishments:</td></tr></table>														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:					
	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:																																																						

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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) 67RTIP / MP-RTIP			
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Completed MP-RTIP RSD 1.4.5 software build and integrated into KD 2.2.3. Initiated RSD 1.4 increment (1.4.6) & RSD 1.5 software builds. Completed System Level Performance Verification (SLPV)/Integrated System Evaluation (ISE).											
FY 2015 Plans: Completing development of the MP-RTIP RSD 1.4 increment (1.4.6) software build. Align development support of RSD 1.5.											
FY 2016 Base Plans: Will complete RSD 1.5 through Flight Testing.											
Title: Test & Evaluation							-	1.050	1.785	-	1.785
Description: MP-RTIP Test & Evaluation											
FY 2014 Accomplishments: N/A											
FY 2015 Plans: Complete MP-RTIP Test & Evaluation support for RSD 1.4.6 which will include US Maritime Modes. Initiate and complete Test and Evaluation Planning for remaining requirements including but not limited to test planning, test force and range support, interoperability compliance and third party performance reviews.											
FY 2016 Base Plans: Will complete test & evaluation for flight test of RSD 1.5. Also, initiate Test and Evaluation Planning for remaining requirements including but not limited to test planning, test force and range support, interoperability compliance and third party performance reviews.											
Accomplishments/Planned Programs Subtotals							14.173	10.926	16.092	-	16.092
C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• APAF: BA04: Line Item # HAEUAV: RQ-4	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

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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) 67RTIP / MP-RTIP
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C. Other Program Funding Summary (\$ in Millions)

Line Item	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
• 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
• RDT&E: BA07: PE 0305238F: NATO AGS	221.589	232.851	197.486	-	197.486	39.292	-	-	-	-	825.015

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.

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Exhibit R-3, RDT&E Project Cost Analysis: 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) 67RTIP / MP-RTIP					
Product Development (\$ in Millions)				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
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	TBD
Subtotal			157.782	12.109		7.697		11.824		-		11.824	40.288	229.700	-
Support (\$ in Millions)				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
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 Millions)				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
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 Services (\$ in Millions)				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
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	TBD
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	TBD
Subtotal			27.792	2.064		2.179		2.488		-		2.488	10.650	45.173	-

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Exhibit R-3, RDT&E Project Cost Analysis: 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) 67RTIP / MP-RTIP			
	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		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													

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Exhibit R-4, RDT&E Schedule Profile: PB 2016 Air Force	Date: February 2015
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Appropriation/Budget Activity 3600 / 7	R-1 Program Element (Number/Name) PE 0305220F / RQ-4 UAV	Project (Number/Name) 67RTIP / MP-RTIP
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	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 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
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																												

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Exhibit R-4A, RDT&E Schedule Details: 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) 67RTIP / MP-RTIP	

Schedule Details

Events	Start		End	
	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