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| Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |         |                      |              |                                                                  |               |         |         |         | DATE: April 2013 |                  |            |
| APPROPRIATION/BUDGET ACTIVITY<br>2040: Research, Development, Test & Evaluation, Army<br>BA 5: System Development & Demonstration (SDD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |         |                      |              | R-1 ITEM NOMENCLATURE<br>PE 0605626A: Aerial Common Sensor - SDD |               |         |         |         |                  |                  |            |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -               | 31.435  | 47.426               | 10.382       | -                                                                | 10.382        | 36.102  | 23.244  | 0.133   | 0.135            | Continuing       | Continuing |
| AC5: Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -               | 31.435  | 47.426               | 10.382       | -                                                                | 10.382        | 36.102  | 23.244  | 0.133   | 0.135            | Continuing       | Continuing |
| # 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| Note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| FY14 - Budget Year Adjustment of \$10.258 million additional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| FY15 - ARL funding has been placed in the EMARSS RDTE line in the amount of \$28.225 million until new RDTE line can be established.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| FY16 - ARL funding has been placed in the EMARSS RDTE line in the amount of \$17.946 million until new RDTE line can be established.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| A. Mission Description and Budget Item Justification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is the Army's next generation C-12 based, direct support, manned airborne intelligence collection, processing, and targeting support system. EMARSS provides a persistent capability to detect, locate, classify/identify, and track surface targets with a high degree of timeliness and accuracy. EMARSS aircraft will be assigned to the U.S. Army Intelligence and Security Command's (INSCOM) Aerial Exploitation Battalions (AEB). EMARSS is an improvement over the existing Medium Altitude Reconnaissance and Surveillance System Quick Reaction Capability (MARSS QRC) in that it hosts an on board Distributed Common Ground System - Army (DCGS-A) capability, improved satellite communications, improved aircraft performance, and life cycle logistics sustainment capability. |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| EMARSS will consist of a commercial derivative aircraft equipped with an Electro-optical/Infrared (EO/IR) sensor with Full Motion Video (FMV), a Communications Intelligence (COMINT) collection system, an Aerial Precision Geolocation (APG) system, tactical line-of-site (LOS) and beyond line-of-site (BLOS) communications suite, two DCGS-A enabled operator workstations and a self-protection suite. EMARSS is built to allow future capabilities to be integrated on platform with the addition of a third carry-on workstation.                                                                                                                                                                                                                                                                                                                                 |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |
| EMARSS will operate as a single platform in direct support of tactical missions. EMARSS, integrating elements of the DCGS-A, will provide efficient response to Combat Forces with Intelligence, Surveillance and Reconnaissance (ISR) tasking. EMARSS' flexibility, endurance, sensor capability, communications architecture, and Processing, Exploitation & Dissemination (PED) support is relevant to the entire Find, Fix, Finish, Exploit, Analyze, and Disseminate (F3EAD) cycle.                                                                                                                                                                                                                                                                                                                                                                                   |                 |         |                      |              |                                                                  |               |         |         |         |                  |                  |            |

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| <b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2014 Army | <b>DATE:</b> April 2013 |
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| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i> | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> |
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FY14 Base funding in the amount of \$10.382 million funds final Engineering and Manufacturing Development (EMD) activities to include delta testing and corrective actions resulting from Limited User Test (LUT). These funds also provide partial funding for an Interim Contractor Logistics Support (ICLS) capability. Results will support a Milestone C decision.

| <b><u>B. Program Change Summary (\$ in Millions)</u></b> | <b><u>FY 2012</u></b> | <b><u>FY 2013</u></b> | <b><u>FY 2014 Base</u></b> | <b><u>FY 2014 OCO</u></b> | <b><u>FY 2014 Total</u></b> |
|----------------------------------------------------------|-----------------------|-----------------------|----------------------------|---------------------------|-----------------------------|
| Previous President's Budget                              | 31.435                | 47.426                | 0.124                      | -                         | 0.124                       |
| Current President's Budget                               | 31.435                | 47.426                | 10.382                     | -                         | 10.382                      |
| Total Adjustments                                        | 0.000                 | 0.000                 | 10.258                     | -                         | 10.258                      |
| • Congressional General Reductions                       | -                     | -                     |                            |                           |                             |
| • Congressional Directed Reductions                      | -                     | -                     |                            |                           |                             |
| • Congressional Rescissions                              | -                     | -                     |                            |                           |                             |
| • Congressional Adds                                     | -                     | -                     |                            |                           |                             |
| • Congressional Directed Transfers                       | -                     | -                     |                            |                           |                             |
| • Reprogrammings                                         | -                     | -                     |                            |                           |                             |
| • SBIR/STTR Transfer                                     | -                     | -                     |                            |                           |                             |
| • Adjustments to Budget Years                            | -                     | -                     | 10.258                     | -                         | 10.258                      |

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| Exhibit R-2A, RDT&E Project Justification: PB 2014 Army                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |         |                      |              |                                                                  |               |         |         | DATE: April 2013                                                  |         |                  |            |
| APPROPRIATION/BUDGET ACTIVITY<br>2040: Research, Development, Test & Evaluation, Army<br>BA 5: System Development & Demonstration (SDD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |         |                      |              | R-1 ITEM NOMENCLATURE<br>PE 0605626A: Aerial Common Sensor - SDD |               |         |         | PROJECT<br>AC5: Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP) |         |                  |            |
| 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 |
| AC5: Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -               | 31.435  | 47.426               | 10.382       | -                                                                | 10.382        | 36.102  | 23.244  | 0.133                                                             | 0.135   | Continuing       | Continuing |
| Quantity of RDT&E Articles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| # 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| Note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| FY15-FY16 - As Airborne Reconnaissance Low (ARL) does not have an RDTE line, funding has been placed in the EMARSS RDTE line in FY15 (\$28.225 million) and FY16 (\$17.946 million) until a new RDTE line can be established.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| A. Mission Description and Budget Item Justification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is the Army's next generation C-12 based, direct support, manned airborne intelligence collection, processing, and targeting support system. EMARSS provides a persistent capability to detect, locate, classify/identify, and track surface targets with a high degree of timeliness and accuracy. EMARSS aircraft will be assigned to the U.S. Army Intelligence and Security Command's (INSCOM) Aerial Exploitation Battalions (AEB). EMARSS is an improvement over the existing Medium Altitude Reconnaissance and Surveillance System Quick Reaction Capability (MARSS QRC) in that it hosts an on board Distributed Common Ground System - Army (DCGS-A) capability, improved satellite communications, improved aircraft performance, and life cycle logistics sustainment capability. |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| EMARSS will consist of a commercial derivative aircraft equipped with an Electro-optical/Infrared (EO/IR) sensor with Full Motion Video (FMV), a Communications Intelligence (COMINT) collection system, an Aerial Precision Geolocation (APG) system, tactical line-of-site (LOS) and beyond line-of-site (BLOS) communications suite, two DCGS-A enabled operator workstations and a self-protection suite. EMARSS is built to allow future capabilities to be integrated on platform with the addition of a third carry-on workstation.                                                                                                                                                                                                                                                                                                                                 |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| EMARSS will operate as a single platform in direct support of tactical missions. EMARSS, integrating elements of the DCGS-A, will provide efficient response to Combat Forces with Intelligence, Surveillance and Reconnaissance (ISR) tasking. EMARSS' flexibility, endurance, sensor capability, communications architecture, and Processing, Exploitation & Dissemination (PED) support is relevant to the entire Find, Fix, Finish, Exploit, Analyze, and Disseminate (F3EAD) cycle.                                                                                                                                                                                                                                                                                                                                                                                   |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |
| FY14 Base funding in the amount of \$10.382 million funds final Engineering and Manufacturing Development (EMD) activities to include delta testing and corrective actions resulting from Limited User Test (LUT). These funds also provide partial funding for an Interim Contractor Logistics Support (ICLS) capability. Results will support a Milestone C decision.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                 |         |                      |              |                                                                  |               |         |         |                                                                   |         |                  |            |

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| Exhibit R-2A, RDT&E Project Justification: PB 2014 Army                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                  | DATE: April 2013                                                  |             |         |
| APPROPRIATION/BUDGET ACTIVITY<br>2040: Research, Development, Test & Evaluation, Army<br>BA 5: System Development & Demonstration (SDD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | R-1 ITEM NOMENCLATURE<br>PE 0605626A: Aerial Common Sensor - SDD | PROJECT<br>AC5: Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP) |             |         |
| B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                  | FY 2012                                                           | FY 2013     | FY 2014 |
| <div><div>Title: Product Development</div><div>Articles:</div><div>Description: Funding is provided for the following efforts:</div><div>FY 2012 Accomplishments:<br/>Funded integration of prime mission equipment, software integration, and risk mitigation effort.</div><div>FY 2013 Plans:<br/>Continues integration of prime mission equipment, software integration, and risk mitigation effort.</div><div>FY 2014 Plans:<br/>Finalizes integration of prime mission equipment, software integration, and risk mitigation efforts. Partially funds an ICLS capability to support testing.</div></div> |                                                                  | 21.729<br>0                                                       | 17.426<br>0 | 7.182   |
| <div><div>Title: Support Costs</div><div>Articles:</div><div>Description: Support costs for matrix government, matrix contractor and PM Fixed Wing.</div><div>FY 2012 Accomplishments:<br/>Funded support costs for matrix government, matrix contractor and PM Fixed Wing.</div><div>FY 2013 Plans:<br/>Support costs for matrix government, matrix contractor and PM Fixed Wing.</div><div>FY 2014 Plans:<br/>Support costs for matrix government, matrix contractor and PM Fixed Wing.</div></div>                                                                                                        |                                                                  | 2.231<br>0                                                        | 4.800<br>0  | 0.400   |
| <div><div>Title: Test and Evaluation</div><div>Articles:</div><div>Description: Funding is provided for the following effort:</div><div>FY 2012 Accomplishments:<br/>Funded Government DT/OT, LUT, Test Flight Ranges, and Joint Test Integration Facility (JTIF).</div><div>FY 2013 Plans:<br/>Government DT/OT, LUT, FOA, Reliability Growth Testing (RGT), and JTIF.</div><div>FY 2014 Plans:</div></div>                                                                                                                                                                                                 |                                                                  | 5.335<br>0                                                        | 19.300<br>0 | 2.170   |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Army                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |                |                         |                                                                                |                          |                | <b>DATE:</b> April 2013                                                         |                |                |                             |                   |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |                |                         | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> |                          |                | <b>PROJECT</b><br>AC5: <i>Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)</i> |                |                |                             |                   |
| <b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |                |                         |                                                                                |                          |                | <b>FY 2012</b>                                                                  | <b>FY 2013</b> | <b>FY 2014</b> |                             |                   |
| Delta testing and corrective actions resulting from LUT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>Title:</b> Program Management Support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |                |                         |                                                                                |                          |                | <b>Articles:</b>                                                                | 2.140<br>0     | 5.900<br>0     | 0.630                       |                   |
| <b>Description:</b> Funding is provided for the following effort:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>FY 2012 Accomplishments:</b><br>Funded Program Management Office (PMO) support and travel, Systems Engineering and Technical Assistance (SETA) and MITRE support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>FY 2013 Plans:</b><br>Continues Program Management Office (PMO) support and travel, Systems Engineering and Technical Assistance (SETA) and MITRE support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>FY 2014 Plans:</b><br>Continues Program Management Office (PMO) support and travel, Systems Engineering and Technical Assistance (SETA) and MITRE support.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>Accomplishments/Planned Programs Subtotals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                |                |                         |                                                                                |                          |                | 31.435                                                                          | 47.426         | 10.382         |                             |                   |
| <b>C. Other Program Funding Summary (\$ in Millions)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>Line Item</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>FY 2012</b> | <b>FY 2013</b> | <b>FY 2014<br/>Base</b> | <b>FY 2014<br/>OCO</b>                                                         | <b>FY 2014<br/>Total</b> | <b>FY 2015</b> | <b>FY 2016</b>                                                                  | <b>FY 2017</b> | <b>FY 2018</b> | <b>Cost To<br/>Complete</b> | <b>Total Cost</b> |
| • Aerial Common Sensor (ACS):<br>A02005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |                | 142.050                 |                                                                                | 142.050                  | 103.780        | 5.000                                                                           | 5.000          | 5.000          | 0.000                       | 260.830           |
| <b>Remarks</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| ACS - A02005 - FY14 Base procurement dollars in the amount of \$142.050 million supports purchasing four (4) Low Rate Initial Production (LRIP) systems including Government Furnished Equipment (GFE), training support, and initial spares. In addition, it brings four (4) EMARSS Engineering & Manufacturing Development (EMD) systems and a EMARSS Maintenance Vehicle (EMV) to production configuration.                                                                                                                                                                                                                                                                                                                                           |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| <b>D. Acquisition Strategy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |
| The Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS) is a Program of Record based on an Army G-3/5/7 Directed Requirement (DR) signed 11 December 2009. The program entered the acquisition process in the Engineering and Manufacturing Development (EMD) phase with a 1QFY11 contract award that was competitively awarded to a single contractor. Program completed System Design Review in 1QFY12 and begun modification and integration of the aircraft in 2QFY12. Following a Contractor Test / Development Test and Limited User Test, the Army will be positioned to inform a Milestone C Decision. A Forward Operational Assessment may be conducted if necessary to demonstrate the system against real world threats. |                |                |                         |                                                                                |                          |                |                                                                                 |                |                |                             |                   |

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| <b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2014 Army                                                                                                   |                                                                                | <b>DATE:</b> April 2013                                                         |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i> | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> | <b>PROJECT</b><br>AC5: <i>Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)</i> |

The schedule slip is due to a cost overrun indentified by Boeing on 1 Oct 12. The government negotiated a cost share agreement, signed on 26 Oct 12, that allows the program to synchronize the MS C decision with procurement funding in FY14.

**E. Performance Metrics**

Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.

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| <b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Army</b>                                                                                                    |                                   |                                           |                        |                |                   |                                                                                |                   |                     |                   |                    |                   | <b>DATE:</b> April 2013                                                         |                         |                   |                                 |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i> |                                   |                                           |                        |                |                   | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> |                   |                     |                   |                    |                   | <b>PROJECT</b><br>AC5: <i>Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)</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> |
| PMO                                                                                                                                                                  | Various                           | PM ARES:Aberdeen Proving Ground, MD       | 5.220                  | 1.518          |                   | 3.300                                                                          |                   | 0.230               |                   | -                  |                   | 0.230                                                                           | 0.000                   | 10.268            | 0.000                           |
| SETA Support                                                                                                                                                         | C/CPFF                            | PM ARES:Aberdeen Proving Ground, MD       | 3.045                  | 0.415          |                   | 1.600                                                                          |                   | 0.200               |                   | -                  |                   | 0.200                                                                           | 0.000                   | 5.260             | 0.000                           |
| MITRE                                                                                                                                                                | C/CPFF                            | PM ARES:Aberdeen Proving Ground, MD       | 2.326                  | 0.207          |                   | 1.000                                                                          |                   | 0.200               |                   | -                  |                   | 0.200                                                                           | 0.000                   | 3.733             | 0.000                           |
| <b>Subtotal</b>                                                                                                                                                      |                                   |                                           | 10.591                 | 2.140          |                   | 5.900                                                                          |                   | 0.630               |                   | 0.000              |                   | 0.630                                                                           | 0.000                   | 19.261            | 0.000                           |
| <b>Product Development (\$ 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> |
| EMARSS EMD                                                                                                                                                           | C/CPIF                            | Boeing Company:Ridley Park, PA            | 42.989                 | 12.749         |                   | -                                                                              |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 55.738            | 0.000                           |
| Other GFE to include COMSEC Equipment, Airborne Precision Geo Location (APG), and Vortex Data Links                                                                  | Various                           | L3 COMM/ NSA:Warner Robins AFB            | 3.463                  | 0.440          |                   | -                                                                              |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 3.903             | 0.000                           |
| Request for Equitable Adjustment (REA)                                                                                                                               | C/FP                              | Boeing Company:Ridley Park, PA            | 7.085                  | -              |                   | -                                                                              |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 7.085             | 0.000                           |
| Prime Contractor Systems Support                                                                                                                                     | C/CPFF                            | Boeing Company:Ridley Park, PA            | 0.000                  | 8.000          |                   | 5.535                                                                          |                   | 7.182               |                   | -                  |                   | 7.182                                                                           | 0.000                   | 20.717            | 0.000                           |
| Engineering Change Proposals (ECP)                                                                                                                                   | C/CPIF                            | Boeing Company:Ridley Park, PA            | 0.000                  | -              |                   | 11.891                                                                         |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 11.891            | 0.000                           |
| DCGS-A & Orion S/W processing on board                                                                                                                               | Various                           | Various:Various                           | 6.200                  | 0.540          |                   | -                                                                              |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 6.740             | 0.000                           |
| ARL RDTE Placeholder                                                                                                                                                 | C/TBD                             | TBD:TBD                                   | 0.000                  | -              |                   | -                                                                              |                   | -                   |                   | -                  |                   | -                                                                               | 28.225                  | 28.225            | 0.000                           |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------|------------------------|----------------|-------------------|--------------------------------------------------------------------------------|-------------------|---------------------|-------------------|--------------------|-------------------|---------------------------------------------------------------------------------|-------------------------|-------------------|---------------------------------|
| <b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2014 Army</b>                                                                                                    |                                   |                                           |                        |                |                   |                                                                                |                   |                     |                   |                    |                   | <b>DATE:</b> April 2013                                                         |                         |                   |                                 |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i> |                                   |                                           |                        |                |                   | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> |                   |                     |                   |                    |                   | <b>PROJECT</b><br>AC5: <i>Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)</i> |                         |                   |                                 |
| <b>Product Development (\$ 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> |
| <b>Subtotal</b>                                                                                                                                                      |                                   |                                           | 59.737                 | 21.729         |                   | 17.426                                                                         |                   | 7.182               |                   | 0.000              |                   | 7.182                                                                           | 28.225                  | 134.299           | 0.000                           |
| <b>Support (\$ 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> |
| Matrix Government                                                                                                                                                    | MIPR                              | Various:Various                           | 9.405                  | 2.103          |                   | 3.679                                                                          |                   | 0.200               |                   | -                  |                   | 0.200                                                                           | 0.000                   | 15.387            | 0.000                           |
| Matrix Contractor Support                                                                                                                                            | Various                           | Various:Various                           | 1.864                  | 0.128          |                   | 1.121                                                                          |                   | 0.200               |                   | -                  |                   | 0.200                                                                           | 0.000                   | 3.313             | 0.000                           |
| <b>Subtotal</b>                                                                                                                                                      |                                   |                                           | 11.269                 | 2.231          |                   | 4.800                                                                          |                   | 0.400               |                   | 0.000              |                   | 0.400                                                                           | 0.000                   | 18.700            | 0.000                           |
| <b>Test and Evaluation (\$ 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> |
| Government DT/OT, LUT                                                                                                                                                | Various                           | Various:Various                           | 6.383                  | 1.207          |                   | -                                                                              |                   | 2.170               |                   | -                  |                   | 2.170                                                                           | 0.000                   | 9.760             | 0.000                           |
| Test Flight Ranges                                                                                                                                                   | Various                           | Various:Various                           | 6.391                  | 1.126          |                   | -                                                                              |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 7.517             | 0.000                           |
| Live Fire Test & Evaluation (LFTE)                                                                                                                                   | MIPR                              | Various:Various                           | 0.000                  | -              |                   | 5.000                                                                          |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 5.000             | 0.000                           |
| Forward Operational Assessment (FOA)                                                                                                                                 | MIPR                              | Various:Various                           | 0.000                  | 0.124          |                   | 7.000                                                                          |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 7.124             | 0.000                           |
| Initial Operational Test and Evaluation (IOT&E)                                                                                                                      | MIPR                              | Various:Various                           | 0.000                  | -              |                   | 1.000                                                                          |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 1.000             | 0.000                           |
| Reliability Growth Testing (RGT)                                                                                                                                     | MIPR                              | Various:Various                           | 0.000                  | -              |                   | 3.500                                                                          |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 3.500             | 0.000                           |
| Joint Test & Integration Facility (JTIF)                                                                                                                             | Various                           | Various:various                           | 6.800                  | 2.878          |                   | 2.800                                                                          |                   | -                   |                   | -                  |                   | -                                                                               | 0.000                   | 12.478            | 0.000                           |
| <b>Subtotal</b>                                                                                                                                                      |                                   |                                           | 19.574                 | 5.335          |                   | 19.300                                                                         |                   | 2.170               |                   | 0.000              |                   | 2.170                                                                           | 0.000                   | 46.379            | 0.000                           |

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| Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army                                                                                  |                 |         |  |         |                                                                  |              |  |             |  | DATE: April 2013                                                  |                  |            |                          |
| APPROPRIATION/BUDGET ACTIVITY<br>2040: Research, Development, Test & Evaluation, Army<br>BA 5: System Development & Demonstration (SDD) |                 |         |  |         | R-1 ITEM NOMENCLATURE<br>PE 0605626A: Aerial Common Sensor - SDD |              |  |             |  | PROJECT<br>AC5: Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP) |                  |            |                          |
|                                                                                                                                         | All Prior Years | FY 2012 |  | FY 2013 |                                                                  | FY 2014 Base |  | FY 2014 OCO |  | FY 2014 Total                                                     | Cost To Complete | Total Cost | Target Value of Contract |
| Project Cost Totals                                                                                                                     | 101.171         | 31.435  |  | 47.426  |                                                                  | 10.382       |  | 0.000       |  | 10.382                                                            | 28.225           | 218.639    | 0.000                    |

Remarks

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|                                                                                                                                                                      |  |  |  |  |  |  |  |                                                                                |  |  |  |  |  |  |  |                                                                                 |  |  |  |
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| <b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2014 Army                                                                                                         |  |  |  |  |  |  |  |                                                                                |  |  |  |  |  |  |  | <b>DATE:</b> April 2013                                                         |  |  |  |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i> |  |  |  |  |  |  |  | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> |  |  |  |  |  |  |  | <b>PROJECT</b><br>AC5: <i>Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)</i> |  |  |  |

|           | FY 2012 |   |   |   | FY 2013 |   |   |   | FY 2014 |   |   |   | FY 2015 |   |   |   | FY 2016 |   |   |   | FY 2017 |   |   |   | FY 2018 |   |   |   |
|-----------|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|
|           | 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 |
| CT/DT     |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| LUT / FOA |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| MS C      |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |
| LRIP      |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |         |   |   |   |

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| <b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2014 Army                                                                                                        |                                                                                |                                                                                 | <b>DATE:</b> April 2013 |
| <b>APPROPRIATION/BUDGET ACTIVITY</b><br>2040: <i>Research, Development, Test &amp; Evaluation, Army</i><br>BA 5: <i>System Development &amp; Demonstration (SDD)</i> | <b>R-1 ITEM NOMENCLATURE</b><br>PE 0605626A: <i>Aerial Common Sensor - SDD</i> | <b>PROJECT</b><br>AC5: <i>Enhanced Medium Alt Recon Surv Sys (EMARSS) (MIP)</i> |                         |

Schedule Details

| Events    | Start   |      | End     |      |
|-----------|---------|------|---------|------|
|           | Quarter | Year | Quarter | Year |
| CT/DT     | 4       | 2013 | 1       | 2014 |
| LUT / FOA | 2       | 2014 | 3       | 2014 |
| MS C      | 3       | 2014 | 3       | 2014 |
| LRIP      | 3       | 2014 | 1       | 2017 |