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**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 0305219F: *MQ-1 Predator A UAV*

| COST (\$ in Millions)      | All Prior Years | FY 2012 | FY 2013 <sup>#</sup> | FY 2014 Base | FY 2014 OCO <sup>##</sup> | FY 2014 Total | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To Complete | Total Cost |
|----------------------------|-----------------|---------|----------------------|--------------|---------------------------|---------------|---------|---------|---------|---------|------------------|------------|
| Total Program Element      | 335.638         | 51.642  | 9.122                | 3.326        | -                         | 3.326         | 1.396   | 0.930   | 0.279   | 0.284   | 0.000            | 402.617    |
| 675143: <i>Predator</i>    | 335.638         | 51.642  | 9.122                | 3.326        | -                         | 3.326         | 1.396   | 0.930   | 0.279   | 0.284   | 0.000            | 402.617    |
| Quantity of RDT&E Articles |                 | 0       | 0                    | 0            |                           | 0             | 0       | 0       | 0       | 0       |                  |            |

**MDAP/MAIS Code(s):** 271

<sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

## A. Mission Description and Budget Item Justification

The basic MQ-1 system consists of the aircraft, a control station, communications equipment, support equipment, simulator and training devices, Readiness Spares Packages (RSP), technical data/training, and personnel required to operate, maintain, and sustain the system. This funding supports development and enhancements to the Predator weapon system to include: aircraft and Ground Control Stations (GCS) and associated software, sensors, communication equipment, training systems and support elements. 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-1 aircraft is a single-engine, propeller-driven, remotely piloted aircraft (formerly called Unmanned Aircraft Vehicle, UAV) designed to operate over-the-horizon for long endurance sorties. The aircraft is designed to provide real-time Intelligence, Surveillance, Reconnaissance, and Target Acquisition (ISR TA), and attack capability to aggressively prosecute Time Sensitive Targets (TSTs). The aircraft is configured to carry Hellfire laser-guided missiles. The MQ-1 operates primarily at medium altitudes, integrating with joint aerospace, ground, and maritime forces as well as coalition and Allied forces, to execute combatant commander priority missions. The aircraft carries a Multi-spectral Targeting System (MTS) (a sensor turret that incorporates Electro-Optical (EO), Infra-Red (IR), laser designator, and IR illuminator) capable of transmitting real-time Full Motion Video (FMV) imagery throughout the operational theater.

Major changes will be classified as distinct blocks or Mission Design Series (MDS) updates. The overarching MQ-1 modernization activity is known as the Critical Capabilities Integration Program (CCIP). CCIP will integrate Predator Primary Data Link (PPDL) into the GCS, upgrade the aircraft GPS, and integrate Hellfire R Software, Digital Video, Video Orientated Transceiver for Exchange of Information FMV encrypted data link, and Airborne Cueing and Exploitation System Hyperspectral Sensor (ACES HY). This program will also address interoperability among developed systems through common standards and tools. Additionally, this program will continue to address reliability and maintainability, safety of flight, and warfighter needs as they arise.

The GCS, common with the MQ-9 Reaper, 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; provide a means for manual control; allow control of multiple aircraft and payloads; allow personnel to launch, recover, and monitor aircraft, payloads, and system communications status; secure data links to receive payload sensor data and command

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force                                                                                                                                                                                                                                         |  |                                                           |         | DATE: April 2013 |             |               |
| APPROPRIATION/BUDGET ACTIVITY<br>3600: Research, Development, Test & Evaluation, Air Force<br>BA 7: Operational Systems Development                                                                                                                                                                     |  | R-1 ITEM NOMENCLATURE<br>PE 0305219F: MQ-1 Predator A UAV |         |                  |             |               |
| links; monitor threats to the aircraft; display a common operational picture; and provide support functions. Additionally, GCS allows for servicing, systems checks, maintaining, launching, and recovering aircraft under LOS control for hand-off to a mobile or fixed facility GCS.                  |  |                                                           |         |                  |             |               |
| 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                                                                                                                                                                                                                                                                             |  | 11.642                                                    | 9.122   | 5.652            | -           | 5.652         |
| Current President's Budget                                                                                                                                                                                                                                                                              |  | 51.642                                                    | 9.122   | 3.326            | -           | 3.326         |
| Total Adjustments                                                                                                                                                                                                                                                                                       |  | 40.000                                                    | 0.000   | -2.326           | -           | -2.326        |
| • 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                                                                                                                                                                                                                                                                                        |  | 0.000                                                     | 0.000   |                  |             |               |
| • SBIR/STTR Transfer                                                                                                                                                                                                                                                                                    |  | 0.000                                                     | 0.000   |                  |             |               |
| • Other Adjustments                                                                                                                                                                                                                                                                                     |  | 40.000                                                    | 0.000   | -2.326           | -           | -2.326        |
| Change Summary Explanation                                                                                                                                                                                                                                                                              |  |                                                           |         |                  |             |               |
| Reduction of \$2.326M in FY14 due to higher AF priorities.                                                                                                                                                                                                                                              |  |                                                           |         |                  |             |               |
| C. Accomplishments/Planned Programs (\$ in Millions)                                                                                                                                                                                                                                                    |  |                                                           |         | FY 2012          | FY 2013     | FY 2014       |
| Title: OGC and Urgent Services                                                                                                                                                                                                                                                                          |  |                                                           |         | 0.871            | 0.632       | 0.579         |
| Description: Other Government Costs (OGC) and Urgent Services                                                                                                                                                                                                                                           |  |                                                           |         |                  |             |               |
| FY 2012 Accomplishments:                                                                                                                                                                                                                                                                                |  |                                                           |         |                  |             |               |
| Continued OGC and Urgent Services                                                                                                                                                                                                                                                                       |  |                                                           |         |                  |             |               |
| FY 2013 Plans:                                                                                                                                                                                                                                                                                          |  |                                                           |         |                  |             |               |
| Will continue OGC and Urgent Services                                                                                                                                                                                                                                                                   |  |                                                           |         |                  |             |               |
| FY 2014 Plans:                                                                                                                                                                                                                                                                                          |  |                                                           |         |                  |             |               |
| Will complete OGC and Urgent Services                                                                                                                                                                                                                                                                   |  |                                                           |         |                  |             |               |
| Title: Program Management Administration (PMA)                                                                                                                                                                                                                                                          |  |                                                           |         | 0.496            | 0.820       | 0.784         |

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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | <b>DATE:</b> April 2013                                                 |                |                |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i><br>BA 7: <i>Operational Systems Development</i>                                                                                                                                                                                                                                                                                                                                                                                            |  | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305219F: <i>MQ-1 Predator A UAV</i> |                |                |
| <b>C. Accomplishments/Planned Programs (\$ in Millions)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <b>FY 2012</b>                                                          | <b>FY 2013</b> | <b>FY 2014</b> |
| <b>Description:</b> Program Management Administration<br><br><b>FY 2012 Accomplishments:</b><br>Continued Program Management Administration<br><br><b>FY 2013 Plans:</b><br>Will continue Program Management Administration<br><br><b>FY 2014 Plans:</b><br>Will continue Program Management Administration                                                                                                                                                                                                                                             |  |                                                                         |                |                |
| <b>Title:</b> ST&E<br><b>Description:</b> Systems Test & Evaluation (ST&E)<br><br><b>FY 2012 Accomplishments:</b><br>Continued ST&E<br><br><b>FY 2013 Plans:</b><br>Will continue ST&E<br><br><b>FY 2014 Plans:</b><br>Will complete ST&E                                                                                                                                                                                                                                                                                                               |  | 0.618                                                                   | 1.445          | 0.613          |
| <b>Title:</b> PMATS<br><b>Description:</b> Predator Mission Aircrew Training System (PMATS)<br><br><b>FY 2012 Accomplishments:</b><br>Continued PMATS development activity to keep the training system current with other MQ-1 CCI development activities<br><br><b>FY 2013 Plans:</b><br>Will continue PMATS development to keep the training system current with other MQ-1 CCI development activities<br><br><b>FY 2014 Plans:</b><br>Will complete PMATS development to keep the training system current with other MQ-1 CCI development activities |  | 0.304                                                                   | 1.242          | 1.350          |
| <b>Title:</b> VORTEX<br><b>Description:</b> Video Oriented Transceiver for Exchange of Information (VORTEX)                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | 3.698                                                                   | 1.902          | 0.000          |

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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force                                                                                                                                                                                |  | <b>DATE:</b> April 2013                                                 |                |                |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i><br>BA 7: <i>Operational Systems Development</i>                                                                                              |  | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305219F: <i>MQ-1 Predator A UAV</i> |                |                |
| <b>C. Accomplishments/Planned Programs (\$ in Millions)</b>                                                                                                                                                                                               |  | <b>FY 2012</b>                                                          | <b>FY 2013</b> | <b>FY 2014</b> |
| <b><i>FY 2012 Accomplishments:</i></b><br>Continued development of VORTEX, a system which enables encrypted line of sight data transmission across multiple frequencies, channels, and waveforms. Includes aircraft integration and software development. |  |                                                                         |                |                |
| <b><i>FY 2013 Plans:</i></b><br>Will continue development on VORTEX, a system which enables encrypted line of sight data transmission across multiple frequencies, channels, and waveforms. Includes aircraft integration and software development.       |  |                                                                         |                |                |
| <b><i>FY 2014 Plans:</i></b><br>N/A                                                                                                                                                                                                                       |  |                                                                         |                |                |
| <b><i>Title:</i></b> CCI<br><b><i>Description:</i></b> Critical Capabilities Integration (CCI)                                                                                                                                                            |  | 1.765                                                                   | 0.987          | 0.000          |
| <b><i>FY 2012 Accomplishments:</i></b><br>Continued development of the overarching integration strategy as well as development for the integration of differential Global Positioning System (dGPS).                                                      |  |                                                                         |                |                |
| <b><i>FY 2013 Plans:</i></b><br>Will complete development of the overarching integration strategy as well as development for the integration of dGPS.                                                                                                     |  |                                                                         |                |                |
| <b><i>FY 2014 Plans:</i></b><br>N/A                                                                                                                                                                                                                       |  |                                                                         |                |                |
| <b><i>Title:</i></b> Hellfire Software<br><b><i>Description:</i></b> Hellfire Software                                                                                                                                                                    |  | 3.000                                                                   | 0.798          | 0.000          |
| <b><i>FY 2012 Accomplishments:</i></b><br>Continued development required to integrate the next generation Hellfire air-to-ground missile (AGM-114R) on the MQ-1                                                                                           |  |                                                                         |                |                |
| <b><i>FY 2013 Plans:</i></b><br>Will complete development and conduct testing required to integrate the next generation Hellfire missile (AGM-114R) on the MQ-1                                                                                           |  |                                                                         |                |                |
| <b><i>FY 2014 Plans:</i></b><br>N/A                                                                                                                                                                                                                       |  |                                                                         |                |                |
| <b><i>Title:</i></b> Digital Video                                                                                                                                                                                                                        |  | 0.890                                                                   | 1.296          | 0.000          |

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| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Air Force                                                                                                                                          |         |         |                 |                |                                                           |         |         |         |         | DATE: April 2013    |            |         |
| APPROPRIATION/BUDGET ACTIVITY<br>3600: Research, Development, Test & Evaluation, Air Force<br>BA 7: Operational Systems Development                                                                      |         |         |                 |                | R-1 ITEM NOMENCLATURE<br>PE 0305219F: MQ-1 Predator A UAV |         |         |         |         |                     |            |         |
| C. Accomplishments/Planned Programs (\$ in Millions)                                                                                                                                                     |         |         |                 |                |                                                           |         |         |         |         | FY 2012             | FY 2013    | FY 2014 |
| Description: Digital Video                                                                                                                                                                               |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| FY 2012 Accomplishments:<br>Continued development activities including engineering, design, integration and testing to improved image quality from analog to 720p and synchronized metadata for the MQ-1 |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| FY 2013 Plans:<br>Will complete development activities including engineering, design, integration and testing to improved image quality from analog to 720p and synchronized metadata for the MQ-1       |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| FY 2014 Plans:<br>N/A                                                                                                                                                                                    |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| Title: Predator C Sensors                                                                                                                                                                                |         |         |                 |                |                                                           |         |         |         |         | 40.000              | 0.000      | 0.000   |
| Description: Predator C Sensors                                                                                                                                                                          |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| FY 2012 Accomplishments:<br>Integrated and tested EO/IR sensor for Predator C demonstration                                                                                                              |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| FY 2013 Plans:<br>N/A                                                                                                                                                                                    |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| FY 2014 Plans:<br>N/A                                                                                                                                                                                    |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| Accomplishments/Planned Programs Subtotals                                                                                                                                                               |         |         |                 |                |                                                           |         |         |         |         | 51.642              | 9.122      | 3.326   |
| D. Other Program Funding Summary (\$ in Millions)                                                                                                                                                        |         |         |                 |                |                                                           |         |         |         |         |                     |            |         |
| Line Item                                                                                                                                                                                                | FY 2012 | FY 2013 | FY 2014<br>Base | FY 2014<br>OCO | FY 2014<br>Total                                          | FY 2015 | FY 2016 | FY 2017 | FY 2018 | Cost To<br>Complete | Total Cost |         |
| • APAF: BA05: Line Item #<br>PRDT01: MQ-1 MODS                                                                                                                                                           | 161.246 | 30.861  | 9.734           |                | 9.734                                                     | 4.800   | 3.200   | 0.000   | 0.000   | 0.000               | 0.000      |         |
| • APAF: BA06: Line Item #<br>PRDT01: INITIAL SPARES                                                                                                                                                      | 7.729   | 4.845   | 2.466           |                | 2.466                                                     | 4.033   | 0.310   | 0.000   | 0.000   | 0.000               | 0.000      |         |
| • MILCON: PE 0305219: OTHER<br>CONTINGENCIES                                                                                                                                                             | 15.000  | 0.000   | 0.000           |                | 0.000                                                     | 0.000   | 0.000   | 0.000   | 0.000   | 0.000               | 15.000     |         |

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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Air Force                                                                                                                                                                         |                |                |                |                |                                                                         |                |                |                |                | <b>DATE:</b> April 2013 |                   |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i><br>BA 7: <i>Operational Systems Development</i>                                                                                       |                |                |                |                | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305219F: <i>MQ-1 Predator A UAV</i> |                |                |                |                |                         |                   |
| <b>D. Other Program Funding Summary (\$ in Millions)</b>                                                                                                                                                                                           |                |                |                |                |                                                                         |                |                |                |                |                         |                   |
|                                                                                                                                                                                                                                                    |                |                | <u>FY 2014</u> | <u>FY 2014</u> | <u>FY 2014</u>                                                          |                |                |                |                | <u>Cost To</u>          |                   |
| <u>Line Item</u>                                                                                                                                                                                                                                   | <u>FY 2012</u> | <u>FY 2013</u> | <u>Base</u>    | <u>OCO</u>     | <u>Total</u>                                                            | <u>FY 2015</u> | <u>FY 2016</u> | <u>FY 2017</u> | <u>FY 2018</u> | <u>Complete</u>         | <u>Total Cost</u> |
| <b>Remarks</b>                                                                                                                                                                                                                                     |                |                |                |                |                                                                         |                |                |                |                |                         |                   |
| <b>E. Acquisition Strategy</b>                                                                                                                                                                                                                     |                |                |                |                |                                                                         |                |                |                |                |                         |                   |
| The MQ-1 Predator system will be acquired via sole-source acquisition strategies with General Atomics-ASI and Raytheon as the prime contractors.                                                                                                   |                |                |                |                |                                                                         |                |                |                |                |                         |                   |
| <b>F. Performance Metrics</b>                                                                                                                                                                                                                      |                |                |                |                |                                                                         |                |                |                |                |                         |                   |
| 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 2014 Air Force                                                                         |                        |                                  |                 |         |            |                                                           |            |              |            |                             |            |               | DATE: April 2013 |            |                          |
|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------|-----------------|---------|------------|-----------------------------------------------------------|------------|--------------|------------|-----------------------------|------------|---------------|------------------|------------|--------------------------|
| APPROPRIATION/BUDGET ACTIVITY<br>3600: Research, Development, Test & Evaluation, Air Force<br>BA 7: Operational Systems Development |                        |                                  |                 |         |            | R-1 ITEM NOMENCLATURE<br>PE 0305219F: MQ-1 Predator A UAV |            |              |            | PROJECT<br>675143: Predator |            |               |                  |            |                          |
| Product Development (\$ in Millions)                                                                                                |                        |                                  |                 | FY 2012 |            | FY 2013                                                   |            | FY 2014 Base |            | FY 2014 OCO                 |            | FY 2014 Total |                  |            |                          |
| Cost Category Item                                                                                                                  | Contract Method & Type | Performing Activity & Location   | All Prior Years | Cost    | Award Date | Cost                                                      | Award Date | Cost         | Award Date | Cost                        | Award Date | Cost          | Cost To Complete | Total Cost | Target Value of Contract |
| PMATS                                                                                                                               | Various                | L3 Comm:Binghamton, NY           | 28.022          | 0.304   | Mar 2012   | 1.242                                                     | Feb 2013   | 1.350        | Dec 2013   | -                           |            | 1.350         | 0.000            | 30.918     | 30.918                   |
| VORTEX                                                                                                                              | SS/CPIF                | General Atomics - ASI:Poway, CA  | 4.594           | 3.698   | Aug 2012   | 1.902                                                     | Feb 2013   | 0.000        |            | -                           |            | 0.000         | 0.000            | 10.194     | 10.194                   |
| CCI                                                                                                                                 | SS/CPIF                | General Atomics - ASI:Poway, CA  | 15.732          | 1.765   | Jul 2012   | 0.987                                                     | Feb 2013   | 0.000        |            | -                           |            | 0.000         | 0.000            | 18.484     | 18.484                   |
| Hellfire Software                                                                                                                   | SS/CPIF                | General Atomics - ASI:Poway, CA  | 0.589           | 3.000   | Jul 2012   | 0.798                                                     | Feb 2013   | 0.000        |            | -                           |            | 0.000         | 2.326            | 6.713      | 6.713                    |
| Digital Video                                                                                                                       | SS/CPIF                | General Atomics - ASI:Poway, CA  | 5.243           | 0.890   | Jul 2012   | 1.296                                                     | Feb 2013   | 0.000        |            | -                           |            | 0.000         | 0.000            | 7.429      | 7.429                    |
| Predator C Sensors                                                                                                                  | SS/CPFF                | United Technologies:Westford, MA | 16.300          | 40.000  | Apr 2013   | 0.000                                                     |            | 0.000        |            | -                           |            | 0.000         | 0.000            | 56.300     | 56.300                   |
| Prior Year Completed Projects                                                                                                       | Various                | Not specified.:                  | 230.174         | 0.000   |            | 0.000                                                     |            | 0.000        |            | -                           |            | 0.000         | 0.000            | 230.174    | 230.174                  |
| Subtotal                                                                                                                            |                        |                                  | 300.654         | 49.657  |            | 6.225                                                     |            | 1.350        |            | 0.000                       |            | 1.350         | 2.326            | 360.212    | 360.212                  |
| Support (\$ in Millions)                                                                                                            |                        |                                  |                 | FY 2012 |            | FY 2013                                                   |            | FY 2014 Base |            | FY 2014 OCO                 |            | FY 2014 Total |                  |            |                          |
| Cost Category Item                                                                                                                  | Contract Method & Type | Performing Activity & Location   | All Prior Years | Cost    | Award Date | Cost                                                      | Award Date | Cost         | Award Date | Cost                        | Award Date | Cost          | Cost To Complete | Total Cost | Target Value of Contract |
| OGC and Urgent Services                                                                                                             | Various                | Various:Various,                 | 22.208          | 0.871   | Dec 2011   | 0.632                                                     | Dec 2012   | 0.579        | Dec 2013   | -                           |            | 0.579         | 0.563            | 24.853     | 24.853                   |
| Subtotal                                                                                                                            |                        |                                  | 22.208          | 0.871   |            | 0.632                                                     |            | 0.579        |            | 0.000                       |            | 0.579         | 0.563            | 24.853     | 24.853                   |
| Test and Evaluation (\$ in Millions)                                                                                                |                        |                                  |                 | FY 2012 |            | FY 2013                                                   |            | FY 2014 Base |            | FY 2014 OCO                 |            | FY 2014 Total |                  |            |                          |
| Cost Category Item                                                                                                                  | Contract Method & Type | Performing Activity & Location   | All Prior Years | Cost    | Award Date | Cost                                                      | Award Date | Cost         | Award Date | Cost                        | Award Date | Cost          | Cost To Complete | Total Cost | Target Value of Contract |
| Test Support                                                                                                                        | Various                | Various:Various,                 | 7.250           | 0.618   | Mar 2012   | 1.445                                                     | Dec 2012   | 0.613        | Dec 2013   | -                           |            | 0.613         | 0.000            | 9.926      | 9.926                    |
| Subtotal                                                                                                                            |                        |                                  | 7.250           | 0.618   |            | 1.445                                                     |            | 0.613        |            | 0.000                       |            | 0.613         | 0.000            | 9.926      | 9.926                    |

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| <b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2014 Air Force                                                                                       |  |  |  |  |  |  |                                                                         |  |  |  |                                           | <b>DATE:</b> April 2013 |  |  |  |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i><br>BA 7: <i>Operational Systems Development</i> |  |  |  |  |  |  | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305219F: <i>MQ-1 Predator A UAV</i> |  |  |  | <b>PROJECT</b><br>675143: <i>Predator</i> |                         |  |  |  |

| <b>Management Services (\$ in Millions)</b> |                                   |                                           |                        | <b>FY 2012</b> |                   | <b>FY 2013</b> |                   | <b>FY 2014 Base</b> |                   | <b>FY 2014 OCO</b> |                   | <b>FY 2014 Total</b> |                         |                   |                                 |
|---------------------------------------------|-----------------------------------|-------------------------------------------|------------------------|----------------|-------------------|----------------|-------------------|---------------------|-------------------|--------------------|-------------------|----------------------|-------------------------|-------------------|---------------------------------|
| <b>Cost Category Item</b>                   | <b>Contract Method &amp; Type</b> | <b>Performing Activity &amp; Location</b> | <b>All Prior Years</b> | <b>Cost</b>    | <b>Award Date</b> | <b>Cost</b>    | <b>Award Date</b> | <b>Cost</b>         | <b>Award Date</b> | <b>Cost</b>        | <b>Award Date</b> | <b>Cost</b>          | <b>Cost To Complete</b> | <b>Total Cost</b> | <b>Target Value of Contract</b> |
| Program Management Administration (PMA)     | Various                           | Various:Various,                          | 5.526                  | 0.496          | Nov 2011          | 0.820          | Nov 2012          | 0.784               | Nov 2013          | -                  |                   | 0.784                | 0.000                   | 7.626             | 7.626                           |
| <b>Subtotal</b>                             |                                   |                                           | 5.526                  | 0.496          |                   | 0.820          |                   | 0.784               |                   | 0.000              |                   | 0.784                | 0.000                   | 7.626             | 7.626                           |

|                            | <b>All Prior Years</b> | <b>FY 2012</b> |  | <b>FY 2013</b> |  | <b>FY 2014 Base</b> |  | <b>FY 2014 OCO</b> |  | <b>FY 2014 Total</b> | <b>Cost To Complete</b> | <b>Total Cost</b> | <b>Target Value of Contract</b> |
|----------------------------|------------------------|----------------|--|----------------|--|---------------------|--|--------------------|--|----------------------|-------------------------|-------------------|---------------------------------|
| <b>Project Cost Totals</b> | 335.638                | 51.642         |  | 9.122          |  | 3.326               |  | 0.000              |  | 3.326                | 2.889                   | 402.617           | 402.617                         |

**Remarks**



# UNCLASSIFIED

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

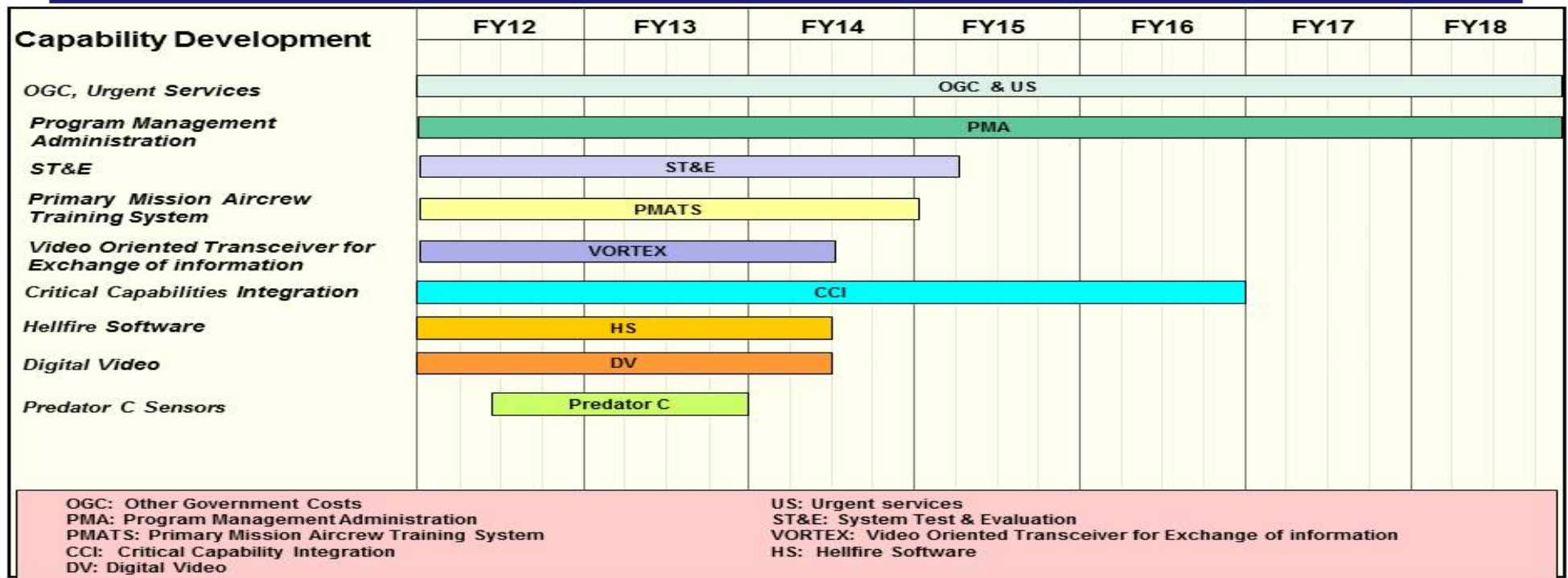
PE 0305219F: MQ-1 Predator A UAV

## PROJECT

675143: Predator



# MQ-1 Predator Program Schedule



**UNCLASSIFIED**

|                                                                                                                                                              |                                                                         |                                           |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------|-------------------------|
| <b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Air Force                                                                                           |                                                                         |                                           | <b>DATE:</b> April 2013 |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>3600: <i>Research, Development, Test &amp; Evaluation, Air Force</i><br>BA 7: <i>Operational Systems Development</i> | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0305219F: <i>MQ-1 Predator A UAV</i> | <b>PROJECT</b><br>675143: <i>Predator</i> |                         |

Schedule Details

| Events                                                 | Start   |      | End     |      |
|--------------------------------------------------------|---------|------|---------|------|
|                                                        | Quarter | Year | Quarter | Year |
| OGC, Urgent Services                                   | 1       | 2012 | 4       | 2018 |
| Program Management Administration                      | 1       | 2012 | 4       | 2018 |
| ST&E                                                   | 1       | 2012 | 1       | 2015 |
| Predator Mission Aircrew Training System               | 1       | 2012 | 4       | 2014 |
| Video Oriented Transceiver tor Exchange of Information | 1       | 2012 | 2       | 2014 |
| Critical Capabilities Integration                      | 1       | 2012 | 4       | 2016 |
| Hellfire Software                                      | 1       | 2012 | 2       | 2014 |
| Digital Video                                          | 1       | 2012 | 2       | 2014 |
| Predator C Sensors                                     | 2       | 2012 | 4       | 2013 |