Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force											DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*					R-1 ITEM NOMENCLATURE PE 0205219F: *MQ-9 UAV*							
COST ($ in Millions)	**All Prior Years**	**FY 2012**	**FY 2013#**	**FY 2014 Base**	**FY 2014 OCO ##**	**FY 2014 Total**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**Cost To Complete**	**Total Cost**
Total Program Element	-	107.576	147.971	128.328	-	128.328	194.561	191.289	147.100	92.900	Continuing	Continuing
675246: *MQ-9 Development and Fielding*	-	107.576	147.971	128.328	-	128.328	194.561	191.289	147.100	92.900	Continuing	Continuing
Quantity of RDT&E Articles	3	0	0	0		0	0	0	0	0		

MDAP/MAIS Code(s): 424

FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

The basic MQ-9 Reaper system consists of the aircraft, sensors, a ground control station (GCS), Squadron Operations Center (SOC), communications equipment, weapon kits, support equipment, simulator and training devices, Readiness Spares Packages (RSP), technical data/training, and personnel required to operate, maintain, and sustain the system. The system is designed to be modular and open-ended. Mission-specific equipment is employed in a 'plug-and-play' mission kit concept allowing specific aircraft and control station configurations to be tailored to fit mission needs.

The MQ-9 Reaper aircraft is a single-engine, turbo-prop remotely piloted aircraft (RPA) designed to operate over-the-horizon at medium-to-high altitude for long endurance sorties. The aircraft is designed primarily to prosecute critical, emerging Time-Sensitive-Targets (TSTs) as a radar, Electro-optical/Infrared (EO/IR), and laser designator-based attack asset with on-board hard-kill capability (hunter-killer). It also performs Intelligence, Surveillance, Reconnaissance and Target Acquisition (ISR TA). In the hunter-killer role, the aircraft employs fused multi-spectral sensors to find, fix, and track ground targets using Automatic Target Cueing (ATC), high definition EO/IR, Metric Sensor and other capabilities, and assesses post-strike results. The MQ-9 system is continuing to develop and field capability through incremental upgrades. Future capabilities development activity includes airframe and airframe system improvements, such as; increasing the maximum gross takeoff weight capability of the aircraft from 10,500 to 11,700lbs; increasing the operational range and endurance of the baseline MQ-9 aircraft (adding external fuel tanks and/or airframe modifications such as wing extensions); incorporating an anti-ice/de-ice capability to transit light icing conditions (will involve wing/tail modifications as well as turbine inlet heating); propulsion system improvements; enhancing MQ-9 systems to include automatic takeoff and landing capability (ATLC); integrated redundant avionics; modifying the system to include provisions for a Foreign Military Sale exportable version of the weapon system; Predator Primary Data Link (PPDL) communication system upgrades and communications upgrades to include data link encryption, IP networking, and Beyond Line-of-Sight comm upgrades; navigation system upgrades; electrical system upgrades; incorporation of Elevated Temperature Wet (ETW) materials; secure voice and data communications, including SATCOM upgrades; sensor/stores management computer improvement; MIL-STD-1760 advanced weapons data bus; Universal Armament and Sensor Interface and Miniature Munitions/Store Interface; advanced sensor and weapon payloads; improved human-machine interface (HMI); integrating precision weapons (e.g. AGM-114 Hellfire missile, GBU-12/38/49 guided bombs, and Small Diameter Bomb variants); Mode 5 / Automatic Dependent Surveillance - Broadcast (ADS-B) integration; hardware and software upgrades to the ground control station for MQ-9 operations; completing airworthiness certification; weapons system certification and accreditation; and producing applicable training devices that emulate weapon system functionality and capabilities. The MQ-9 program will continue to support other payload and capability development activities funded in other Program Elements (e.g. SIGINT, communications, Wide Area Motion Imagery (WAMI) leveraging Gorgon Stare Quick

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Reaction Capability, advanced Counter-Improvised Explosive Device (C-IED), Dismount Detection Radar (DDR), missile defense, hyperspectral, and other sensors and weapons) and address reliability, maintainability, sustainability, and safety issues. Activities also include trade studies, analyses, preliminary systems engineering, system and subsystem level testing in accordance with DoD and military standards, and specification development in support of both current program planning and execution, and studies supporting analysis and investment in future program planning.

The GCS, common with the MQ-1 Predator, functions as the aircraft cockpit and can control the aircraft either within line-of-sight (LOS) or beyond LOS (BLOS) via a combination of satellite relay and terrestrial communications. The GCS is either mobile to support forward operating locations or fixed at a facility to support Remote Split Operations (RSO). The GCS has the capability to perform mission planning; provides a means for manual control; allows personnel to launch, recover, and monitor aircraft, payloads, and system communications status; incorporates secure data links to send aircraft and payload commands and receive system telemetry and payload data; monitors threats to the aircraft; displays the common operational picture; and provides support functions. Launch and Recovery GCS (LRGCS) allow for servicing, systems checks, maintenance, launch and recovery of aircraft under LOS control for hand-off to a mobile or fixed facility GCS, and conducting operations within line-of-sight range of the LRGCS. GCS upgrades will be developed and fielded in coordination with improvements to MQ-9 system capabilities and in response to evolving operational and information assurance/certification and accreditation requirements. Key efforts include GCS upgrades that add new LINUX processors, high definition monitors, ergonomic improvements, improved human-machine interfaces, open systems architecture, and improved crew habitability. In addition, the GCS upgrade effort also includes development/integration of the Unmanned Aircraft System (UAS) Command and Control (C2) Initiative (UCI) government-owned standard to enable improved capabilities for situational awareness and multi-mission management monitoring and oversight in the GCS and SOC. This project will also increase interoperability among developed systems by developing common standard and tools.

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

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	126.730	147.971	147.030	-	147.030
Current President's Budget	107.576	147.971	128.328	-	128.328
Total Adjustments	-19.154	0.000	-18.702	-	-18.702
• Congressional General Reductions	-	0.000			
• Congressional Directed Reductions	-	0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds	-	0.000			
• Congressional Directed Transfers	-	0.000			
• Reprogrammings	-19.154	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	-18.702	-	-18.702

Change Summary Explanation

- FY14 decrease of $18.7M due to Service Cost Postion adjustment at MS-C

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: MQ-9 System Development and Demonstration (SDD) ***Description:*** Complete development to meet MQ-9 Capabilities Production Document (CPD) requirements. ***FY 2012 Accomplishments:*** Continued high definition sensor capability and high definition integration and PPDL development. Software release version 904.6 will support development testing. ***FY 2013 Plans:*** Will continue development of airframe related development and test & begin ECP-2 - secure communications - weapon integration AGM-114P+/R (Hellfire P+/R) - HD video dissemination via Ku Line-of-Sight - Sensor control and integration - Integration and productionization - Integration, testing, production, and training documentation Milestones; CDR completed Jan 11. Interim software for Block 5 system activities scheduled for delivery in Sep 13. Developmental test begins for PPDL Human Machine Interface, Dual ARC-210 radios, left seat Synthetic Aperture Radar control, and forward bay reorganization. ***FY 2014 Plans:*** Will continue airframe related development and test to include; Secure Line of Sight (LOS), GFE Radios, Automatic Takeoff and Landing Capability (ATLC) Phase 1C, Vortex Phase 1 & 2, Test aircraft (retrofit), Community Sensor Model (CSM, Weapons (AGM-114 P+/R), and 904.6 software development.	25.603	41.776	26.140
Title: Ground Control Station (GCS) Development ***Description:*** Develop Ground Control Station (GCS) capabilities. Major capabilities include open system architecture, multi-level security and ergonomic cockpit design. ***FY 2012 Accomplishments:*** Continued GCS Block 50 development. ***FY 2013 Plans:***	18.995	13.124	9.293

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Will continue Block 50 design and procure RDT&E SILs. ***FY 2014 Plans:*** Will continue Block 50 design; procure RDT&E Software Integration Labs (SILs), technical orders, software integration.			
Title: MQ-9 Electro-Optic / Infrared (EO/IR) Sensor ***Description:*** Develop improved MTS-B modes and capability including all digital high-definition (HD) camera formats and high definition improvements to improve imagery performance (definition and color) and to support future use of coordinate seeking weapons. ***FY 2012 Accomplishments:*** Continued High Definition improvements for EO/IR sensor. ***FY 2013 Plans:*** Will continue the MTS-B High Definition architecture, including design, fabrication, integration, and manned flight test/unmanned flight test of prototypes to achieve production readiness. Program Protection design, integration, and test. Electronic zoom prototype evaluation. MTS-B Prototype integration and test mission software for HD development, integration and test MTS-B HD platform integration/flight test & integration into SIL. System Qualification and Extended Reliability Testing. HD MTS-B Turret Unit Productionization - Document final design, conduct readiness reviews to begin production. Formally release all MTS-B HD design documents. Documentation and Training - Prepare technical orders and training materials. ***FY 2014 Plans:*** Will continue MTS-B High Definition architecture, including design, fabrication, integration, and manned flight test/unmanned flight test of prototypes to achieve production readiness.	26.923	19.671	15.410
Title: Other Government Costs (OGC) ***Description:*** Other Government Costs including urgent services, engineering change orders, program office support, studies and general research. ***FY 2012 Accomplishments:*** Continued OGC support. N/A ***FY 2013 Plans:***	5.079	13.451	13.965

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Will continue OGC Support ***FY 2014 Plans:*** Will continue Urgent and Program Management Services. Support Services to include DMS and corporate support.			
Title: Program Management Administration (PMA) ***Description:*** Program Management Administration ***FY 2012 Accomplishments:*** Continued PMA ***FY 2013 Plans:*** Will continue PMA ***FY 2014 Plans:*** Will continue PMA	2.211	2.559	2.109
Title: Operator Simulator ***Description:*** Develop operator simulators for training and updates to keep Operator Simulator current with upgrades to aircraft and Ground Control Station. ***FY 2012 Accomplishments:*** Continued updates to keep Operator Simulator current with upgrades to aircraft and Ground Station. ***FY 2013 Plans:*** Will continue updates to keep Operator Simulator current with upgrades to aircraft and Ground Station. Consists of: Trainer Enhancements, hi-def EO/IR enhancements, and Block 50 GCS Upgrades. ***FY 2014 Plans:*** Will continue updates to Operator Simulator with upgrades to trainers, Lynx SAR and high definition enhancements.	0.322	12.153	6.070
Title: Synthetic Aperture Radar (SAR) Enhancements ***Description:*** Improvements in MQ-9 capability to disseminate SAR data, improve Ground Moving Target Indicator (GMTI) tracking, automation of data exploitation via Continuous Look Attack Management for Predator (CLAMP) and classification of 3-D targeting. ***FY 2012 Accomplishments:***	6.797	7.547	5.020

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Continued SAR data development phase 3, dual beam dismount development, 3-D targeting, and feature aided tracker. ***FY 2013 Plans:*** Will continue SAR data development phase 3, dual beam dismount development, 3-D targeting, and feature aided tracker. ***FY 2014 Plans:*** Will continue stationary targeting improvements for GPS-based weapons: prototype minor modification to Block 20A radar, and re-qualify radar software update and sensor control interface changes.			
Title: Test Support ***Description:*** Various MQ-9 testing activities such as flight testing including range time, controlled airspace, frequency management, project management and on-site facilities. Other testing activities include Joint Integrated Test Command (JITC) support and Edwards AFB acceptance testing support. ***FY 2012 Accomplishments:*** Continued test support. ***FY 2013 Plans:*** Will continue test support. ***FY 2014 Plans:*** Will continue test support.	1.232	2.327	2.327
Title: Communications ***Description:*** Develop MQ-9 communication capabilities including encrypted Line of Sight (LOS) data links to ROVER terminals (VORTEX) and beyond LOS military SATCOM usage. Development and integration of an IP based Remote Split Operations network/infrastructure to include: Design, development and test of IP based network interfaces, network systems managers, drafting Technical Orders and support documentation, Training Packages, Production Drawings and Retrofit Acceptance Test Plans. ***FY 2012 Accomplishments:*** Started development and integration of an IP based Remote Split Operations network/infrastructure to include: Design, development and test of IP based network interfaces, network systems managers, drafting Technical Orders and support documentation, Training Packages, Production Drawings and Retrofit Acceptance Test Procedures. ***FY 2013 Plans:***	2.506	8.148	1.110

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Will continue the development and integration of an IP based Remote Split Operations network/infrastructure to include: Design, development and test of IP based network interfaces, network systems managers, drafting Technical Orders and support documentation, Training Packages, Production Drawings and Retrofit ATPs. ***FY 2014 Plans:*** Will continue development of the Network Enterprise Management Kit, Satellite Earth Terminal Sub-System (SETSS)/Fixed Site Satellite Terminal (FSST) Tech Order Updates, RSO Tech Order Development, Training Course Development and various logistics support analyses.			
Title: Counter-IED Development and Demonstration ***Description:*** Adding "Step Stare" mode capability to the MTS-B EO/IR sensors; also includes associated GCS development and testing. ***FY 2012 Accomplishments:*** Continued to develop/modify sensor to add "Step Stare" mode capability to the MTS-B EO/IR sensors; also includes associated GCS development and testing. ***FY 2013 Plans:*** Will complete development/modification to sensor to add "Step Stare" mode capability to the MTS-B EO/IR sensors; also includes associated GCS development and testing. ***FY 2014 Plans:*** N/A	14.008	6.000	0.000
Title: Multi Transit Operations ***Description:*** Multi-aircraft transit operation is to develop a core functionality to allow one pilot to safely control multiple RPA in non-segregated airspace on an IFR flight plan between airfield and mission area(s) ***FY 2012 Accomplishments:*** Developed multi-aircraft transit operations functionality for RPA's. ***FY 2013 Plans:*** Will continue development of multi-aircraft transit operations functionality for RPA's. Incorporating UCI software architecture and improved Human Machine Interface upgrades to better enable monitoring and oversight of multi-mission activity. ***FY 2014 Plans:***	3.600	6.470	2.640

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Will continue development of multi-aircraft transit operations functionality for RPA's. Incorporates UCI software architecture and improved Human Machine Interface upgrades to better enable monitoring and oversight of multi-mission activity.			
Title: MQ-9 Technology Insertion ***Description:*** Develop program protection Technology Insertion capabilities and functionality for the MQ-9 Weapon System. ***FY 2012 Accomplishments:*** N/A ***FY 2013 Plans:*** Will develop program protection Technology Insertion capabilities and functionality for the MQ-9 Weapon System. ***FY 2014 Plans:*** Will continue development of program protection, Technology Insertion capabilities and functionality for the MQ-9 Weapon System including aircraft, sensors, and Ground Control Station documentation and drawings.	0.000	10.700	5.430
Title: Reliability and Maintainability ***Description:*** Develop MQ-9 modification improvements for aircraft and ground base infrastructure. ***FY 2012 Accomplishments:*** Developed reliability growth plan for MQ-9. ***FY 2013 Plans:*** Will develop MQ-9 modification improvements for aircraft and ground based infrastructure systems to improve mission capable rates and reduce reliability and maintainability cost. ***FY 2014 Plans:*** Will continue development of MQ-9 modification improvements for aircraft and ground based infrastructure to improve mission capable rates and reduce reliability and maintainability cost.	0.300	4.045	4.224
Title: Anti-ice ***Description:*** Develop anti-ice capability to allow the MQ-9 to detect and transit light icing conditions. There will be wing/tail modifications as well as turbine inlet heating. ***FY 2012 Accomplishments:*** N/A ***FY 2013 Plans:***	0.000	0.000	4.590

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C. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
N/A ***FY 2014 Plans:*** Will begin to develop anti-ice capability to allow the MQ-9 to detect and transit light icing conditions. There will be wing/tail modifications as well as turbine inlet heating.			
Title: Extended Range ***Description:*** Develop Extended Range capability to increase operational range and endurance of the baseline MQ-9. ***FY 2012 Accomplishments:*** N/A ***FY 2013 Plans:*** N/A ***FY 2014 Plans:*** Will begin to develop Extended Range capability to increase operational range and endurance of the baseline MQ-9. Technical solutions may include extended wings/tails and incorporating external fuel tanks.	0.000	0.000	30.000
Accomplishments/Planned Programs Subtotals	107.576	147.971	128.328

D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• APAF: BA04: Line Item # PRDTB1: *MQ-9*	659.592	553.530	272.217		272.217	433.705	494.319	541.534	559.942	1,619.304	7,724.889
• APAF: BA06:Line Item # PRDTB1: *MQ-9*	188.815	124.060	37.070		37.070	126.657	128.408	125.169	131.616	377.628	1,235.347
• APAF: BA05: Line Item # PRDTB2: *MQ-9 Mods*	110.744	238.360	102.970		102.970	104.102	128.052	205.537	160.998	1,142.890	2,298.855
• APAF: BA07: Line Item # PRDTB1: *MQ-9*	0.000	4.000	124.100		124.100	102.000	27.700	27.500	25.790	0.000	355.200
• OPAF: BA03: Line Item 834040: *AF Global Command & Control Sys*	3.907	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	3.907

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D. Other Program Funding Summary ($ in Millions)

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• OPAF: BA04: Line Item # 845010: *Base Procured Equipment*	0.510	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.510
• RDTE: BA07: PE 0305219F: *MQ-1 Predator A UAV*	51.642	9.122	3.326		3.326	1.396	0.930	0.279	0.284	Continuing	Continuing
• RDTE: BA07: PE 0305206F: *Airborne Reconnaissance Systems*	16.047	16.359	13.040		13.040	6.419	0.000	0.000	0.000	Continuing	Continuing
• APAF: BA05: Line Item PRDTB3: *MQ-9 UAS Payloads*	74.611	93.461	0.000		0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• APAF: BA06: PRDTB3: *MQ-9 UAS Payloads*	0.000	12.725	8.256		8.256	15.039	1.239	0.000	0.000	Continuing	Continuing
• RDTE: BA07: PE 0304260F: *Airborne SIGINT Enterprise*	25.874	35.340	19.818		19.818	28.354	27.561	33.198	33.795	Continuing	Continuing

Remarks

E. Acquisition Strategy

The MQ-9 Reaper system will be acquired via sole-source contracts with General Atomics-ASI, L3Comm, and Raytheon as the prime contractors. GA-ASI is the prime contractor for aircraft and ground control stations. L3Comm is the prime contractor for the Predator Satellite Link. Raytheon is the prime contractor for the MTS-B EO/IR sensor system.

F. 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.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force		DATE: April 2013
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
MQ-9 System Development and Demonstration (SDD)	SS/CPIF	GA-ASI:Poway, CA	-	25.603	Feb 2012	41.776	Apr 2013	26.140	Oct 2013	-		26.140	Continuing	Continuing	377.185
Ground Control Station (GCS) Development	SS/ Various	GA-ASI:Poway, CA	-	18.995	Feb 2012	13.124	Jul 2013	9.293	Dec 2013	-		9.293	Continuing	Continuing	195.305
MQ-9 Electro-Optical / Infrared (EO/IR) Sensor	SS/ Various	Raytheon:McKinney, TX	-	26.923	Feb 2012	19.671	Dec 2012	15.410	Oct 2013	-		15.410	Continuing	Continuing	187.941
Operator Simulator	SS/CPIF	L3 Comm:Salt Lake City, UT	-	0.322	Jun 2012	12.153	Apr 2013	6.070	Dec 2013	-		6.070	Continuing	Continuing	75.210
Synthetic Aperture Radar (SAR) Enhancements	SS/CPFF	GA-RSG:Poway, CA	-	6.797	Feb 2012	7.547	Dec 2012	5.020	Oct 2013	-		5.020	Continuing	Continuing	58.118
Communication	SS/CPFF	GA-ASI:Poway, CA	-	2.506	Aug 2012	8.148	Jan 2013	1.110	Oct 2013	-		1.110	Continuing	Continuing	27.799
Counter-IED Development and Demonstration	SS/ Various	Various:Various,	-	14.008	May 2012	6.000	Apr 2013	0.000		-		0.000	0.000	20.008	31.555
GCS Multi Transit Ops	SS/CPFF	GA-ASI:Poway, CA	-	3.600	Feb 2012	6.470	Jan 2013	2.640	May 2014	-		2.640	Continuing	Continuing	47.390
MQ-9 Program Protection Technology Insertion	SS/CPFF	GA-ASI:Poway, CA	-	0.000		10.700	May 2013	5.430	Dec 2013	-		5.430	Continuing	Continuing	59.390
Reliability and Maintainability	SS/CPFF	GA-ASI:Poway, CA	-	0.300	Apr 2012	4.045	May 2013	4.224	Dec 2013	-		4.224	Continuing	Continuing	37.333
Anti-Ice	SS/CPFF	GA-ASI:Poway, CA	-	0.000		0.000		4.590	Dec 2013	-		4.590	Continuing	Continuing	23.900
Extended Range	SS/CPFF	GA-ASI:Poway, CA	-	0.000		0.000		30.000	Dec 2013	-		30.000	Continuing	Continuing	50.000
		Subtotal	0.000	99.054		129.634		109.927		0.000		109.927			1,171.126

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support Services	Various	Various:,	-	5.079	Dec 2011	13.451	Oct 2012	13.965	Oct 2013	-		13.965	Continuing	Continuing	138.162
		Subtotal	0.000	5.079		13.451		13.965		0.000		13.965			138.162

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Air Force			DATE: April 2013
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support	Various	Various:,	-	1.232	Feb 2012	2.327	Oct 2012	2.327	Oct 2013	-		2.327	Continuing	Continuing	35.735
		Subtotal	0.000	1.232		2.327		2.327		0.000		2.327			35.735

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Administration	Various	Various:,	-	2.211	Feb 2012	2.559	Oct 2012	2.109	Oct 2013	-		2.109	Continuing	Continuing	39.321
		Subtotal	0.000	2.211		2.559		2.109		0.000		2.109			39.321

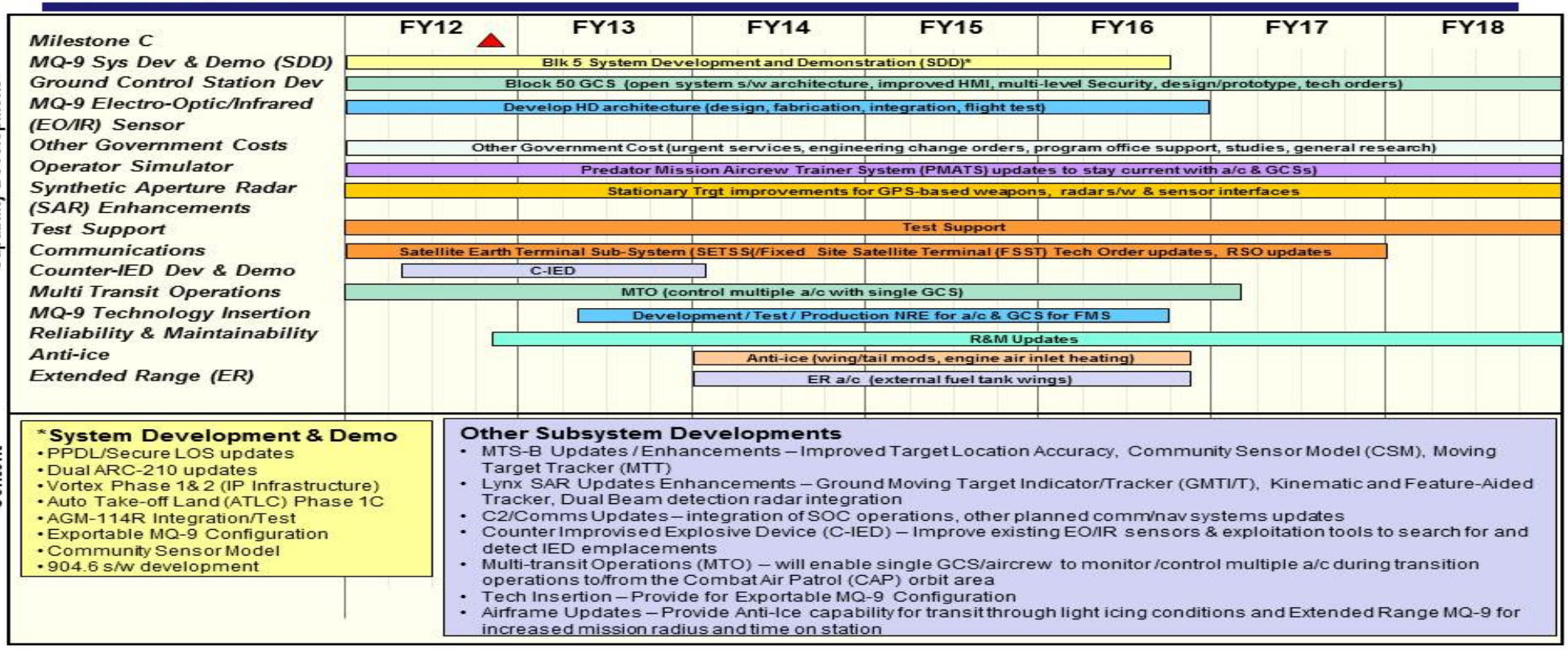
	All Prior Years	FY 2012 Cost	FY 2012 Award Date	FY 2013 Cost	FY 2013 Award Date	FY 2014 Base Cost	FY 2014 Base Award Date	FY 2014 OCO Cost	FY 2014 OCO Award Date	FY 2014 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	107.576		147.971		128.328		0.000		128.328			1,384.344

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Air Force		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0205219F: *MQ-9 UAV*	PROJECT 675246: *MQ-9 Development and Fielding*

U.S. AIR FORCE

MQ-9 Reaper Program Schedule



Content

***System Development & Demo**
- PPDL/Secure LOS updates
- Dual ARC-210 updates
- Vortex Phase 1& 2 (IP Infrastructure)
- Auto Take-off Land (ATLC) Phase 1C
- AGM-114R Integration/Test
- Exportable MQ-9 Configuration
- Community Sensor Model
- 904.6 s/w development

Other Subsystem Developments
- MTS-B Updates / Enhancements – Improved Target Location Accuracy, Community Sensor Model (CSM), Moving Target Tracker (MTT)
- Lynx SAR Updates Enhancements – Ground Moving Target Indicator/Tracker (GMTI/T), Kinematic and Feature-Aided Tracker, Dual Beam detection radar integration
- C2/Comms Updates – integration of SOC operations, other planned comm/nav systems updates
- Counter Improvised Explosive Device (C-IED) – Improve existing EO/IR sensors & exploitation tools to search for and detect IED emplacements
- Multi-transit Operations (MTO) – will enable single GCS/aircrew to monitor /control multiple a/c during transition operations to/from the Combat Air Patrol (CAP) orbit area
- Tech Insertion – Provide for Exportable MQ-9 Configuration
- Airframe Updates – Provide Anti-Ice capability for transit through light icing conditions and Extended Range MQ-9 for increased mission radius and time on station

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Air Force		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0205219F: *MQ-9 UAV*	PROJECT 675246: *MQ-9 Development and Fielding*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Milestone C	4	2012	4	2012
MQ-9 System Development and Demonstration (SDD)	1	2012	3	2016
Ground Control Station (GCS) Development	1	2012	4	2018
MQ-9 Electro-Optic/Infrared (EO/IR) Sensor	1	2012	4	2016
Other Government Costs	1	2012	4	2018
Operator Simulator	1	2012	4	2018
Synthetic Aperture Radar (SAR) Enhancements	1	2012	4	2018
Test Support	1	2012	4	2018
Communications	1	2012	4	2017
Counter-IED Development and Demonstration	2	2012	1	2014
Multi Transit Operations	1	2012	1	2017
MQ-9 Technology Insertion	2	2013	3	2016
Reliability and Maintainability	4	2012	4	2018
Anti-ice	1	2014	4	2016
Extended Range (ER)	1	2014	4	2016